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# Internal and international migration as response of double deprivation: some evidence from India

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## WORK IN PROGRESS

### Abstract

This study disentangles the effects of feelings of relative deprivation and the capability of households in realizing their migration aspirations. For this purpose we decompose the concept of relative deprivation into intra-group and inter-group relative deprivation and test their relative importance together with levels of absolute deprivation in shaping migration decisions on a household level. The migration decision itself is modelled as a two stage process which allows separating the decision on *whether* to migrate at all, and the decision *where* to migrate in terms of an internal or international destination. This study concentrates on migration in contemporary India, a country with about 20 million Indians living abroad and around 180 million people enumerated as internal migrants. The empirical analysis is based on a unique dataset based on the recent 64<sup>th</sup> round of the Indian National Sample Survey (NSS). This large dataset covers around 125,000 households and about 100,000 former household members enumerated as out-migrants. We hypothesize that feelings of relative deprivation have different effects on the choice of destination when controlled for alternative reference groups and group identifications. We identify the following factors as relevant in this migration decision-making process: First, intra-group as well as inter-group relative deprivations are strong predictors only for short distance intra-state movements. On contrary, the likelihood of out-migration towards international destinations is significantly lower for households with lower levels of intra-group and inter-group relative deprivation. Second, besides the effects of relative deprivation, absolute deprivation plays an ambivalent role: while economically better endowed households have a higher migration propensity to send (primarily male) migrants to distant inter-state and international destinations, the inverse is true for moves of shorter distance that are mainly dominated by (female) migrants stemming from poorer households.

**Keywords:** Relative deprivation, internal and international migration, India

## Introduction

“The links between internal and international migration have recently begun to attract attention at the international policy level, especially in response to concerns by developed countries over migrant flows. Important questions are whether today’s internal migrants are tomorrow’s international migrants; whether international migration and internal migration are substitutes for each other; and *whether internal and international migrants share the same profile*. Needless to say, the answers depend very much on the local context and thus can only be arrived at through location-specific case studies.” (IOM, 2008, p. 181)

The study of internal and international migration is dichotomous in a sense that most research is either focused on the one or the other. This distinction might be justified if the two subjects would not have much in common. This, however, is not the case since the underlying forces initiating and perpetuating both types of movements are mostly the same and only different in their relative weight. The core difference, however, is to be seen in the role of the state and regulations to control international flows of people. Beside this, internal and international migration share a very similar set of economic, social, political and cultural drivers that influence the migration decision-making process of individuals and groups such as households or kinships (King and Skeldon 2010). The purpose of this article is to analyze the drivers and pattern of internal and international migration in contemporary India and we try to answer the following questions: why do some individuals (or whole households) decide to leave their place of residence, and what determines the decision about the internal or international destination? What is the common explanatory set of internal and international migration, and where are the differences? And in particular, we are analyzing the role of absolute and relative deprivation in the migration decision-making process of Indian households.

Socio-economic factors play a decisive role in explaining migration decisions of individuals and households as well as in driving aggregate migration flows. Availability of economic resources enables individuals and households to materialize their desire to migrate. This desire for migration can be explained by some socio-psychological factors that create an individual or collective aspiration for a significant change in people’s life. We argue in this paper that social

comparisons among individuals or households that belong to the same group of people are the source for individual or collective feelings of deprivation or gratification. Individuals belong to or identify with a multitude of social groups in which such comparisons are made and they may have feelings of deprivation even if absolute deprivation is hardly an issue. With which social group an individual or household identifies with and what weight an individual or household puts on the comparison within or beyond their group of reference is a priori unclear. Liebig and Sousa-Poza (2004) found some empirical evidence on the hypothesis that countries with a more unequal income distribution by trend have higher migration rates. Stark (2006) has provided the micro-foundation for this structural relationship arguing that relative deprivation of individuals or households is the behavioral link. Hereby, income inequality within a country generates feelings of relative deprivation which induces higher an emigration propensity among those most deprived. Accordingly, household members decide for migration not necessarily to increase the individual or household's expected income but rather to improve its relative position with respect to a specific reference group (Stark and Taylor (1989). However, and to my best knowledge, the migration literature only considers relative deprivation with a country's overall population as the relevant reference group, i.e. people compare their personal well-being with that of the rest of the country's population. The decisive question is, however, whether this is appropriate, and if not, *which* societal reference categories are relevant in a societal reality of multiple belongings. In this paper, we apply the concept of relative deprivation within and across subordinate groups. We test the following three societal categories and their intra-categorical inequality on their relevance of explaining migration propensities: political entity, social class, and religious group, with subdividing all three categories into a number of societal reference groups. We further ask whether migration propensities are based on social comparisons made within that societal subgroup ('individual relative deprivation'), across societal groups but within the same societal category on a basis of group identification ('group relative deprivation'), or both. Multiple relative deprivations, defined as feelings of 'double deprivation' within *and* across a multitude of societal groups, are then tested on its relevance in explaining migration decision-making of households in India. Due to the availability of recent household data of the National Sample Survey (NSS), we can test

the implications of multiple relative deprivation on two types of migration decisions: first, whether relatively deprived households have a higher propensity to send any household member as a migrant, and second, whether multiple relative deprivation has an influence on the choice of destination in terms of an internal or international migration site. We find strong evidence for both individual (household) and group relative deprivations across political, social, and religious categories as playing a significant role in the decision to send a household member at all. For the decision on destination, however, the role of relative deprivation is more ambiguous. We find a strong positive effect on short distance migration within a federal state, insignificance for long distance internal movements within India, and a negative effect of multiple relative deprivations on international migration disproving an assumed positive link between sending country inequalities and emigration.

The remainder of this paper is structured as follows. The next section outlines the conceptual framework of our definition of multiple (double) relative deprivations and the influence on migration decision-making. Section three describes the Indian pattern of migration by exploring our sample, and we develop the methodology used for the empirical analysis on the relevance of relative deprivation in driving household decisions on out-migration of family members. Section four provides and interprets the empirical results. Section five concludes.

## **Multiple relative deprivation and migration**

Migration theory provides a bundle of possible determinants of internal and international migration. Massey et al. (1993, 1998), Ghatak et al. (1996), and King and Skeldon (2010) provide some excellent reviews on theoretical drivers of internal and international migration. This paper draws on some insights of traditional and new migration theory in respect of (i) the role of households in the decision-making process, (ii) the role of capabilities and resource endowments of individuals and households (iii) the spread of risks by diversifying income sources and smoothing of intertemporal income and consumption of individuals and among household members, and most importantly, (iv) the role aspirations and perceptions of relative

deprivation. The concept of relative deprivation refers to the feeling of deprivation after comparing the individual well-being with the personal situation of others within a pre-defined reference group (Runciman 1966). Yitzhaki (1979, 1982) integrates this concept into the economic inequality literature by asserting that individuals feel deprived when they compare their economic situation with the living standards of wealthier people, and Stark (1984) has identified individual relative deprivation as a possible driver for human migration.

Deprivation as a source of individual and collective discontent is not only an absolute condition for individual and collective action such as emigration, but it is most of the time relative to an (explicit or implicit) norm or standard of what is considered as adequate. This idea of a discrepancy between aspirations and achievements, or between the standard of living individuals are currently enjoying and the standard of living they believe they deserve, lies at the heart of relative deprivation theory and explains to a large extent individual and collective unrest (Brown 2000). Gurr (1970) emphasizes the importance of relative deprivation as a root source for collective violence; the larger the discrepancy between the own situation and that of others the greater the likelihood of unrest. Beside an individual's (or an household's) direct experience of relative deprivation, there is also a feeling of deprivation based on people's perception of the well-being of the social group they belong to. Runciman (1966) labels this phenomenon 'fraternalistic' deprivation and means the sense that the group an individual (or household) belongs to is relatively deprived either compared to a desired standard or to the situation of other groups in a reference category. In the following we distinguish the two types of deprivation by labeling them 'individual relative deprivation' (IRD) and 'group relative deprivation' (GRD). Accordingly, Pettigrew et al (2008) distinguish in their study on prejudice four types of people: those with a high (low) IRD and high (low) GRD, and those with a high (low) IRD, but low (high) GRD. Thus, there are people that are 'double deprived', 'double gratified', or have 'mixed' feeling about their levels of individual and group deprivation. Typically, it is members of subordinate groups who feel most deprived.<sup>1</sup>

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<sup>1</sup> For India, for instance, Tripathi and Srivastava (1981) find that Muslims as a socially disadvantaged minority show a much more biased attitude towards Hindus to the extent that they are individually and collectively deprived.

Similar to Runciman's (1966) findings on the causes of social unrest, who observes that participants in insurgencies are seldom the most deprived individuals, we can also state that it is seldom the poorest who decide to migrate (e.g., Martin and Taylor (1996) on the anatomy of the 'migration hump'). Stark and Yitzhaki (1988) and Stark and Taylor (1989) were among the first who linked the concept of individual relative deprivation with the migration decision-making process of individuals and households and find that the more an individual is deprived relative to the society (or, a particular reference group), the higher the propensity for emigration. For instance, Stark and Taylor (1991) have empirically tested the implications of relative deprivation on migration of Mexicans finding evidence for individual relative deprivation driving Mexican-US cross-border movements but not internal migration in Mexico.

So far, however, the migration literature on the nexus between relative deprivation and migration ignores the fact that individuals may feel 'double deprived'. A distinction between individual relative deprivation (IRD) and group relative deprivation (GRD) as relevant factors in the migration decision-making process seems therefore indispensable (Czaika, 2010). By the way, we are well aware that emigration is only one possible behavioral step deprived individuals or groups can take to improve their lot.<sup>2</sup> Individuals can reduce feelings of deprivation with or without migration as they can change their standards and reference groups with or without migration. In the following empirical analysis, however, we assume that individuals do not (at least in the short-term) change their reference group suggesting that out-migration of a household member, if not of the whole household, is *ceteris paribus* the 'most likely' consequence of feelings of individual and group-based relative deprivation.

A perennial problem in relative deprivation theory is the inability to specify *a priori* who compares with whom (Walker & Smith, 2000). Social comparisons provide the means by which people assess their own position within their group as well as their group's standing. However, whether social comparisons lead to perceptions and feelings of deprivation depends on the situation of the group of reference, i.e. the group of people individuals compare with. In social psychology, it is assumed that individuals tend to compare with 'similar others' (Brown, 2000,

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<sup>2</sup> Rebellion and violence, fatalism and resignation, or some pro-activism and activities to improve (individual and collective) economic and social outcomes are other behavioral options.

p. 244). We interpret this definition in the following way: perceptions of individual relative deprivation are based on intra-group comparisons with other members within the same subordinate reference group of a social category (e.g. within a particular religious group), whereas feelings of group relative deprivation are generated by inter-group comparisons within a social categories and an inferior position of the own group with respect to other groups in the same social category (e.g. other religious groups). Beyond this distinction of individual and group relative deprivation, we take into account that people generally belong to and identify themselves with a multitude of groups across different social categories. Therefore, we explicitly analyze the relevance of ‘multiple relative deprivation’ as migration driver, i.e. we test intra-group (IRD) and inter-group (GRD) deprivation across three different social categories for their role in the migration decision-making process.

In the following, we formulize the two types of relative deprivation and distinguish (i) individual comparisons of households *within* a societal reference group and (ii) group comparisons *across* other groups of the same societal reference category. Hereby, household’s  $i$  level of individual relative deprivation  $IRD$  with respect to other households within the same societal reference group  $r$  is defined as follows:

$$IRD_{i,r}(c_i) = \int_{c_{i,r}}^{c_{i,r}^{max}} [1 - F(z)] dz \quad (1)$$

Comparison parameter is household consumption expenditure  $c_i$ , whereas  $F(z)$  represents the cumulative distribution of household consumption levels within reference group  $r$ . The implication is that the propensity for out-migration increases with higher levels of relative deprivation, i.e. within each societal group it is the more deprived households that have higher propensities for migration. However, it is not necessarily the poorest households in a country’s population that have the highest levels of relative deprivation and thus have higher likelihood of out-migration. Households that belong to a group with –on average- high but unequal distributed consumption levels may have higher rates of outmigration than poorer but more balanced groups. That is, it is not only the relative deprivation within groups that counts, but also the relative position of the group compared to the other reference groups in the society. Consequently, we define household  $i$ ’s level of group relative deprivation  $GRD$  according to:



$$GRD_{i,r}(\bar{c}_r) = \int_{\bar{c}_r}^{\bar{c}_r^{max}} [1 - F(z)]dz \quad \text{with} \quad \bar{c}_r = \frac{1}{n_r} \sum_{i \in r} c_{i,r}. \quad (2)$$

We assume that each household  $i$ , member of societal group  $r$ , identifies with the average consumption level  $\bar{c}_r$  of that group and compares with the average consumption levels of all other (richer) groups within the same societal reference category. The migration propensity of household  $i$  is therefore expressed by the likelihood of out-migration of a household member, which is driven by feelings of deprivation because of a relatively low position within a reference group (i.e. IRD) or belonging to a relatively deprived group within a societal reference category, or both, and a set  $X$  of other explanatory factors considered as relevant in the migration decision-making process.

$$Prob(M_i = 1) = f(IRD_i, GRD_i, X) \quad (3)$$

Thus, we suggest that this relationship between individual relative deprivation and group relative deprivation, respectively, and migration propensity is caused by the intentions of individuals (households) or larger groups to improve their relative position in their reference group and social reference category, respectively. The following case study on the drivers of internal and international migration in India shall test the validity of these implications.

### **Drivers of internal and international migration in India: the empirical analysis**

This case study on internal and international migration in India provides some location-specific analysis of the Indian migration pattern. Primarily the question whether internal and international migration share a similar set of determinants is hereby in our focus. Our presumption is that this divide between the two types of migration is established for reasons of academic practice and sometimes for political reasons. This distinction is not justifiable because of the nature of internal and international migration since both categories are highly interlinked and often part of a larger migration system (King and Skeldon 2010). For the case of India, Skeldon (2006) provides some insights on some of these inter-linkages between the internal rural-urban migration and the international migration pattern. For the Indian state of Kerala, Zachariah and Rajan (2005) discuss the role this federal state plays as a migration hub and how

migrants from neighboring federal states are refilling the gaps in the workforce left by skilled and semi-skilled workers leaving for the Gulf. However, the empirical investigation of these larger migration processes is beyond the scope of this paper. Instead, we are studying the set of possible determinants that is common to both types of migration.

### ***Data source and descriptive statistics***

This study is based on data from the 64<sup>th</sup> round of the Indian National Sample Survey (NSS) conducted on about 125,000 households across all India between July 2007 and June 2008. This survey collects inter alia information on full household migration and out-migration of former household members leaving their place of residence for another destination within or outside India. The data sample is the result of a stratified multi-stage sampling design, where at the all India level around 12600 villages and urban neighbourhoods were surveyed that were allocated to each Indian federal state and Union Territory in proportion to the population registered in the 2001 census (NSSO, 2010). The collected information is based on the responses given by household heads and includes a wide range of socio-economic household characteristics as well as particulars on the out-migrant. For the purpose of this study, we compile two different configurations of the overall sample: in one, the unit of analysis are the households with or without reporting on an out-migrant, whereas in the second, the individual out-migrant is the analytical unit and we add to this level some information on the out-migrants' former household. Thus, in the first stage regression, the dependent variable *outmigration* is set to one if the household has reported out-migration of a former household member to another place of residence, and zero otherwise.<sup>3</sup> For the three different types of regression models at the second stage, the respective variables on outmigration are set to one, or zero otherwise, if the household head has reported (i) intra-state migration, i.e. within the same state of the former household, (ii) inter-state migration to another state within India, or (iii) international migration to another country.

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<sup>3</sup> A household is defined as a "group of persons who normally lived together and took food from a common kitchen" (NSSO 2010, p. 6)

**Table 1:** The pattern of internal and international migration in India in 2007/2008

Area	Households with out-migrant	Present place of residence of out-migrant		
		Intra-state	Inter-state	International
Rural (71.6 %)	30.4 %	73.4 %	23.3 %	3.1 %
Urban (28.4 %)	19.3 %	69.9 %	22.8 %	7.1 %
Total (100 %)	27.2 %	72.8 %	23.2 %	3.8 %

Note: Calculations are based on the weighted NSS sample observations.

Table 1 shows that the share of migrant-sending households is significantly higher for rural than for urban households. Despite some large agglomerations, India can still be characterized as a rural country with more than 70 percent of its population still living in non-urban areas. On an all India level, more than a quarter of all households have reported on a former household member as out-migrant with more rural households reporting on out-migration of a family member. Concerning the destination of out-migration, almost three quarters of the out-migrants are deciding for a place of residence at short distance within the state or union territory (see also Figure A1). About 23 percent of migrants settle in another state within India (Figure A2), and only a small percentage of about 3.8 percent decide to leave the country for a destination abroad (Figure A3). The out-migration rate for males was 9.2 per cent for rural areas and 5.1 per cent from urban areas. The rates for females were much higher compared to males in both the rural and urban areas with about 16.6 per cent for rural females and 11.0 per cent among for urban females. With respect to distance, a share of female out-migrants, from both the rural and urban areas, took up residence within the state/Union territory: 89.0 per cent for rural female out-migrants and 79.7 per cent for urban female out-migrants have their present place residence within the state. Compared to female out-migrants, the out-migration pattern is more diverse for the males in both rural and urban areas. Rural male out-migrants are almost equally dispersed within and outside the state they had their last place of residence (around 46 per cent in each of these two types of places). For urban male out-migrants, about

49.9 per cent are still residing within the State whereas 33.3 per cent of them had left the state of last residence.

To explain this pattern of out-migration, we theorized in the previous section on the role of relative deprivation with respect to different reference groups and types of belonging. Based on household-specific information and the two concepts of relative deprivation expressed by eqs (1) and (2), we generate measures of individual household relative deprivation (IRD) for four different reference groups: all India (*IRD\_India*), states (*IRD\_state*), societal class (*IRD\_social class*), and religious group (*IRD\_religious group*). These calculations of household relative deprivation levels are based on the weighted annual amount of household consumption expenditures and the mean excess consumption of wealthier households in the respective reference group.<sup>4</sup> Beyond these measures of intra-group comparison, we determine for the three alternative reference groups weighted averages of group-specific consumption levels to enable inter-group comparisons of group-based relative deprivation (GRD). Since each household identifies itself generally with a multiplicity of societal groups, relative deprivation levels of both types might be correlated across societal categories. Therefore, we calculate a composite level of ‘multiple relative deprivations’ across the three group categories (state, social class, religious group) for both relative deprivation measures, i.e. comparisons within and across groups. We apply principal component analysis for calculating the eigenvectors of the two separate multiple relative deprivations (*IRD\_multiple* and *GRD\_multiple*).

### ***Empirical strategy***

In the empirical analysis the focus is put on the likelihood of a household to send out a family member as migrant, and if yes, whether to send the migrant to an internal destination or abroad. We run two types of regression models in order to quantify the effects of various types of relative deprivation and other socio-economic and cultural variables at the two stages of the migration decision-making process. For the second stage of the analysis on migration

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<sup>4</sup> For the out-migration households, the annual household consumption expenditure is predicted with a Tobit model on the annual amount of remittances and some other explanatory variables. This procedure corrects for the problem of endogeneity of the household consumption expenditure variable in the migration decision models.

destination we apply the same set of control variables on household characteristics as in the first stage plus some controls on personal characteristics of the individual out-migrant.

### ***Estimation model***

The first stage regression predicts as latent variable the unobserved probability of out-migration of a member  $M_i^*$  of household  $i$ , dependent on the level of household-specific ( $IRD_i$ ) and group-specific ( $GRD_i$ ) relative deprivation with respect to reference group  $r$ , and a vector of other explanatory variables  $X_i$ , the unknown vector of parameters  $\alpha$ , and the normally distributed error term  $\varepsilon_i$ . Out-migration of a former household member is the observed binary variable which is set to one if the household has send a family member anytime in the past, and zero otherwise,

$$M_i = 1 \text{ if } (\alpha_1 IRD_{ir} + \alpha_2 GRD_{ir} + X_i' \alpha_0 + \varepsilon_i > 0), \text{ and } 0 \text{ otherwise,} \quad (3)$$

which is estimated by a probit model. Based on model estimates, marginal effects (measured at sample means) on the probability of out-migration of a household member are then calculated for each explanatory variable. Similarly, the second stage models predict the probability that an out-migrant  $j$  as a former member of household  $i$  has chosen an internal or international destination  $D_{ji}^z$  with  $z=(intra-state, inter-state, international)$ . The respective binary variable on destination-specific out-migration is then set to one if the out-migrant has chosen destination  $z$ , and zero otherwise,

$$D_{ji}^z = 1 \text{ if } (\beta_1^z IRD_{ir} + \beta_2^z GRD_{ir} + Y_{ji}' \beta_0^z + \delta^z), \text{ and } 0 \text{ otherwise.} \quad (4)$$

We estimate the vector of coefficients  $\beta$  of these destination-specific out-migration models by a probit regression procedure. This approach allows a comparison of marginal effects for the set of explanatory variables across different migration destination models.

For both stages of the decision making process on out-migration, our core explanatory variables of interest are the two relative deprivation measures. Household relative deprivation  $IRD$  with respect to reference group  $r=(state, social class, religious group)$  expresses the level of intra-group comparisons on household consumption levels indicating the degree to which

households (and its members) feel relatively deprived within their reference group.<sup>5</sup>  $GRD_{ir}$  captures the effect of feelings of relative deprivation on behalf of the group  $r$  household  $i$  belongs to. Since households belong to groups of different social categories at the same time, and both measures of IRD and GRD across these social categories might be collinear, we use two alternative procedures to control for the influence of multiple relative deprivations on the probability for out-migration: first, we estimate separate models for relative deprivation measures  $IRD_r$  and  $GRD_r$  for the three social reference categories state, social class, and religious group. Second, we calculate the eigenvectors  $IRD\_multiple$  and  $GRD\_multiple$  that reflect the respective principal component across the three reference categories. Finally, as an overall measure without group separation, we test for the effect of individual household deprivation across all India  $RD\_India$ .

### ***Main control variables***

The decision of a household on out-migration of one or more of its household members is assumed to be driven by a whole set of variables. Based on the characteristics of the available dataset we are able to control for various socio-economic, geographical, and demographic factors at the household level. As our main variable for explaining the likelihood of outmigration, we use the number of household members including the out-migrants (*HH size*) as a proxy for an underlying demographic and socio-economic pressure. Generally, capability of a household member for out-migration relies to some extent on the level of absolute deprivation. We capture this effect by the amount of annual household consumption expenditures *HH consumption* and check for a possible non-linearity by using an additional squared term of this variable. To reduce problems of reverse causality we use a tobit estimation procedure to predict *HH consumption* levels for households reporting a remittances-sending out-migrant. This shall correct for the influence of non-negative remittances on household consumption levels.

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<sup>5</sup> Figure A4 in the annex displays the geographic pattern of state-based relative deprivation (GRD) with the state as reference group.

As another socio-economic variable we use a dummy variable for households with relatively small (below 1 hectare) and large (above 6 hectare) *land possession* to test for resource availability as migration enabling factor. However, land possession can at the same have a reducing effect on migration propensities if the possessed land is a main source of income and household workforce is scarce. Therefore, we control additionally for the type of household in terms of its main economic activity. For rural households we distinguish between agricultural and non-agricultural households, whereas for urban areas we control for self-employed and casual labour households.

Beside these socio-economic factors, we also take into account the influence of cultural and religious factors. We do this by using dummy variables for households that belong to either one of the three largest religious groups, *Hindu*, *Muslim* and *Christian*. Similarly, we control for social minorities, expressed by dummy variables for *scheduled tribes* and *scheduled castes*. These are social groupings that are explicitly recognized by the Indian constitution and its members can generally be considered as severely underprivileged and absolutely deprived. Beside these two categories for minorities we control for households that belong to an *Upper social class* as a residual category of all the households that do not belong to a scheduled caste/tribe or another backward class.

## **Estimation results**

### ***Household out-migration***

Table 2 reports the regressions on the probability of out-migration of a household member. Across all five model specifications we find positive and significant effects of both types of relative deprivation measures for all three societal categories, i.e. the federal state (model 2), social class (model 3), and religious group (model 4). Also when measured across all India, i.e. without considering societal groups (model 1), relative deprivation seems to be a very relevant factor in the household decision making process on out-migration. These results indicate that there is a positive relationship between double deprivation and migration. Households that are deprived within their societal group have a higher probability for migration as well as

**Table 2:** Probit estimation: Relative deprivation and household out-migration

Dependent variable	Out-migration of former HH member				
	(1)	(2)	(3)	(4)	(5)
RD_All India	0.158** (28.47)				
IRD_state		0.132** (25.48)			
GRD_states		0.167** (6.77)			
IRD_social class			0.116** (25.78)		
GRD_social class			0.008** (9.67)		
IRD_religious group				0.136** (28.43)	
GRD_religious groups				0.212** (5.23)	
IRD_multiple					0.086** (25.37)
GRD_multiple					0.010* (2.01)
HH size	0.094** (62.50)	0.090** (63.40)	0.089** (66.08)	0.090** (64.96)	0.092** (62.19)
HH consumption	0.007** (4.71)	0.005** (3.49)	0.003 (1.77)	0.005** (3.33)	0.013** (6.90)
HH consumption (sq.)	-0.000* (1.99)	-0.000 (0.69)	0.000 (1.21)	-0.000 (0.50)	-0.000** (3.73)
Land possession (<1 hectare)	-0.003 (0.50)	-0.000 (0.00)	0.004 (0.54)	-0.005 (0.73)	-0.002 (0.30)
Land possession (>6 hectare)	0.055* (2.02)	0.062* (2.29)	0.067* (2.48)	0.061* (2.28)	0.058* (2.13)
Scheduled tribe	-0.105** (14.95)	-0.100** (14.10)		-0.098** (13.89)	-0.085** (10.20)
Scheduled caste	-0.041** (7.43)	-0.039** (7.01)		-0.032** (5.76)	-0.024** (3.81)
Upper social class	0.056** (10.43)	0.056** (10.40)		0.043** (8.22)	0.010 (1.46)
Hindu	-0.035* (2.46)	-0.039** (2.79)	-0.034* (2.41)		0.013 (0.93)
Muslim	-0.104** (7.74)	-0.106** (7.89)	-0.110** (8.27)		-0.066** (4.44)
Christian	0.009 (0.50)	0.008 (0.44)	-0.008 (0.45)		0.020 (1.03)
Self-employed in non-agriculture	-0.031** (4.64)	-0.036** (5.42)	-0.036** (5.41)	-0.038** (5.59)	-0.034** (5.08)
Self-employed in agriculture	0.042** (7.14)	0.037** (6.31)	0.031** (5.33)	0.044** (7.46)	0.040** (6.79)
Urban Self-employed	-0.075** (9.86)	-0.068** (8.88)	-0.065** (8.53)	-0.077** (10.23)	-0.074** (9.82)
Urban Casual labour	-0.118** (9.63)	-0.112** (9.06)	-0.111** (9.25)	-0.119** (9.69)	-0.121** (10.11)
Obs. P	0.272	0.272	0.272	0.272	0.272
Pred. P	0.238	0.239	0.239	0.238	0.238
No. of obs.	125516	125516	125516	125516	125516
Pseudo R2	0.196	0.190	0.187	0.190	0.193

Notes: \* (\*\*) significant at the 5% (1%) level. t-statistics are in parentheses. All models include state dummy variables and a rural dummy.



households that belong to a rather deprived societal group also have a higher propensity for migration; the latter holds also for households that are less or not deprived within this societal reference group. While the effect for individual household relative deprivation (IRD) is relatively stable for all three societal categories, the effect of group relative deprivation (GRD) varies a lot for the different categories. While relative deprivation of the religious group increases the likelihood of out-migration quite significantly, the effect for group relative deprivation of the social class only is rather minimal. This might be explained that the identification with the social class is weaker than identification with the religious group, and thus, inequality across social classes induces less emigration pressure than inequality across religious groups. Although, using the principle component analysis for determining the composite effect each type of relative deprivation across all three societal categories shows that individual household relative deprivation is much stronger predictor of out-migration than group-based relative deprivation. For the other independent variables we find a clear pattern of explanation. Absolute deprivation in measured by annual household consumption expenditures is a clear constraint of out-migration. Even when we control for the number of household members, out-migration is rather an option of the less deprived and shows that availability of some resources preconditions the realization of out-migration. This income/consumption effect is supported by a wealth effect in terms of land possession. Household with relatively large land property have a higher inclination for sending a family member as migrant than households with smaller possessions. Predominantly for rural households with their main economic activity in agriculture, out-migration is a common reaction to deteriorating agricultural prices of and incomes. This kind of migration is either a rural-to-rural movement within the agricultural sector, or it is part of the structural change and therefore the consequence of a declining agricultural sector at the limits of its labor absorption capacity. Rural households employed in the non-agricultural sector have a significantly lower out-migration propensity. Belonging to a underprivileged scheduled tribe or class reduces the likelihood for out-migration very significantly. Hindu and Muslim households, i.e. the two largest religious groups in India, have significantly lower migration propensities; primarily Muslim households are less mobile.

### ***The choice of the migration destination***

Tables 3 to 5 report the regression results the determinants of the out-migration destination choice by distinguishing between intra-state (Table 3), inter-state (Table 4), and international migration (Table 5). All three binary choice variables are regressed on the same set of explanatory variables, which makes the comparison of their effects possible. Relative deprivation is controlled for on an all India level as well as by composite indices across the three societal categories (state, social class, religious group) for individual household relative deprivation (IRD) and group relative deprivation (GRD), respectively. Besides predicting the choice of migration distances (i.e. destinations) for all out-migrants, we disaggregate also for gender-specific out-migration. The likelihood of short distance migration is positively associated with the levels of both individual household and group relative deprivation. These effects, however, are mainly driven by female out-migration. The vast majority of all female out-migration is short-distance (87.3 per cent) and motivated by marriage (84.3 per cent), relative deprivation, however, seems to be –at least for the intra-state migration option- another relevant factor for females to leave their household. Besides for marriage reasons, intra-state migration is mainly motivated by study purposes. In contrast, prospect of (better) employment are not motivating for intra-state migration. Short distance migration within the state is the most likely chosen option of the poorer and underprivileged (scheduled tribes) households. A robust negative effect of household consumption levels on the probability of intra-state migration is suggesting this interpretation.

Long distance (inter-state) migration is an option chosen by about 23 percent of the out-migrants, with an about four times higher probability to be chosen by males (43.8 per cent) compared to females (11.6 per cent). This discrepancy is mainly driven by the search for (better) employment, which is only a significant factor for male out-migration. Surprisingly, relative deprivation does not play a significant role in the decision for this inter-state option. Instead, and contrary to the short distance alternative, the choice for longer migration distances is positively related to household consumption levels, and thus, negatively with absolute deprivation.

**Table 3: Probit estimation: Short distance (intra-state) out-migration**

Dependent variable	Out-migration of former HH member					
	(1)	(2)	(3)	(4)	(5)	(6)
	Male	Female	Total	Male	Female	Total
RD_All India	0.001 (0.15)	0.010* (2.04)	0.014** (3.11)			
IRD_multiple				0.008 (1.49)	0.005 (1.64)	0.011** (3.49)
GRD_multiple				0.014 (1.36)	0.008 (1.19)	0.014* (7.99)
Employment	-0.244** (14.48)	-0.004 (0.39)	-0.150** (15.72)	-0.243** (14.42)	-0.004 (0.41)	-0.149** (15.69)
Studies	0.122** (4.57)	0.087** (11.95)	0.128** (12.13)	0.124** (4.66)	0.086** (11.90)	0.129** (12.17)
Marriage	0.380** (6.51)	0.288** (35.14)	0.298** (34.73)	0.381** (6.55)	0.288** (35.01)	0.299** (34.77)
Forced Displacement	0.016 (0.12)	0.076* (2.18)	0.098 (1.76)	0.016 (0.12)	0.076* (2.18)	0.099 (1.77)
HH size	0.012** (8.03)	0.004** (6.03)	0.008** (9.71)	0.012** (8.30)	0.004** (5.93)	0.008** (9.83)
HH consumption	-0.018** (6.61)	-0.008** (4.16)	-0.011** (8.72)	-0.016** (5.52)	-0.008** (3.98)	-0.010** (7.98)
HH consumption (sq.)	0.000** (4.81)	0.000* (2.25)	0.000** (4.58)	0.000** (3.77)	0.000* (2.23)	0.000** (4.66)
Land possession (<1 hectare)	-0.042** (3.09)	-0.006 (0.91)	-0.023** (3.15)	-0.043** (3.13)	-0.006 (0.89)	-0.023** (3.18)
Land possession (>6 hectare)	0.051 (1.35)	0.016 (1.15)	0.030 (1.60)	0.050 (1.34)	0.017 (1.20)	0.030 (1.62)
Scheduled tribe	0.087** (4.42)	0.016 (1.55)	0.045** (4.00)	0.073** (3.18)	0.010 (0.78)	0.034* (2.46)
Scheduled caste	0.025 (1.87)	0.011 (1.78)	0.016* (2.31)	0.014 (0.91)	0.007 (0.80)	0.007 (2.85)
Upper social class	0.033** (2.88)	-0.023** (4.24)	-0.009 (1.49)	0.040** (2.78)	-0.020** (2.62)	0.004 (0.45)
Hindu	0.059* (2.02)	0.014 (0.87)	0.028 (1.42)	0.077* (2.43)	0.020 (1.13)	0.042* (1.99)
Muslim	-0.107** (3.35)	0.031* (2.00)	-0.018 (0.84)	-0.087* (2.49)	0.036* (2.26)	-0.002 (0.11)
Christian	0.002 (0.06)	-0.028 (1.25)	-0.012 (0.50)	0.027 (0.62)	-0.019 (0.82)	0.006 (0.23)
Self-employed in non-agriculture	0.033* (2.03)	0.018* (2.45)	0.029** (3.38)	0.035* (2.15)	0.018* (2.43)	0.030** (3.44)
Self-employed in agriculture	-0.029** (2.57)	0.022** (3.86)	0.010 (1.62)	-0.028* (2.46)	0.022** (3.86)	0.010 (1.68)
Urban Self-employed	-0.006 (0.32)	-0.031** (3.84)	-0.035** (3.56)	-0.046 (0.24)	-0.008** (3.84)	-0.035** (3.49)
Urban Casual labour	-0.004 (0.06)	0.022 (1.53)	0.028 (1.35)	-0.001 (0.01)	0.021 (1.51)	0.029 (1.37)
Male dummy			-0.035** (4.07)			-0.035** (4.06)
Obs. P	0.472	0.873	0.728	0.472	0.873	0.728
Pred. P	0.471	0.901	0.792	0.471	0.901	0.792
No. of obs.	54091	46441	100530	54091	46441	100530
Pseudo R2	0.218	0.145	0.290	0.219	0.145	0.290

Note: \* (\*\*) significant at the 5% (1%) level. t-statistics are in parentheses. All models include state dummy variables.

For instance, a hypothetical increase of the average annual household consumption level by 100,000 Rs (approx. 2250 US dollars) would increase the likelihood of inter-state migration by about six per cent and of international migration by about one per cent, while short distance migration would be reduced by about ten per cent. Therefore, a reduction of absolute deprivation has *ceteris paribus* the following effects, i.e. without changing relative deprivation levels: first, it would significantly increase the overall out-migration propensity, and second, it would increase average migration distances in a way that relatively more out-migrants would choose inter-state and international destinations rather than staying within the state. Relative deprivation, however, has even a negative effect on the probability of international out-migration. We find two alternative explanations for this result. First, lower levels of relative deprivation means less inequality either within or across various societal groups. However, less relative deprivation for those relatively poor means also less relative gratification of their social achievement of the relatively rich households. Since wealthier households have a higher propensity for international out-migration than poorer households, a decreasing level of relative deprivation and collinear decrease of relative gratification can increase the overall probability of international out-migration. The second possible explanation of the negative effect of relative deprivation on international out-migration can be caused by a false specification of the relevant reference group. Feelings of deprivation of potential international migrants might be generated by comparisons of their economic well-being at home either with general economic standards and prospects abroad or with respect to the situation of the Indian diaspora as 'external' reference.

Besides the above mentioned socio-economic factors, it stands out that smaller households rather tend to opt for inter-state and international destinations. This might be due to the higher costs of long distance migration and the relatively limited resource available in larger households to afford these higher migration costs. Socio-cultural and network factors also have some power in explaining migration distances.

**Table 4:** Probit estimation: Long distance (inter-state) out-migration

Dependent variable	Out-migration of former HH member					
	(1) Male	(2) Female	(3) Total	(4) Male	(5) Female	(6) Total
RD_All India	0.016 (1.75)	-0.006 (1.38)	0.003 (0.55)			
IRD_multiple				0.004 (0.81)	-0.005 (1.70)	-0.002 (0.59)
GRD_multiple				0.008 (0.75)	-0.004 (0.66)	-0.002 (0.34)
Employment	0.183** (11.86)	-0.008 (0.93)	0.104** (12.64)	0.182** (11.79)	-0.010 (1.11)	0.101** (12.31)
Studies	-0.052 (1.95)	-0.747** (10.29)	-0.087** (8.62)	-0.053* (2.02)	-0.075** (10.33)	-0.088** (8.74)
Marriage	-0.284** (4.84)	-0.244** (31.67)	-0.242** (30.86)	-0.285** (4.87)	-0.250** (32.30)	-0.245** (31.29)
Forced Displacement	-0.133 (1.15)	-0.063 (1.75)	-0.096* (1.97)	-0.134 (1.16)	-0.065 (1.84)	-0.097* (2.00)
HH size	-0.004** (2.80)	-0.001 (1.60)	-0.002** (2.60)	-0.004** (3.04)	-0.002** (2.97)	-0.003** (3.73)
HH consumption	0.007* (2.17)	0.003 (1.65)	0.006** (3.03)	0.004 (1.46)	0.005* (1.31)	0.006** (2.97)
HH consumption (sq.)	-0.093 (1.81)	-0.043 (1.02)	-0.082 (1.79)	-0.000 (1.33)	-0.000 (1.29)	-0.000 (1.75)
Land possession (<1 hectare)	0.026 (1.87)	-0.002 (0.26)	0.012 (1.79)	0.026 (1.88)	0.003 (0.54)	0.015* (2.31)
Land possession (>6 hectare)	-0.039 (1.04)	-0.015 (1.07)	-0.023 (1.35)	-0.038 (1.02)	-0.017 (1.25)	-0.024 (1.44)
Scheduled tribe	-0.078** (4.05)	-0.012 (1.26)	-0.037** (3.71)	-0.084** (3.73)	-0.012 (1.06)	-0.036** (3.03)
Scheduled caste	-0.012 (0.94)	-0.009 (1.44)	-0.009 (1.43)	-0.017 (1.08)	-0.010 (1.32)	-0.010 (1.24)
Upper social class	-0.021 (1.84)	0.013* (2.53)	0.005 (0.96)	-0.018 (1.25)	0.017* (2.35)	0.007 (0.92)
Hindu	0.015 (0.50)	0.000 (0.00)	0.012 (0.63)	0.024 (0.80)	-0.005 (0.30)	0.010 (0.47)
Muslim	-0.013 (0.40)	-0.019 (1.18)	-0.010 (0.47)	-0.003 (0.08)	-0.025 (1.47)	-0.013 (0.59)
Christian	0.025 (0.60)	0.023 (1.04)	0.035 (1.38)	0.037 (0.85)	0.018 (0.75)	0.033 (1.19)
Self-employed in non-agriculture	-0.011 (0.69)	-0.004 (0.47)	-0.010 (1.22)	-0.013 (0.78)	-0.019** (2.63)	-0.021** (2.63)
Self-employed in agriculture	0.021 (1.78)	-0.008 (1.41)	-0.001 (0.24)	0.020 (1.78)	-0.029** (4.20)	-0.011* (2.06)
Urban Self-employed	0.038 (1.79)	-0.012 (1.43)	0.009 (0.88)	0.037* (2.03)	0.029** (3.72)	0.041** (4.48)
Urban Casual labour	-0.070 (1.72)	-0.050** (4.20)	-0.061** (3.61)	-0.072 (1.86)	-0.007 (1.23)	-0.032 (1.92)
Male dummy			0.021** (2.75)			0.021** (2.72)
Obs. P	0.438	0.116	0.232	0.438	0.116	0.232
Pred. P	0.418	0.090	0.171	0.418	0.091	0.172
No. of obs.	54091	46441	100530	54091	46441	100530
Pseudo R2	0.227	0.139	0.257	0.227	0.134	0.256

Note: \*, \*\* significant at 5%, 1% level. t-statistics are in parentheses. All models include state dummy variables.

**Table 5: Probit estimation: International out-migration (from India)**

Dependent variable	Out-migration of former HH member					
	(1) Male	(2) Female	(3) Total	(4) Male	(5) Female	(6) Total
RD_All India	-0.007** (3.08)	0.0001 (0.20)	-0.002** (4.00)			
IRD_multiple				-0.006** (4.47)	-0.0004 (0.85)	-0.002** (6.01)
GRD_multiple				-0.007** (2.68)	-0.001** (3.51)	-0.002** (3.90)
Employment	0.048** (12.79)	0.003** (2.77)	0.021** (14.36)	0.048** (12.65)	0.003** (2.69)	0.021** (13.99)
Studies	0.006 (0.58)	-0.003** (4.70)	-0.005** (4.10)	0.005 (0.53)	-0.003** (4.83)	-0.005** (4.28)
Marriage	-0.017 (1.30)	-0.015** (11.42)	-0.013** (9.18)	-0.017 (1.29)	-0.017** (11.94)	-0.013** (9.52)
Forced Displacement	0.070 (1.09)	-0.003 (1.16)	-0.002 (0.26)	0.078 (1.17)	-0.003 (1.33)	-0.002 (0.28)
HH size	-0.002** (5.77)	-0.001** (6.37)	-0.001** (9.21)	-0.003** (6.55)	-0.001** (7.18)	-0.001** (10.31)
HH consumption	0.003** (5.90)	0.001** (3.81)	0.001** (8.01)	0.003** (5.43)	0.001** (3.31)	0.001** (7.17)
HH consumption (sq.)	-0.015** (3.86)	-0.013* (2.21)	-0.005** (3.91)	-0.000** (3.69)	-0.000* (2.05)	-0.000** (3.79)
Land possession (<1 hectare)	0.004 (1.00)	0.000* (0.26)	0.001 (0.94)	0.005 (1.37)	0.001 (0.67)	0.001 (1.51)
Land possession (>6 hectare)	-0.008 (0.91)	0.002 (0.86)	0.000 (0.02)	-0.008 (1.01)	0.002 (0.81)	-0.000 (0.11)
Scheduled tribe	-0.015** (2.92)	-0.002 (1.54)	-0.004** (3.16)	-0.012 (1.92)	-0.001 (0.82)	-0.003* (1.98)
Scheduled caste	-0.007 (1.75)	-0.000 (0.43)	-0.002 (1.92)	-0.004 (0.87)	-0.000 (0.01)	-0.001 (0.99)
Upper social class	-0.000 (0.09)	0.001* (2.21)	0.001 (1.31)	-0.001 (0.41)	0.001 (1.32)	0.001 (0.66)
Hindu	-0.027** (3.97)	-0.005** (4.08)	-0.008** (5.34)	-0.031** (4.05)	-0.005** (3.68)	-0.009** (5.41)
Muslim	0.062** (6.36)	-0.002* (2.55)	0.010** (5.39)	0.055** (5.44)	-0.002* (2.39)	0.009** (4.55)
Christian	-0.002 (0.22)	-0.001 (0.45)	-0.001 (0.94)	-0.005 (0.66)	-0.001 (0.68)	-0.002 (1.54)
Self-employed in non-agriculture	-0.005 (1.05)	0.002 (1.55)	-0.000 (0.24)	-0.010* (2.47)	-0.000 (0.04)	-0.002* (2.31)
Self-employed in agriculture	0.009* (2.45)	0.002 (1.61)	0.002* (2.49)	0.003 (0.92)	-0.000 (0.08)	0.000 (0.23)
Urban Self-employed	-0.012** (3.03)	-0.001 (1.23)	-0.003** (3.33)	-0.003 (0.97)	0.001 (1.55)	0.000 (0.25)
Urban Casual labour	-0.016** (2.85)	-0.003* (2.25)	-0.005** (4.30)	-0.006 (0.97)	-0.002 (1.15)	-0.003 (1.91)
Male dummy			0.002 (1.77)			0.002 (1.70)
Obs. P	0.085	0.011	0.038	0.085	0.011	0.038
Pred. P	0.029	0.003	0.006	0.030	0.003	0.006
No. of obs.	54091	46289	100530	54091	46289	100530
Pseudo R2	0.344	0.253	0.367	0.342	0.245	0.363

Note: \*, \*\* significant at 5%, 1% level. t-statistics are in parentheses. All models include state dummy variables.

For instance, while migration routes of family members of Hindu households are rather short distance, Muslim households instead have a stronger linkage to international destinations, and here primarily the Gulf. As mentioned before, Muslim households as well as Hindu households are rather underrepresented in overall out-migration, however, if sending a migrant then Muslim households use their established networks to the Arabic region, which is largely male-dominated. On contrary, Hindus lack an equivalent international diaspora, and consequently, Hindu out-migrants stay primarily in the origin region in relative proximity to their sending household.

### **Concluding remarks**

This article studies the determinants of household decisions on out-migration and out-migration distances. We find a common set of drivers for both internal and international migration, but also some differences beyond the obvious role of cross-border policies. These differences are mostly related to the capability of households to afford the higher costs for migrating to distant destinations. Inter-state and international migration is the preferred migration option of households experiencing less absolute deprivation. Relative deprivation, on the other hand, is not a relevant driver of moves of longer distance. However, individual relative deprivation of households as well as collective relative deprivation of societal groups are influencing in the initial decision on whether a family member shall migrate at all, and whether to choose a short distance destination. Therefore, the relative importance of absolute deprivation compared to feelings of relative deprivation either within or beyond a societal reference group increases with the migration distance. Besides these (socio-) economic factors, the Indian migration pattern is largely characterized by a 'feminization' of intra-state migration (short distance), an 'economization' (i.e. employment-driven) of long distance migration, and a 'concentration' of international out-migration in a few migratory hub states such as Kerala, Goa, or Punjab. Relatively deprived states like Bihar, Jharkhand, and Orissa rather fulfil the role of labour reserves for those regions with a high international migration outflow. Further research, however, is needed to disentangle and to better understand the role of established

migratory systems and systemic linkages between internal and international migration processes.

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## Appendix

**Table A1:** Descriptive statistics

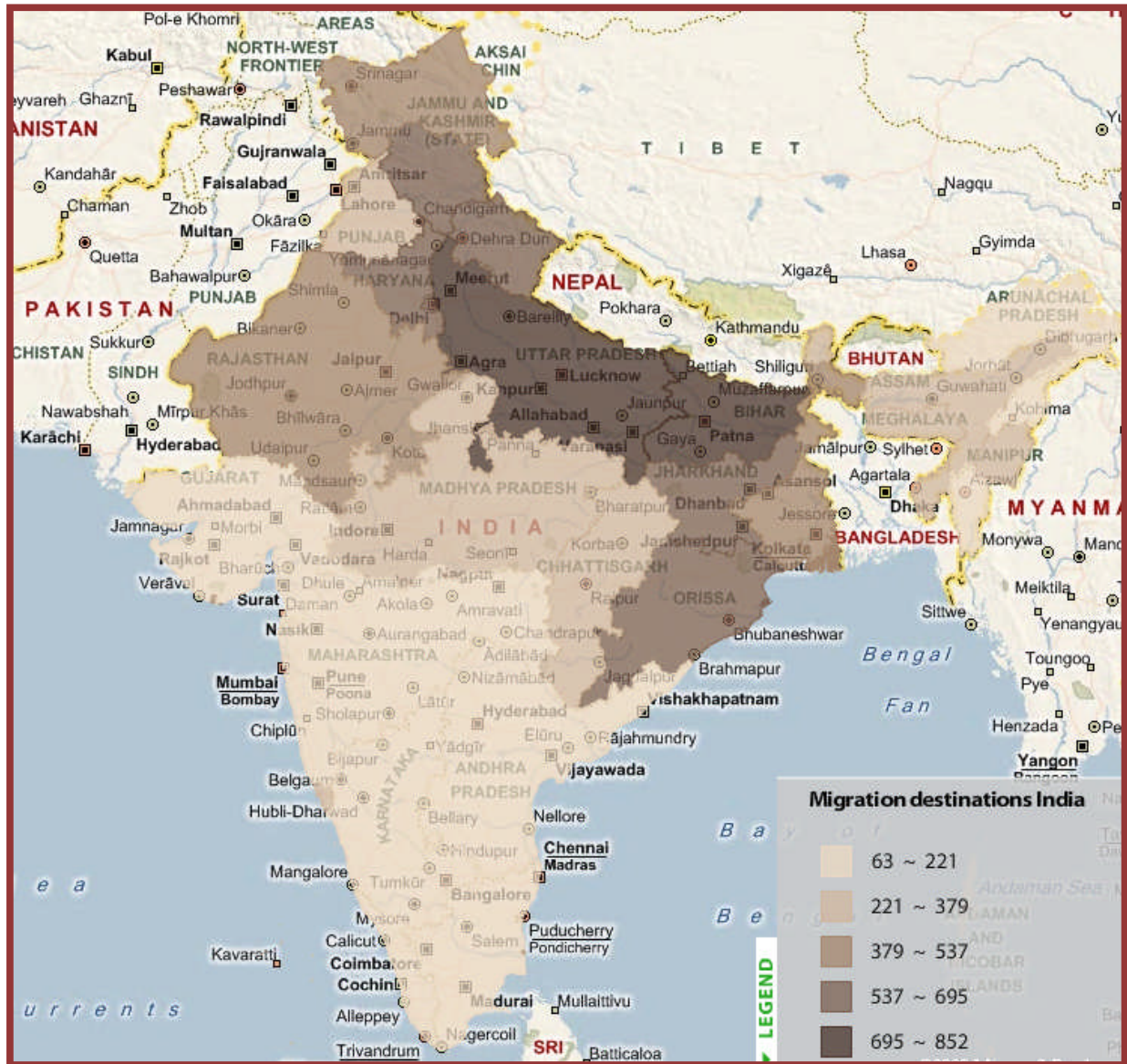
Variable	Definitions	Mean	Std. Dev.	Min	Max
<i>Outmigration</i>	Dummy variable set to one if a household is a migrant-sending household	0.27	0.445	0	1
<i>Outmigration_short</i>	Dummy variable set to one if former household member is migrated within the state/union territory	0.73	0.445	0	1
<i>Outmigration_long</i>	Dummy variable set to one if former household member is migrated outside the state/union territory, but within India	0.23	0.422	0	1
<i>Outmigration_abroad</i>	Dummy variable set to one if former household member is migrated abroad	0.04	0.192	0	1
<i>Household size</i>	Number of household members including out-migrants	5.06	2.709	1	37
<i>Hindu</i>	Dummy variable set to one if household is Hindu	0.83	0.418	0	1
<i>Muslim</i>	Dummy variable set to one if household is Muslim	0.11	0.322	0	1
<i>Christian</i>	Dummy variable set to one if household is Christian	0.03	0.250	0	1
<i>Scheduled tribe</i>	Dummy variable set to one if household belongs to a scheduled tribe	0.09	0.344	0	1
<i>Scheduled caste</i>	Dummy variable set to one if household belongs to a scheduled caste	0.20	0.373	0	1
<i>Upper social class</i>	Dummy variable set to one if household neither belongs to a scheduled tribe nor scheduled caste.	0.30	0.468	0	1
<i>Land possession (&lt;1 ha)</i>	Dummy set to one if household possesses less than 1 hectare of land	0.86	0.344	0	1
<i>Land possession (&gt;6)</i>	Dummy set to one if household possesses more than 6 hectare of land	0.01	0.086	0	1
<i>Employment</i>	Dummy set to one if the main reason for out-migration is employment	0.30	0.458	0	1
<i>Studies</i>	Dummy set to one if the main reason for out-migration is studies	0.05	0.213	0	1
<i>Marriage</i>	Dummy set to one if the main reason for out-migration is marriage	0.54	0.498	0	1
<i>Forced displacement</i>	Dummy set to one if the main reason for out-migration is forced displacement	0.001	0.037	0	1
<i>HH consumption</i>	Total annual household consumption expenditures (in 10000 Rs)	4.512	3.924	0.058	234.99
<i>SE Non-agricultural HH</i>	Dummy set to one for a rural household if the household is self-employed in non-agriculture	0.10	0.304	0	1
<i>Agricultural HH</i>	Dummy set to one for a rural household if the household is self-employed in	0.25	0.433	0	1

	agriculture				
<i>SE urban HH</i>	Dummy set to one for an urban household if the household is self-employed	0.10	0.305	0	1
<i>Urban casual work HH</i>	Dummy set to one for an urban household if the household is casually employed	0.04	0.189	0	1
<i>Urban regular work HH</i>	Dummy set to one for an urban household if the household receives regular salary	0.12	0.321	0	1
<i>Male migrant</i>	Dummy set to one if out-migration is male	0.361	0.480	0	1
<i>RD_all India</i>	Intra-group relative deprivation on an all India level (ln 10000 Rs)	1.606	0.918	0	4.454
<i>IRD_state</i>	Intra-group relative deprivation on a state level (ln 10000 Rs)	1.526	1.003	0	9.197
<i>GRD_state</i>	Inter-group relative deprivation on a state level (ln 10000 Rs)	0.498	0.351	0	1.346
<i>IRD_social group</i>	Intra-group relative deprivation on a social group level (ln 10000 Rs)	1.534	1.053	0	5.866
<i>GRD_social group</i>	Inter-group relative deprivation on a social group level (ln 10000 Rs)	0.525	0.421	0	1.262
<i>IRD_religious group</i>	Intra-group relative deprivation on a religious group level (ln 10000 Rs)	1.592	0.934	0	7.715
<i>GRD_religious group</i>	Inter-group relative deprivation on a religious group level (ln 10000 Rs)	0.092	0.048	0	0.657
<i>IRD_multiple</i>	Intra-group relative deprivation 'index' based on component 1 of PCA of all three group categories	0.000	1.878	-3.471	8.809
<i>GRD_multiple</i>	Inter-group relative deprivation 'index' based on component 1 of PCA of all three group categories	0.000	1.146	-2.459	4.127

Figure A1: Intra- state migration: Distribution per 1000 out-migrants

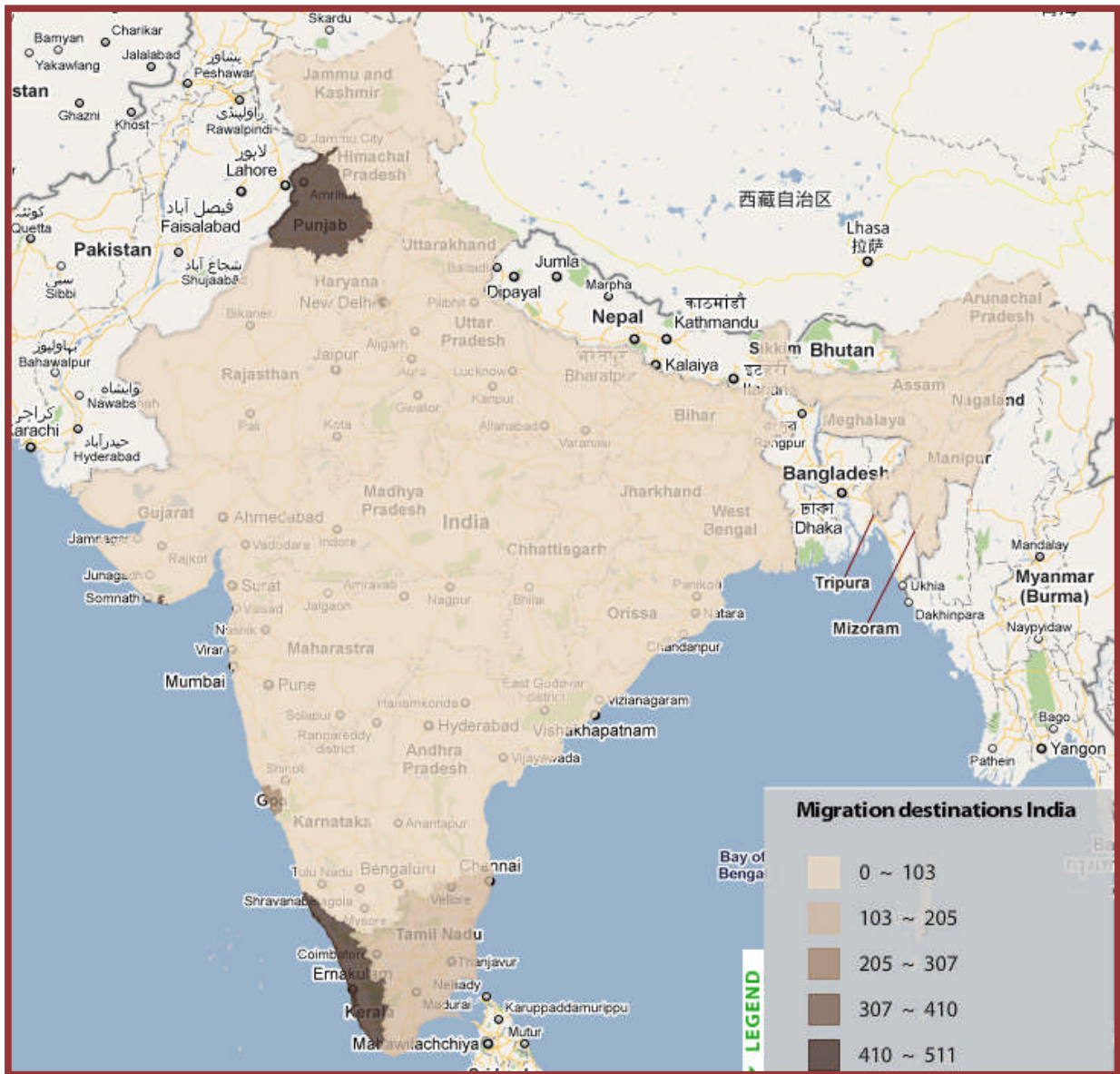


**Figure A2: Inter- state migration: Distribution per 1000 out-migrants**





**Figure A3: International migration hubs: Distribution per 1000 out-migrants**



**Figure A4: State-related levels relative deprivation (in Rs.)**

