

# Are Caste Categories Misleading?

## Relationship between Gender and Jati in Three Indian States

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**WORLD BANK GROUP**

Development Research Group

Poverty and Inequality Team

June 2017

## Abstract

This paper examines the relationship between caste and gender inequality in three states in India. When households are grouped using conventional, government-defined categories of caste the paper finds patterns that are consistent with existing literature: lower-caste women are more likely to participate in the labor market, have greater decision-making autonomy within their households, and experience greater freedom of movement. When households

are grouped by the narrower sub-caste categories of *jati*, where caste is lived and experienced, the paper finds the relationships to be far more varied and nuanced. These results suggest that focussing on broad caste categories such as “scheduled castes” and “scheduled tribes” can be misleading for understanding the relationship between caste and gender, and for targeting anti-poverty programs.

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# Are Caste Categories Misleading? The Relationship between Gender and Jati in Three Indian States

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JEL Classification Codes: I3, J4, O1

Keywords: Gender, Economic Empowerment, Rural Development, Caste, Jati, India

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The authors are grateful to an anonymous referee and participants in the Economic Growth and Development Conference in ISI, Delhi, and in the WIDER workshop, *Towards Gender Equity in Development*, in Namur for very valuable comments on an earlier draft. They are indebted to the World Bank’s South Asia Food and Nutrition Security Initiative, funded by the EU and DfID, and UNU-WIDER for financial support. This paper reflects the individual views of the authors and does not in any way represent the official position of the World Bank or its member countries.

## 1. Introduction

Indian society is highly stratified and hierarchical. Caste, class and gender all contribute to an individual's status. Each of these three identities is powerful in its own right and a large body of literature explores the importance of all three in determining social and economic opportunities. The complex and dynamic interplay between these elements, however, receives less attention even though across India it drives significant regional and temporal variations in social structures (Dreze and Sen, 2002).

This paper examines the relationship between two of these categories: caste and gender. Numerous studies have argued that there is a paradoxical inverse relationship between caste and gender in Indian society. Stringent patriarchal codes designed to subordinate women have been observed to be restricted to high-status caste groups; women from low-status castes thus display higher labor-force participation rates, fewer patriarchal restrictions on mobility and greater decision-making autonomy (Boserup 1970; Liddle and Joshi 1986; Mencher 1988; Chakravarty 1993; Chen 1995; Kapadia 1995; Eswaran, Ramaswami and Wadhwa 2009). A related argument is that increases in wealth and income among low-ranked castes can have a negative impact on the status of women: As these castes emulate the customs, practices and patriarchal codes of higher-ranked castes, women become disempowered (Srinivas 1977).

However, some recent evidence from large-sample surveys is challenging this idea of a negative relationship between caste and the status of women. Deshpande (2002) for example, argues that far from being empowered, women from lower castes may actually be in a trap of material deprivation, low education, limited employment opportunities, inadequate safety and persistent indignity.

A rigorous examination of the relationship between caste and gender has been constrained by methodological challenges. First and foremost is the challenge of defining caste. There is no universally accepted definition of the term.<sup>1,2</sup> In Hindu texts, caste is equated with *varna*, the ancient organization of society into four vertical categories: priests (brahmins), kings and warriors (kshatriya), farmers and merchants (vaishyas), laborers (shudras), and a fifth group of "untouchables" excluded from the system altogether.<sup>3</sup> The Government of India as well as various state governments classify caste according to a different group of categories, including Scheduled Caste (SC), Scheduled Tribe (ST),

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<sup>1</sup>The Miriam Webster dictionary of 2016 offers three separate definitions: (1) one of the hereditary social classes in Hinduism that restrict the occupation of their members and their association with the members of other castes; (2) a division of society based on differences of wealth, inherited rank or privilege, profession, occupation, or race; (3) a system of rigid social stratification characterized by hereditary status, endogamy, and social barriers sanctioned by custom, law, or religion. (Miriam Webster Dictionary Online, Accessed on 7/24/2016).

<sup>2</sup> The very word "caste" is a European term that comes from 16th century Portuguese travelers who applied their word for clan, *casta*, to describe the visibly segregated groups they observed as outsiders.

<sup>3</sup> *Varna* is the Sanskrit word for type, order, color or class.

Backward Caste (BC), Extremely Backward Caste (EBC) and Other Backward Caste (OBC) to allow underprivileged groups to be targetted for benefits. SCs are groups traditionally considered untouchable. STs are groups that traditionally live in forest and hill regions and have been relatively excluded from economic development. BCs, EBCs, and OBCs are generally defined at the state level to identify groups that are considered materially deprived.

Yet caste is lived, experienced and practiced in everyday life as *jāti* (henceforth, jati) (Srinivas 1976; Beteille 1996; Bayly 2001; Dirks 2011).<sup>4</sup> Jatis are hereditarily formed endogamous groups whose identities are manifested in a variety of ways: occupational status, property ownership, diets, gender norms, social practices, religious practices emphasizing purity and pollution, and systems of self-governance. Though jatis are usually regarded as sub-castes, placing them within the *varna* classification can be complicated (Dumont 1980). Each region of India has several hundred jatis and there is no pan-Indian system of ranking them (Srinivas 1976; Bayly 2001; Rao and Ban 2007; Dirks 2011). However, anthropologists have documented numerous *local* criteria for ranking jatis, as well as significant regional differences in rank orderings. Frequent conflicts over rank order and numerous strategies and circumstances that can change rank order (Srinivas 1976, 1977, 1996).

Much evidence exists on the importance of jatis in many aspects of life in India.<sup>5</sup> Members of a given jati have strong social ties, even across villages (Srinivas 1976; Gupta 2000). Almost all marriages are conducted within these groups (Desai and Dubey 2010; Banerjee, Duflo, Ghatak and Lafortune 2013). This creates an extensive insurance network featuring loans and transfers at critical times which are often bigger in size and more favorable in terms than other sources of finance (Munshi and Rosenzweig 2006; Mazzocco 2012). Thus, jati-based networks shape an individual's prospects of marriage, employment and out-migration (Munshi and Rosenzweig 2006; Munshi 2011; Munshi 2016). Jati identity is often endogenously determined - shifting to respond to incentives from the state or via the influence of social movements (Rao and Ban 2007, Cassan 2015). Recent work has also found large differences in the allocation of benefits within Scheduled Castes by jati (Kumar and Somanathan 2017), and evidence that jati-level population proportions have significant implications for electoral outcomes (Huber and Suryanarayan 2016).

Despite understanding the importance of jatis in everyday life, the Indian census and most large national surveys such as the National Family Health Survey, the National Sample Surveys of India, and the District Level Household Survey of India, do not have jati-level identifiers. Caste, therefore, continues to be measured and generally understood only in broad terms, with the emphasis on categories such as SC, ST, OBC and "Forward

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<sup>4</sup> The word *jāti* literally translates to "birth". The term jati appears in almost all Indian languages and is almost always related to the idea of lineage or kinship group. There are perhaps more than 3000 jatis in India.

<sup>5</sup> Munshi (2016) provides a broad overview of this literature.

Castes” (FC) (a term that includes any jati that is not included in one of the officially defined categories because they are considered more privileged).

A second methodological challenge to understanding the relationship between caste, class and gender is the paucity of data with detailed information on economic indicators and women’s status. The National Family Health Survey, the District Level Household Survey and the Annual Health Surveys, for example, all collect detailed information on the status of women, but limit the list of economic indicators to a checklist which includes only household assets and occupational status of household members. Anthropologists and ethnographers have gathered in-depth qualitative information on these issues but their work has typically focussed on small samples in a few villages or communities (examples include Chen 1995; Kapadia 1995; Jeffrey and Jeffrey 1996; Seymour 1999; Srinivas 1979; and many others). Given the enormous geographic, demographic and cultural variations within India, this has limited the generalizability of the findings.

This paper examines data with extensive information on caste and gender status from three states—Bihar, Odisha and Tamil Nadu. Our data are unique in having not only broad geographic coverage but also detailed information on jati category, consumption expenditure, and indicators of the status of women. Conducted between 2011 and 2013, these surveys served as a baseline for the evaluation of livelihoods programs that targeted the poor. The sampling strategy for all the data from all the three states, therefore, was designed to ensure that they were representative of vulnerable populations in rural areas who are currently eligible for a variety of poverty-alleviation programs in these states. This limits the data, which are not representative of the state as whole, but are more representative of poor rural populations. However, the limitations of the data can also be seen an advantage. Oversampling poor regions allows us to better understand how caste and gender are experienced in poor rural communities in these states.

We find that the relationship between caste and the status of women is more nuanced than suggested by the literature: It depends heavily on location and the definitions of caste. We examine three sets of indicators for the status of women in all three states: employment, decision-making authority on key household decisions, and physical mobility. We use a simple reduced-form regression model to explore the role of caste in determining these outcomes. We begin our analysis by using broad caste categories and then we turn to jati-level definitions of caste. In both sets of regressions, we control for numerous individual, household and community characteristics.

When we use broad caste categories that correspond to official definitions used by the Government of India, we find evidence of the inverse relationship between caste and gender status, but the relationship varies by state. For example, we see a relatively strong negative relationship in Bihar, but almost no discernible relationship in Tamil Nadu where

per-capita incomes are almost four times higher than Bihar and economic development has raised the levels of education and formal employment for both men and women. When we break down caste into jatis in the three states, however, the relationship between caste and gender becomes far more complex. In Bihar for example, the inverse relationship is concentrated in specific jatis and totally absent in others. Finally, we examine the relationship between caste, class and gender by interacting the caste variables with consumption expenditure in our reduced form specification. We see very little evidence that increased expenditure is consistently associated with a decline in the status of women.

The rest of the paper is organized as follows: Section 2 discusses the literature on caste, empowerment and inequality; Section 3 describes our sample and data; and Section 4 presents the main findings on inequality between castes including variations of female empowerment within castes and the role of economic advancement in female autonomy.

## 2. Background: Caste and Gender in India

It is often argued that India's patriarchal kinship system is typical of settled agricultural societies (Boserup 1970; Alesina, Giuliano and Nunn 2013). Private property rights and the use of agricultural technology created a storable agricultural surplus, which may have enabled social stratification of both class and gender. Patrilineal inheritance, patrilocal exogamy and a rigid sexual division of labor may have emerged to assure uncontested bloodlines that preserved social, economic and political statuses of families. In such settings, women's labor force participation, mobility and decision-making autonomy arguably falls in response to increased economic status. Goldin (1994) argues that the relationship is more complicated: Women's labor force participation (and, more broadly, their status) may follow a non-linear U-shape during the process of economic development.

In India, the status of women is also affected by the caste system. Ancient texts such as the *Rig Veda* and the *Manusmriti* describe extremely unequal gender relations in the highest castes (Chakravarty 1993; Desai and Krishnaraj 1993). Observations of ruling and martial castes from the colonial period of history highlight the practices of *sati*, *pardah* (total female seclusion), female infanticide, dowry and polygyny among the Brahmins and ruling castes (Joshi 1995; Mani 1998).

Conclusions drawn from ancient religious texts or treatises from the colonial era may not be a valid lens for understanding contemporary gender relations, however. These texts can be ideologically biased in favor of the groups by whom they were written, or of the goals for which they were written, and it is unclear whether the codes of behavior described in these texts were normative statements that were actually followed on the ground. As argued in the introduction of this paper, caste is lived and practiced in India through the system of jati. Very little can be gleaned about contemporary jati-gender

relationship from religious texts or colonial writings. To gain knowledge of the contemporary, we must rely on a growing literature of empirical studies that have been conducted largely in post-independence India. Below we summarize two types of empirical work: literature based upon large sample surveys of the relationship between caste and gender using broad caste categories and empirical literature using smaller observational studies that provide some granular understandings of the relationship between jati and gender.

## 2.1 Perspectives from Large Datasets

Empirical work on caste and gender has frequently compared groups at the bottom of the hierarchy with the rest of the population. This comparison is problematic considering that the groups that have been grouped together at the bottom have changed over time.

The attempt to identify these groups began in the colonial period (Dirks, 2011). The Government of India Act of 1935 created lists of castes and tribes entitled to affirmative action policies throughout British controlled India. Castes and tribes included in these lists were called “Scheduled Castes (SC)” and “Scheduled Tribes (ST)”. In independent India, Articles 341 and 342 of the Indian constitution continued this practice and used the same terminology as during colonial rule (Revankar 1971).<sup>6</sup> However, the jatis who are deemed eligible for inclusion in these groups have shifted over time, and the decisions regarding inclusion in these categories have become increasingly politicized. For example, in 1935, 429 castes were listed as SC at the colonial government at the time. In the most recent census of 2011 however, 1241 castes and 705 tribes had SC and ST status respectively (Census of India, 2011), and there are additional lists at the state level. In recent years, affirmative action benefits have also been extended to groups such as EBCs and OBCs who have faced similar disadvantages to SCs and STs, but were not previously eligible for compensatory programs. The groups included in this category also vary across states and have changed over time.

Given these difficulties in making comparisons between broad groups over time, many studies have relied on cross-sectional approaches to examine the relationships between caste, class and gender. Boserup, for example, examines these broad categories during the 1956–57 period to argue that in India, most female agricultural labor is drawn from SC/ST groups, and they are largely employed on “family farms belonging to men with non-working wives” (Boserup 1970: 69). More recently, Deshpande (2001) uses data

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<sup>6</sup> Article 46 of the 1950 Constitution states, “The State shall promote with special care the educational and economic interests of the weaker sections of the people, and, in particular, of the Scheduled Castes and the Scheduled Tribes, and shall protect them from social injustice and all forms of exploitation.”

from the NFHS survey and finds that 39 percent of SC women, 51 percent of ST women and 30 percent of “Other” women report that they participate in the formal labor force. This broadly confirms the hypothesis of the inverse relationship between caste and labor-force participation rate.

But to what extent does greater employment translate into greater empowerment? Answering this question by using large national datasets is quite difficult, mainly because of the paucity of data on the status of women. Deshpande (2001) uses measures of literacy, asset ownership, mobility and autonomy that are included in the NFHS survey. She finds that for India as a whole 77.3 percent of SC women and 69.7 percent of ST women have no education, which is substantially higher than the average for other castes which is 51.6 percent. She reports lower overall asset ownership by SC and ST households and argues that SC and ST women face higher levels of violence and less mobility and autonomy even when they do participate in the labor force. She also emphasizes that estimates of female labor-force participation rates fail to adjust for the quality of working conditions and job security.

In another study, Deshpande (2002) uses the 55<sup>th</sup> round of the NSS data, conducted in 1999-2000, to show that the higher levels of poverty among SCs, STs, and OBCs—as measured by their physical mobility—undermine rather than enhance the status of women. In these groups, women are only marginally better off (in terms of mobility) than higher-ranked castes. Here too, she finds that contrary to the prevailing wisdom, lower-caste women are the worst off on measures of consumption and exposure to domestic violence.

Another perspective on the determinants of empowerment using large data-sets comes from the analysis of female-male sex ratios. The value of female children, as measured by survival, has been shown to increase with the female labor force participation rate (Dasgupta 1987). Early literature noted female-male sex ratios were more favorable among SC/ST groups in the pre-independence period (Dreze and Sen, 2002).<sup>7</sup> The decline in this ratio in the post-independence period has often been attributed to Sanskritization<sup>8</sup> of SC jatis who have placed restrictions on women in an attempt to improve the group’s status, particularly after benefitting from a variety of programs for social upliftment<sup>9</sup>. Establishing

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<sup>7</sup> Dreze and Sen (2002: 241–45) summarize the findings on time trends of female-male sex ratios in the SC/ST population of India. They note that in pre-independence India, female-male sex ratios among SC/ST groups were significantly higher than the rest of the population, but by 1991, the sex ratio stood at 922 women per 1,000 men, while the rest of the population was 927 per 1,000 men (Dreze and Sen 2000).

<sup>8</sup> The term Sanskritization was developed by M. N. Srinivas (1962, 1967, 1989). He defined this as the process by which castes placed lower in the caste hierarchy seek upward mobility by emulating the rituals and practices of the upper or dominant castes.

<sup>9</sup> The decline in the sex ratio among SC/ST groups is largely driven by states with the highest concentration of SC/ST population such as Uttar Pradesh. Dreze and Sen (2002: 242) note that the Chamar caste of UP, which is the largest SC caste in the state, had a female-male sex ratio of 986 in 1901, but by 1981 the SC/ST sex ratio had aligned with the rest of the population.

the causal effect of Sanskritization, however, is quite difficult since there are many possible mechanisms linking changes in survival rates to caste status.

## 2.2 Perspectives from Field Studies

In recent years a large literature by anthropologists, sociologists and economists has analyzed qualitative and quantitative data on the relationship between caste and gender. A series of ethnographies have largely confirmed that in most parts of rural India upper-caste women are more likely to practice *purdah* (female seclusion), are more likely to use the veil, and face significant restrictions on their mobility and labor force participation opportunities (Srinivas 1977, 1979; Chen, 1995, Kapadia, 1995; Jeffrey and Jeffrey 1996; Seymour 1999; and many others). These studies have also noticed that increased caste status is associated with a greater subordination of women (Hutton 1946; Srinivas 1977).<sup>10</sup>

Field studies have also provided insights into the rigid sexual division of labor by caste and class. Boserup (1970: 69–70), for example, uses data on female labor force participation rates from several states of India to highlight the division of labor in agriculture; ploughing is a male task but post-agricultural processing and preservation of grain are female tasks, and almost all female labor is drawn from the poorest castes/classes. In her comparison of India and Bangladesh, Chen (1995) reports that in India, villagers display high levels of preoccupation with ensuring status-appropriate work for women. They rank castes by “...whether they allow women to work in the following activities: only within their courtyards/homesteads, only on their own farms, only within the courtyards or homesteads of others, only at the farms of others, in other activities within the village, or in other activities outside the village. Using this ranking scale, the more secluded the woman, the higher her household’s status or prestige” (Chen 1995: 46). Mencher (1988) conducts detailed analyses of female labor force participation in paddy cultivation in Tamil Nadu and highlights the reluctance of upper-caste women to enter the labor force, even when facing conditions of severe poverty that place them in a ranking of income below the SC and ST women in the village.

The sexual division of labor is also seen in non-agricultural occupations. In artisan jatis such as potters and weavers, men specialize in specific skills, while female household members are active participants in every other non-male stage of production (David and Kramer 2001). Some studies have also found evidence that greater opportunities among the lower-caste women can translate into empowerment. Kapadia (1995), for example, finds that among the Pallar of Tamil Nadu—a highly impoverished, landless SC who largely perform agricultural labor—women form a major share of the local labor force. They enjoy significant independence in the domestic domain as well as in negotiations with

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<sup>10</sup> A review of this literature is found in Liddle and Joshi (1986) and Mohanty (2004).

their employers. She reports that this pattern was not seen in the higher-caste Vellalar women who worked as gem cutters in the rural synthetic gem-cutting industry.

Another strand of literature that provides insights into the jati-gender relationship is on marriage markets in India. Recent surveys find that 95 percent of Indians still marry within their broad caste group (Desai and Dubey 2012). This has implications for the status of women. Within broad caste groups, women are not permitted to marry a man of a lower caste/jati, and strong punishments are imposed for transgressing that norm (Das 1975). However, hypergamy is, in theory, permitted (i.e., a woman may marry upwards in the caste/jati ranking).

In summary, most large national sample surveys lack details about jatis. While anthropologists have gathered in-depth information on the jati-gender relationship, their work has typically focused on small samples in a single community. The enormous geographic, demographic and cultural variations within India make it difficult to draw any broad conclusions from these findings. Furthermore, much of the anthropological literature is dated, and caste and gender relations have changed rapidly in recent years (Sanyal et al. 2015). Thus, examining recent survey data to discern patterns in these relationships could help expand our understanding of caste and gender roles. In this paper, we use data from three states to contribute to this literature.

### 3. Data

We use data from baseline surveys collected between 2011 and 2013 for the impact evaluations of State Rural Livelihoods Projects in three states in India: JEEViKA<sup>11</sup> in Bihar, TRIPTI<sup>12</sup> in Odisha and PVP<sup>13</sup> in Tamil Nadu. The three states have very different economic, social and demographic characteristics. Key indicators are summarized in Table 1. Bihar is a predominantly rural state whose agrarian structure has a strong caste and class base (Rodgers and Rodgers 2001). Odisha is a coastal state with one of the highest populations of Scheduled Tribes (STs) in the country. STs account for 22.1 percent of the total population of the state and 9.7 percent of the tribal population of India (Census of India 2001). Both Bihar and Odisha are considerably poorer than Tamil Nadu, which is the 8<sup>th</sup> wealthiest state in India and has made great strides in education as well as urbanization. The average person in Tamil Nadu is approximately four times richer than their counterpart in Bihar and twice as rich as their counterpart in Odisha. This significant regional imbalance has been noted by other scholars (Dreze and Sen 2002).

Our surveys include 9,000 households from seven districts in Bihar surveyed in 2011, 3,000 households from ten districts in Odisha also surveyed in 2011, and 3,900

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<sup>11</sup> Bihar Rural Livelihoods Project

<sup>12</sup> Targeted Rural Initiatives for Poverty Termination and Infrastructure

<sup>13</sup> Tamil Nadu Empowerment and Poverty Alleviation Project

households from nine districts surveyed in Tamil Nadu in the first half of 2013 (see Table 2). The surveys were designed to be representative of the target population of state-implemented livelihoods projects. The survey populations are concentrated in the poorer regions of the three states, and we oversampled SC and ST households because they were the intended targets of the project.<sup>14</sup> For the purpose of this study, we restrict the sample to those households for which we have both household and woman-specific information.<sup>15</sup> This yields a sample of 8,969, 2,470, and 3,384 households from Bihar, Odisha and Tamil Nadu respectively.

Table 2, panel (a) summarizes the caste distribution for our data in the three states. Due to the oversampling of Scheduled Castes, almost 70 percent of the sample in Bihar, 27 percent in Odisha and 32 percent in Tamil Nadu are comprised of SCs. The BCs comprise the largest caste group in Tamil Nadu followed by SCs and Most Backward Castes (MBCs). Odisha is the only state with a significant sample of households from “general” or “forward” castes, which form the third largest caste category after OBCs and SCs. Odisha also has the highest share of ST households in our sample.

Table 2 panel (a) also contains the jati distributions considered for our analysis, arranged by state. In order to avoid unduly small cells, we focus on the major jati groups in the state and gather the smaller jatis into an ‘Others’ category for each broad caste group. Musahar (26 percent), Chamar (20 percent), Dusadh (17 percent) and Yadavs (7 percent) form the major jatis in our sample for Bihar. All belong to the SC caste group<sup>16</sup>. Khandayat

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<sup>14</sup> For clarity, we detail the design of the sampling strategy below:

(i) In Bihar, 180 panchayats were randomly picked in each of the 16 blocks chosen from the seven project districts where the scale-up of JEEViKA was planned. Within each of the study villages, hamlets (*tolas*) in which the majority of the population belonged to SC or ST castes were identified. Households were then randomly selected from these hamlets.

(ii) In Odisha, our sample is drawn from matched treatment-control pairs of blocks, which were obtained from a sample of 10 backward districts of the state for the purpose of the rollout of the TRIPTI plan. These were selected based on a ranking of the state’s districts using a backwardness index. The sample, therefore, includes a project block with the lowest backwardness score (treatment block) and a non-project block with the backwardness score closest to the last project block that was selected into TRIPTI (control block). Since TRIPTI explicitly targets the poor who are overwhelmingly drawn from SC and ST groups, SC and ST households are systematically oversampled in every village.

(iii) In Tamil Nadu, as in Odisha, selection of blocks within the ten districts was based on a backwardness score. This score was composed of five equally weighted indicators: percentage unirrigated area to the total cultivable land, infant mortality rate, industrial backwardness score, rural female literacy rate, and percentage of SC/ST population. The 3 to 5 most backward blocks were chosen for inclusion into the program. In every district, a pair of blocks—a treatment block with the last backward block chosen into the program and a control block that had the closest score to the treatment block with the lowest score (i.e., the last treatment block that was selected)—were selected for the sample. The oversampling of SC and ST households is proportionate to their population in the village.

<sup>15</sup> Those households for which we could not match the women between the two modules have been dropped.

<sup>16</sup> This is due to oversampling of SCs in the baseline data.

(19 percent), Chasa (9 percent), and Pana (7.5 percent) form the sampled castes in Odisha, and they belong to General, OBC and SC castes respectively. In Tamil Nadu, Adi Dravidar (22 percent), Vanniyar (13 percent), and Vellalar, also known as Gounder (10 percent) comprise our sample, and belong to SC, MBC and BC groups respectively.<sup>17</sup>

#### 4. Results

Using these data, we examine the relationship between caste and female empowerment. We measure empowerment with variables that are consistent with the literature described earlier and include three categories of indicators:

- Measures of intra-household decision-making: Women were asked who was the primary decision-maker in the household on (i) purchases of household durables, (ii) children's education/tuition, (iii) their own livelihood activity, and (iv) voting behavior. For each of these indicators, we examine two measures, whether a woman respondent provides any input into the decision, or whether she makes the decision entirely by herself.
- Measures of female mobility: Women were asked if they can go—without seeking permission—to the general store, health centre, bank, and to visit their friends, neighbors and relatives<sup>18</sup>.
- Labor force participation: We use a dummy variable that takes a value of 1 if a woman works for income (in cash or in kind) outside the home in at least one season, and 0 otherwise. We use information collected from the detailed livelihoods module in the household general questionnaire, which contains employment activities of all working adults in the household for both rainy and non-rainy seasons.<sup>19</sup>

One hypothesis, based on the literature described earlier, is that there is a negative relationship between these three types of variables and low caste status: SC and ST women should have greater mobility, autonomy and the highest levels of labor-force participation rates. We test the hypothesis using a linear probability model, using a set of dummy variables for caste with the poorest group in each population (SCs in Bihar and Tamil Nadu, and STs in Odisha) treated as the omitted category.

We first regress empowerment indicators on official caste categories and then on jati identifiers. We report three sets of regressions. First, to ensure consistency with the

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<sup>17</sup> In our sample the jati distribution for Tamil Nadu is fairly representative of the general population, in which Vanniyars make up roughly 20 percent, Gounders 8 percent, Thevar 10 percent, and Vellalars 7 percent.

<sup>18</sup> For Tamil Nadu, we use available indicators of female mobility, including whether woman can go to the bank, the Taluk office (Block office) and the police station.

<sup>19</sup> An adult is considered employed if (s)he is employed in any income-generating activity in either season.

existing literature, we use official (broad) caste categories (all defined as dummy variables). Next, we perform comparisons between jatis. We do this in two steps. First, we regress outcome variables on dummy indicators for all non-SC jatis, with SC jatis as the excluded group. Next, we regress our outcome variables on dummy variables for all SC jatis, with all non-SC castes omitted so that we can focus on between-jati differences within the SC category. To address the role of confounding factors, we include a set of control variables and conduct an analysis for each state in our sample separately, using the same set of control variables for all regressions. Controls include household level variables: per capita monthly consumption expenditure, wealth (landholding), number of members in the household, education and gender of the household head; female headship; and a set of individual controls that includes education level, age, age squared, and age at marriage of the woman respondent. To control for locational factors, we also include panchayat-specific fixed effects.

#### 4.1 Empowerment across Broad Caste Categories

The results of our main specification for caste-level differences are reported in Table 3 and Figure 1 (panels (a)–(c) correspond to each of the three states). In each of these regressions, the omitted category is SC. In Bihar (Table 3, panel (a) or Figure 1(a)), OBCs and FCs (who are the wealthier groups,) have significantly lower female employment relative to the SCs (9.2 and 27 percentage points respectively). This is also true of women’s decision-making authority on issues of their own livelihoods (9.4 and 18.5 percentage points), and their mobility in terms of accessing the local store (11.7 and 27 percentage points).

The patterns of caste variation that emerge in Odisha (Table 3, panel (b) or Figure 1(b)) are similar to those in Bihar. We observe that women in the Forward Caste category are 8.6 percentage points less likely to work than SCs, and 6 percentage points less likely to visit the store on their own when compared to their SC counterparts. OBC women are 5 percentage points less likely to work, 9 percentage points less likely to make decisions about durables, and 9 percentage points less likely to make decisions on their livelihood activities compared to SC women. ST women, on the other hand, are 18 percentage points more likely to be employed than SCs.

Tamil Nadu has less variation at the caste level than the other two states (Table 3, panel (c) or Figure 1(c)). ST women are 11 percentage points less likely to make decisions on their children’s education. MBC women are less likely to make decisions related to their children’s education or their own livelihood activity (by 5 percentage points each) and have less mobility in terms of accessing the block office. Women in the BC group are 5 percentage points less likely than SC women to participate in the labor market. However, they are 4 percentage points more likely to visit a bank.

## 4.2 Empowerment across Jati Categories

Next, we examine jati-level regressions for all three states. As before, we present the results separately for each state. The results are in Tables 5, 6 and 7 and Figures 2, 3 and 4. For each state, we present two sets of regression results. In the top panel, we present estimation results for regressions with the jati-level categories for SC groups only (with all other castes treated as the excluded category), and in the bottom panel we present estimation results from regressions with the jati-level categories for other groups, excluding the SC groups. For reasons of brevity, in all these tables we only present jati coefficients. We do not report the effects of the control variables which are not very different in their magnitude and significance from the results from the broad caste categories.

At first glance, what is most striking about the results is the level of variation within and across the three states. In Table 5 and Figure 2(a) reporting Bihar results, for example, we see in the top panel that Musahars have significantly higher female employment than any other SC jati. They are 17 percentage points more likely to work than the OBCs, FCs and Muslims and are at least twice as likely to work as the Dobhas, Chamars and ‘Other’ SC jatis. This is consistent with anthropological studies that have noted that this particular jati, geographically concentrated in Bihar and Eastern Uttar Pradesh, has a very distinctive history and is one of the most politically, economically and socially marginalized groups in India (Mukul 1999).<sup>20</sup>

In the lower panel of Table 5 and Figure 2(b) we see that relative to the SC and ST groups, female employment is 7–8 percentage points lower among the Yadavs, Kurmis, EBCs and other jatis, who are also classified as backward castes.<sup>21</sup> Note that women from the highest ranked castes, Brahmins and Rajputs, are 33 and 22 percent less likely to be employed compared to SCs. The lower labor force participation rates of women in the

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<sup>20</sup> Both the Musahars and Chamars are traditionally outcastes, (i.e., they are outside of the caste system and regarded as untouchables (Hasan, Rizvi and Das 2005)). But these groups are quite distinct. The Musahar jati actually consists of three sub-jatis: Bhagat, Sakatiya and Turkahia. Each of these sub-jatis is endogamous. The Musahars were traditionally rat catchers, but are now largely agricultural laborers. In recent years, the adoption of agricultural technologies has created widespread male unemployment and driven Musahar men to migrate out of the state for several months a year, with women performing the traditional manual labor (Mukul 1999). The Chamar jati, on the other hand, though also classified as SC, is found throughout India and consists of many different sub-jatis that vary significantly in status. Traditionally tanners, Chamars have diversified into agriculture and many other occupations. In many states such as Uttar Pradesh and Punjab, they have been successful in mobilizing themselves politically.

<sup>21</sup> Yadavs are traditionally a group of jatis whose main occupations were related to dairy farming and pastoral agriculture in the Bihar and Uttar Pradesh region (Hutton 1946). The group now includes a wide range of pastoral agriculturalists in numerous states of India. Since the late nineteenth and early twentieth centuries, the Yadav community has mobilized itself to improve its social standing (Jaffrelot 2003). Strategies of upward mobility have included participation in the Indian and British armed forces, expansion of economic opportunities to include other, more prestigious business fields, and active participation in politics (Jaffrelot 2003). As a result of these efforts, Yadavs have increasingly claimed *Kshatriya* status within the *varna* system.

higher-ranked jatis is consistent with our hypothesis, as well as with the large body of literature described earlier on the subordination of women in these specific groups.

We see similar patterns for women's input into livelihood decisions, as well as for patterns of mobility. In the top panel in Table 5, we see that women from the Musahar jati appear to have the highest level of input in family decisions related to livelihoods and they have greatest freedom of mobility for going to a store. They appear to have lower input into children's tuition funds, though this could be driven by the lower levels of schooling in this group. In the bottom panel, we see again that Brahmin and Rajput women have significantly lower levels of empowerment on all our indicators (employment, decision-making autonomy and mobility), but Brahmin women have even lower levels of labor force participation than Rajputs. We also note that Muslim women's employment is 19 percentage points lower than the SCs in Bihar.

Similar mixed patterns are evident for Odisha. In the top panel of Table 6 and Figure 3(a), we see that in Odisha, ST women and SC women from the Barui caste are 21 percentage points more likely to be employed than the higher-ranked castes. In the bottom panel and Figure 3(b), we see that women from the highest ranked Brahmin, Karan and Khandayat castes have 9–17 percentage points lower labor force participation rates compared to SC/ST groups. Chasa, Goala and Tanti women of the OBC group are 5–12 percentage points less likely to work than SC/ST women. Higher-caste women from the Chasa, Goala and Khandayat jatis are also less likely to make decisions on buying household durables. We do not, however, see much evidence of jati-level variation for mobility indicators in this state. This suggests that perhaps in the case of Odisha, location and issues specific to the tribal culture in the poorest regions of the state could be playing a key role in determining women's autonomy.

Finally, in Tamil Nadu (Table 7 and Figure 4), we find in the top panel and Figure 4(a) that Adi Dravidars exhibit higher employment among the SCs relative to higher castes.<sup>22</sup> The other SC castes—Chakkalians, Pallars and others—do not appear to be statistically distinguishable from their upper-caste counterparts, possibly because these castes have mobilized themselves very successfully in the state.<sup>23</sup> The lower panel of Table 7 and Figure 4(b) show differences within the BC and MBC groups. Naidu, Gounder and Reddiyar women of the BC caste are less likely to work than SC/ST women by 14.7, 7 and

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<sup>22</sup> Adi-Dravida or Adi-Dravidars are also known as Pariyars or Pareiyas. They have historically served higher castes and/or colonial officers (Bergunder, Frese and Schroder, 2010). Today they are classified as a Scheduled Caste and are the largest SC group in Tamil Nadu (<http://tnpsc.gov.in/communities-list.html>, Accessed on Nov 30<sup>th</sup>, 2016).

<sup>23</sup> The Pallars of Tamil Nadu are also an SC jati. Largely concentrated in the southern area of the state, this jati has mainly consisted of agricultural laborers with both men and women working in paddy cultivation. The Pallars have been very effective in mobilizing for political action, and they created Tamil Nadu's first all-Dalit party, the DKV (Mosse 2012).

15.5 percentage points respectively. These results stand in contrast to our findings when we used broad indicators of caste.

The caste and mobility relationships in Tamil Nadu are difficult to compare to those of Bihar and Odisha because we lack comparable indicators on mobility. In Tamil Nadu we only measure whether women have the freedom to visit a bank, Taluk office and police station without needing permission. In the top panel, we see that women from the Adi Dravidar jati visit the Taluk office 6 percentage points more often than the higher-ranked BC and MBC groups and is also 2 percentage points more likely to visit a police station, respectively. In the lower panel of Table 6, we again see considerable within-caste variation. Yadava, Parkavakulam, and Naidu women in the BC group show higher mobility for trips to banks. Some other BC jatis show less mobility for trips to the Taluk office and police station. For instance, MBC Ambalakarar women and Gounder women are 14 and 6 percentage points less likely to go to the Taluk Office than SC/ST groups. Nadar, Reddiyar and Gounder women have less freedom to access the police station.

We also—separately from each of the regressions in Table 5, 6 and 7—perform a test for pairwise equality of coefficients between SC/ST jatis, and between Non-SC/ST jatis. We combine the indicators of decision-making autonomy and the indicators of mobility and report, in Table 11, the percentage of pairwise coefficient differences, between SC/ST jatis and between Non-SC/ST jatis that are significant different from each other. Results obtained here are consistent with the above analysis. In Bihar, there is substantial variation within SC/ST jatis and within Non-SC jatis on all three counts. In Odisha, the differences between jatis are present for labor force participation but are less dramatic for decision-making autonomy and mobility. We see very little difference, if any, between jatis in Tamil Nadu, except some evidence of variation on employment between BC and MBC jatis.

Overall, we find evidence in support of an inverse relationship between caste status and female employment rates, but we find that there is considerable variation at the jati level. The relationship between caste and female employment is more pronounced in Bihar and Odisha than in Tamil Nadu, and the effect is concentrated within a few jatis. We also note that evidence of a negative relationship between caste and female intra-household bargaining authority emerges only when we group households at the jati level. Because the negative relationship is concentrated within specific jatis, this information is less visible when households are grouped within broad caste categories because they compute averages over highly heterogeneous groups.

#### **4.3 Empowerment, Caste and Income: Regression Results**

The next step in our analysis is to examine the relationship between caste, the status of women and economic status. As discussed earlier, a large body of literature on India argues that economic advancement intensifies the negative relationship between caste and

gender since groups may seek to improve their status by imposing constraints on women. To test for this, we run separate linear probability models interacting caste and jati with per-capita monthly consumption expenditure. We employ the same specification as previously, (i.e., we control for the role of a respondent woman's characteristics, her household's characteristics, and local characteristics in the form of panchayat-specific fixed effects.) Results for the broad caste-level aggregates are included in Table 4. In the case of Bihar, we see that employment for ST women is likely to rise by 42 percentage points with a 1,000-rupee increase in per capita monthly consumption expenditure and fall by 18 percentage points for FCs. We emphasize that these patterns should be viewed purely in an associative manner—expenditure is likely to be endogenous with employment as well as with autonomy and mobility.

Otherwise interactions between caste and income are not statistically significant (beyond two coefficients at the 10% level) for any of the other states (Panels (b) and (c)), suggesting that there is almost no evidence of income effects with broad categories of caste for Odisha and Tamil Nadu.

Jati-level results for Bihar, Odisha and Tamil Nadu are reported in Tables 8, 9 and 10 respectively. For the sake of brevity, we report only the coefficients for the term interacting jati and per-capita expenditure. As before, we present the results for all jatis, first by using non-SC/ST jatis as the excluded group (panel(a) of all tables) and then by using the SC/ST jatis as the excluded group (panel(b) of all tables).

We find striking differences across jatis in all three states. Bihar shows the most significant variations. For the regression on female employment, the interaction of jati and expenditure is positive and statistically significant at the 5 percent level for Chamars and STs and at the 10 percent level for Musahars and Dusadhs. The estimates indicate that an extra 1,000 rupees of per-capita household expenditure among the Chamar and Musahar population is associated with a 13-percentage-point and 11-percentage-point increase in labor force participation of women.<sup>24</sup>

When we examine the bottom panel for Bihar in Table 8, we see that some higher jati groups display lower likelihoods of female labor force participation and empowerment relative to lower-ranked SC castes. Increases in per-capita household expenditure are associated with rather significant declines in female labor force participation for Rajputs (27 percentage points) and these are statistically significant at the 5 percent level. We emphasize that this is insufficient evidence to draw any conclusions about deliberate attempts to improve status in these groups through the process of Sanskritization described earlier, or any other mechanism. Simple mechanisms such as a backward-bending labor supply curve for women could be salient here. Furthermore, unobserved variables such as

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<sup>24</sup> We focus on the Chamars and Musahars, mainly due to the small size of the ST sample and the rather significant population share of these jatis in Bihar.

differential rates of migration, education and employment between men and women across these groups could provide alternate explanations. These results emphasize the salience of within jati variations in income that might drive indicators of women's empowerment; results that are far less salient when we look at broad caste categories.

In Odisha and Tamil Nadu, there are almost no significant differences between broad caste-expenditure interactions. However, there are some variations at the jati level. In Odisha (Table 4(b)), the decision-making autonomy of OBCs rises by 2 percentage points with a 1,000-rupee rise in expenditure. As in the case of Bihar, the jati-level regressions (Table 9) suggest that this effect is driven by specific jatis. In Panel (a) of Table 9, we observe that the Pana and Kondara jatis drive the overall negative relationship between expenditure and women's autonomy on their own political decisions. In Panel (b) of Table 9, we see that this relationship is strongest in the Chasa and Goala jatis who fall into the OBC caste category.

Results for Tamil Nadu using caste and jati-level aggregations are presented in Tables 7 and 10 respectively. In Table 7 we see that increased expenditure is associated with lower levels of mobility (as measured by visiting banks) for MBC women as a broad group. Table 10, however, reveals that this difference is solely driven by a single jati (Vanniyar) among the MBCs. We also observe a differential effect in the rise in expenditure on other indicators. Most notably, while there was no difference at the broad caste level, the freedom to go to a Taluk office decreases by 8 percentage points for the smaller MBC-jati women and for Reddiyar women in a BC group with a 1,000-rupee higher per-capita expenditure, but it increases for Muthuraja women in the MBC group and Thevar women in the BC group. There is similar heterogeneity observed for women's autonomy on own livelihood activity at the jati level.

## **5. Program targeting under the States' Livelihoods Programs**

The removal of caste-based barriers has been a major focus of Indian public policy for more than a hundred years. As mentioned earlier, the collection of data and design of policies has largely focused on and been determined by broad caste categories. Our results thus far raise the question of whether aggregate caste groupings are an effective strategy, and whether benefits disproportionately accrue to specific jatis.

To address this question in our own data, we examine how effectively the State Rural Livelihoods Programs were able to target households belonging to specific castes and jatis in the three states of this study. These programs are livelihoods-focused, community-driven development (CDD) projects that organize women into self-help groups (SHG) that enable them to save and access formal-sector credit to support themselves and their families. Much existing research highlights the role of these groups in empowering

women and their communities (Pitt, Khandekar and Cartwright 2006; Desai and Joshi, 2013; and Khanna, Kochhar and Palaniswamy 2015, Sanyal, Rao and Majumdar 2015).

We obtain information on SHG membership using the endline surveys from the three samples that are the focus of this paper.<sup>25</sup> The SHG membership variable is a proxy for participation in the respective state programs: JEEViKA in Bihar, TRIPTI in Odisha and PVP in Tamil Nadu. Since the treatment was universal in the treated villages, we restrict our analysis to households in treatment areas. We find significant variations in uptake of the programs: 43, 36 and 21 percent of women in the treatment areas of Bihar, Odisha and Tamil Nadu reported participation in an SHG (Appendix Figure 5).<sup>26</sup>

We use a linear probability model to regress a dummy variable for whether any household member is part of an SHG under its respective program, using the same set of baseline controls as in the previous specifications. As above, we do this analysis first by broad caste categories, and then separately by first excluding non-SC/ST jatis and then by excluding SC/ST jatis. The results are presented in Table 12 and Figures 6, 7 and 8.

The results using broad caste groupings show that in Bihar, EBCs, OBCs, Muslims and FCs are 8–30 percentage points less likely to participate in SHGs compared to SC women (Table 12, panel (a), and Figure 6(a)). We also observe that STs and Muslims in Odisha and MBCs in Tamil Nadu are at least 10 percent less likely to participate than SC women (Table 12, panel (b) and (c), and Figures 7(a) and 8(a)). These results indicate selection in favor of SC status rather than on economic deprivation.

Disaggregation of caste categories into jatis shows that the uptake is not uniform. In Bihar, Table 12(b) and Figure 6(b) we see that SC Chamars and Dusadhs are more likely to participate in an SHG program than the Non-SC/ST groups by 14 and 18 percentage points respectively. Table 12(c) and Figure 6(c) shows that SHG membership under the livelihood program is lower for OBC Kurmi by 19 percentage points and for Brahmins, Rajputs and other FC jatis by 20–42 percentage points. It is interesting to note that earlier in this paper, we found that these jatis had lower levels of empowerment, as measured by female autonomy and mobility. Taken together, the two sets of results highlight the complexity of implementing anti-poverty programs for women in settings like rural Bihar.

In Odisha we see, in Table 12(a) and Figure 7(a), that STs who have higher employment and female empowerment are less likely to participate in the SHG program. However, there is variation within other caste groups. Table 12(b) and Figure 7(b) show

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<sup>25</sup> Endline surveys were collected at a gap of 1.5 to 2 years from the baseline surveys. We merge the SHG membership from these surveys, along with the baseline data.

<sup>26</sup> In our sample, although membership under PVP SHGs is only 21 percent, SHG membership as a whole is almost 50 percent, which reflects the long history of the SHG movement in Tamil Nadu.

that Pana households, who belong to the SC group, are 18 percentage points more likely to be covered under TRIPTI than the non-SC/ST households. Similarly, jati-level analysis reported in Table 12(a) and Figure 8(a) in Tamil Nadu indicates that there is no differential coverage of the program for BCs relative to SC/ST households. However, Table 12(b) and Figure 8(b) show that the Adi-Dravidar among the SCs are significantly more likely to be members of SHG under PVP while all Table 12(c) and Figure 8(c) show that the MBC jatis are significantly less likely to be covered by PVP.

These results suggest that jati-level differences matter when it comes to the implementation of rural livelihoods programs. Within broad caste groups, some jatis disproportionately benefit from state-run programs. The results also show that women who access such programs are not necessarily the women who could benefit the most from the opportunity for empowerment. In Bihar, for example, upper-caste women who display lower levels of empowerment in the baseline surveys are less likely to benefit from an SHG program that explicitly seeks to expand opportunities for empowerment and economic opportunity. This is consistent with the findings of previous research studies that highlight the difficulty of poverty targeting (Galasso and Ravallion; 2005). This study suggests that some jatis may have better political, economic or social networks for harnessing state programs. Understanding the mechanisms behind this would be an important question for future research.

## 6. Conclusion

This paper has examined the relationship between caste and gender inequality in three states of India: Bihar, Odisha and Tamil Nadu. We use detailed data on caste to understand its effects on three measures of female status: labor-force participation, decision-making autonomy and mobility.

When we group households using conventional, government-defined categories of caste, we find overall patterns that are consistent with the literature on India. Lower-caste women are more likely to participate in the labor market, have greater decision-making autonomy within their households and have greater freedom of movement. There is some evidence of regional variations. Women in Bihar appear to be significantly affected by broad caste-based divisions, women in Odisha appear to be more affected by location and micro-contexts, and women in Tamil Nadu seem to be affected by education and income rather than by caste status.

However, when we group households by the narrower categories of jati, where caste is lived and experienced at the local level, we find more variability across the three states. In all three states, the overall relationship between caste and female employment is driven by specific jatis (such as the Musahars in Bihar and the Adi-Dravidars in Tamil

Nadu). Evidence of a negative relationship between caste and female intra-household bargaining authority emerges only when we group households at the jati level. Finally, we find that there is a strong relationship between empowerment and economic status in some jatis but not in others. We also show that this matters for public policy because women from specific jatis—rather than from broad caste groups—and more likely to benefit from state-run anti-poverty programs. In conclusion, these results suggest that focussing on broad caste categories such as “Scheduled Castes” and “Scheduled Tribes” can be misleading because they mask important differences at the jati level.

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## Tables

**Table 1: State-level differences**

	<b>India</b>	<b>Bihar</b>	<b>Odisha</b>	<b>Tamil Nadu</b>
GDP per-capita at current prices	Rs. 74,380	Rs. 33,199	Rs. 59,229	Rs. 128,366
GDP per-capita at 2004-2005 prices	Rs. 39,904	Rs. 16,801	Rs. 26,531	Rs. 66,635
GDP per capita in \$ at current market exchange rates	\$1,627	\$682	\$1,150	\$2,464
Rank (among 33 states and union territories of India) for GDP	-	33	27	8
SC population	16.20%	8.20%	16.50%	20.00%
ST population	8.60%	1.30%	22.80%	1.10%
Literacy	74.04%	63.82%	73.45%	80.33%
Literacy among SCs	66.10%	48.65%	69.02%	73.26%
Urban Population	31.16%	11.30%	16.68%	48.45%
Sex-ratio	943	996	979	916
Female literacy	65.46%	53.33%	64.36%	73.86%

Source: GDP numbers are from the Ministry of State Planning and Implementation (2016). Retrieved from <http://statisticstimes.com/economy/gdp-of-indian-states.php> (Nov 8, 2016). Demographic numbers are from the Census of India (2011).

**Table 2: Summary Statistics****Panel (a): State characteristics: districts, caste and jatis**

Bihar		Odisha		Tamil Nadu	
	Sample %		Sample %		Sample %
<b>(i) Sampled Districts</b>					
Gaya	3.4	Anugul	11.7	Ariyalur	21
Madhepura	31	Balasore	11.8	Dharmapuri	5.2
Madhubani	5.1	Bhadrak	10.2	Dindigul	10.3
Muzaffarpur	18.5	Cuttack	11.7	Karur	7.9
Nalanda	5.6	Jagatsinghpur	8.3	Krishnagiri	16.5
Saharsa	19.1	Jajpur	3.3	Madurai	9.4
Supaul	17.4	Kendrapada	11.8	Pudukkottai	10.7
		Khurda	8.5	Sivaganga	9.9
		Nayagarh	10.9	Virudhunagar	9.1
		Puri	11.8		
<b>(ii) Caste Composition</b>					
SC	69.9	SC	26.7	SC	31.6
ST	1.1	ST	7.2	ST	1.8
EBC	4.7	OBC	33.8	MBC	24.7
OBC	16.88	Muslim	1.7	BC	41.9
Muslim	3.8	FC	30.3		
FC	3.6				
<b>(iii) Jati Composition</b>					
EBC/MBC: Others	4.7	BC/OBC: Others	13	Kallar	4.8
Brahmin	1.3	Brahmin	5.5	Naidu	1.3
Rajput	1.5	Karan	2.7	Parkavakulam	4
General: Others	0.8	Khandayat	18.7	Thevar	1.9
Muslim: Others	3.8	General: Others	3.5	Vellalar	10.1
Dhanuk	1.2	Muslim: Others	1.7	Yadava	2.1
Kurmi	1.3	Chasa	9	EBC/MBC: Others	6
Yadav	6.6	Goala	4.5	Adi Dravidar	22.3
OBC:Others	7.8	Guria	2.2	Pallar	4.2
Chamar	20.5	Tanti	2.5	SC: Others	3.5
Dobha/Dobh	2.5	Teli	2.5	ST: Others	1.8
Dushad	16.7	Barui	3.1	Ambalakarar	3.4
Musahar	25.9	Dobha	2.6	Muthuraja	1.9
Sardar	2.1	Keuta	2.5	Vanniyar	13.3
SC: Others	2.3	Kondara	3.9	Chettiar	1.6
ST: Others	1.1	Pana	7.5	Nadar	1.2
		SC: Others	7.4	Reddiyar	1.4
		ST: Others	7.2	Chakkaliyan	1.6
				Vishwakrma	1.3
				BC: Others	12.2

**Panel (b): Household characteristics**

	<b>Bihar</b>	<b>Odisha</b>	<b>Tamil Nadu</b>
Sample size	8969	2462	3384
Per capita household monthly consumption expenditure (average in rupees)	610.1	1176.9	2150.3
Land holding (average in acres)	0.5	0.6	1.96
Female household head	16.3	5.9	16.7
Number of members in the household (average)	5.9	5.2	4.4
Distance to nearest town ( average in kilometers)	22.5	54.4	18.8
Employed adults females	68.2	17.5	62.1
<b><i>Education profile of the household head</i></b>			
Never went to school	56.6	20.5	31.3
Primary	18.2	33.2	10.1
Above primary but below or equal to senior secondary	22.5	20.1	54.7
Above senior secondary	2.6	26.2	3.9

**Panel (c): Characteristics of female respondents (means)**

	<b>Bihar</b>	<b>Odisha</b>	<b>TN</b>
Age	34.1	42.3	39.8
Age at the time of marriage	17.9	18.9	19.3
Employment	80.3	24.1	76.9
<b><i>Marital status of the female respondent</i></b>			
Married	96.3	93.1	90
Unmarried	1.3	0.9	0.7
Widowed/Separated/Not cohabiting	2.4	5.9	9.3
<b><i>Education profile of female respondents</i></b>			
Never went to school	78.1	37.6	40
Primary	11	29.4	9.1
Above primary but below or equal to senior secondary	10.3	17.7	48.5
Above senior secondary	0.6	15.3	2.4
<b><i>Intra-household decision making: Does female respondent provide any input in the following decisions made in the household?</i></b>			
Purchase of household durables	91.7	82.9	86.3
Children's education	84.1	63	84.8
Own livelihood activity	79.5	64.2	77.4
Politics (like who to vote for)	78.6	41.6	87.3
<b><i>Mobility of female respondent</i></b>			
Bank	20.1	21.1	76
Store	75.1	45.3	-
Health centre	93.1	94.1	-
Friend/ neighbour/ relative	97.4	96	-
Taluk Office	-	-	30
Police Station	-	-	5.5

Source: Authors' calculations based on data collected by Social Observatory, World Bank and state Government of Bihar, Odisha and Tamil Nadu, respectively.

**Table 3: Empowerment regressions with government-defined caste categories**

Panel (a): Bihar	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Employed	Input				Mobility			
		Durables	Tuition	Livelihoods	Politics	Store	Health Centre	Friend	Bank
ST	-0.0342 (-0.88)	-0.0491 (-1.37)	-0.0434 (-1.08)	-0.0317 (-0.80)	-0.105* (-2.37)	0.0252 (0.55)	-0.0753 (-1.92)	0.00463 (0.24)	0.0460 (0.98)
OBC	-0.0917*** (-8.32)	0.00301 (0.35)	0.0226* (2.10)	-0.0942*** (-7.09)	-0.00350 (-0.28)	-0.117*** (-8.44)	-0.0239** (-2.78)	0.00192 (0.42)	-0.00377 (-0.28)
EBC	-0.0808*** (-4.67)	-0.00748 (-0.58)	0.0167 (1.05)	-0.0916*** (-4.43)	0.0148 (0.77)	-0.0409* (-2.09)	-0.00227 (-0.20)	-0.00809 (-0.97)	0.0210 (0.97)
Muslim	-0.191*** (-8.72)	-0.000158 (-0.01)	-0.00925 (-0.44)	-0.134*** (-4.97)	-0.0332 (-1.38)	-0.118*** (-4.73)	-0.000230 (-0.02)	-0.0129 (-1.10)	-0.0220 (-0.91)
General	-0.271*** (-12.01)	-0.0113 (-0.80)	-0.00355 (-0.18)	-0.185*** (-6.59)	-0.0192 (-0.86)	-0.271*** (-9.52)	0.00219 (0.16)	-0.0210 (-1.82)	-0.0501 (-1.85)
Some Schooling	-0.0936*** (-8.62)	0.0198* (2.38)	0.0364*** (3.49)	-0.0035 (-0.27)	0.0256* (2.13)	-0.0598*** (-4.49)	0.0052 (0.67)	0.0084 (1.79)	0.115*** (8.85)
Female headed household	0.0507*** (4.98)	0.0193* (2.34)	0.0338** (3.03)	0.0596*** (5.13)	0.0272* (2.21)	0.0462*** (3.85)	-0.0145 (-1.77)	-0.0084 (-1.51)	0.0158 (1.26)
Per capita expenditure	-0.156** (-3.00)	-0.0684 (-1.77)	0.0299 (0.54)	-0.106 (-1.70)	0.122* (2.00)	-0.0328 (-0.53)	-0.0151 (-0.42)	0.0335 (1.31)	0.225*** (3.34)
Per capita expenditure squared	0.0237 (0.82)	0.0223 (1.14)	-0.0440 (-1.45)	0.0417 (1.24)	-0.0697* (-2.11)	-0.0343 (-1.04)	0.00265 (0.15)	-0.0170 (-1.32)	-0.0573 (-1.51)
Land	-0.0112*** (-4.84)	0.0007 (0.38)	0.004* (1.98)	-0.005 (-1.45)	0.001 (0.38)	-0.0163*** (-4.41)	-0.0022 (-0.91)	0.0023* (2.45)	0.01** (2.93)
Observations	12584	8637	8637	8637	8637	8637	8637	8637	8637
Adjusted R-squared	0.302	0.087	0.122	0.118	0.135	0.205	0.090	0.024	0.086

Notes: (1) Source: Author's calculations based on data collected by Social Observatory, World Bank and Government of Bihar. (2) SC is the omitted caste group. (3) Each column represents a separate regression wherein an `empowerment indicator' is regressed on variables that are reported as well as additional controls: age, age squared, marital status of the woman, age at marriage, and a dummy variable for some schooling of the female respondent; a dummy variable for whether it is female-headed household, per-capital expenditure, per-capita expenditure squared, landholdings, education of the household head, number of members in the household and panchayat level fixed-effects. The female employment is run for all female adults in the sample (individual level). (4) We report robust standard errors in the brackets. (5) We report the level of significance: \* p value < .05, \*\* p value < .01 and \*\*\* p value < .001.

<b>Panel (b): Odisha</b>	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Employed	Durables	Tuition	Input Livelihood s	Politics	Store	Mobility Health Centre	Friend	Bank
ST	0.187*** (4.81)	-0.0166 (-0.45)	-0.0354 (-0.67)	-0.0610 (-1.19)	-0.0613 (-1.24)	0.0493 (0.97)	0.0256 (1.16)	0.0165 (1.03)	-0.0453 (-1.03)
OBC	-0.0511*** (-3.31)	-0.0899*** (-4.15)	0.0017 (0.06)	-0.0864*** (-3.34)	0.0460 (1.66)	-0.0346 (-1.28)	-0.006 (-0.41)	0.0078 (0.60)	0.0277 (1.18)
Muslim	0.101 (1.69)	0.119 (1.58)	0.148 (1.61)	-0.0703 (-0.77)	0.0135 (0.14)	-0.00933 (-0.10)	0.00558 (0.11)	0.0164 (1.30)	-0.0318 (-0.47)
FC	-0.0859*** (-5.63)	-0.0364 (-1.59)	0.0173 (0.61)	-0.0572* (-2.10)	0.0335 (1.16)	-0.0521 (-1.87)	0.0135 (0.98)	0.0110 (0.81)	0.0403 (1.60)
Some Schooling	-0.0726*** (-4.57)	0.0630** (3.24)	0.0629** (2.69)	0.0237 (1.02)	0.00656 (0.27)	-0.0751** (-3.17)	0.00636 (0.51)	0.0023 (0.23)	0.117*** (6.06)
Female headed household	0.0767** (2.67)	0.0206 (0.37)	-0.0164 (-0.26)	-0.0616 (-0.96)	0.188** (2.75)	0.105 (1.58)	0.0270 (0.88)	0.0193 (0.56)	-0.0534 (-1.00)
Per capita expenditure	-0.0087 (-1.77)	-0.0007 (-0.09)	0.0065 (0.80)	0.0147 (1.76)	-0.0067 (-0.86)	-0.008 (-0.94)	0.0046 (1.04)	0.0031 (1.46)	-0.0031 (-0.38)
Per capita expenditure squared	0.0004* (2.10)	0.0001 (0.20)	-0.0001 (-0.44)	-0.0005 (-1.50)	0.0003 (0.91)	0.0005 (1.35)	-0.00009 (-0.63)	0.0000 (-0.14)	0.0003 (0.90)
Land	-0.0087* (-2.09)	0.0088 (1.64)	0.0034 (0.40)	-0.0141 (-1.76)	0.0033 (0.39)	-0.0328*** (-3.88)	0.0029 (0.93)	* (2.29)	-0.0090 (-1.36)
Observations	4077	2246	2246	2246	2246	2246	2246	2246	2246
Adjusted R-squared	0.212	0.141	0.188	0.199	0.201	0.244	0.075	0.063	0.088

Notes: (1) Source: Author's calculations based on data collected by Social Observatory, World Bank and Government of Odisha. Notes (2) - (5) of Table 3(a) apply.

<b>Panel (c): Tamil Nadu</b>	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Employed	Durables	Input:			Bank	Mobility:	
			Tuition	Livelihood	Politics		Taluk Office	Police Station
ST	0.0867 (1.78)	-0.0609 (-1.16)	-0.111* (-2.07)	-0.0884 (-1.35)	-0.0986 (-1.73)	-0.0304 (-0.44)	0.0165 (0.24)	-0.00567 (-0.16)
MBC	-0.00889 (-0.52)	-0.0305 (-1.73)	-0.0437* (-2.55)	-0.0201 (-1.00)	-0.0454** (-2.67)	0.00678 (0.32)	-0.0584** (-2.64)	-0.00910 (-0.78)
BC	-0.0486*** (-3.31)	0.0101 (0.72)	-0.0143 (-0.93)	0.00286 (0.16)	-0.0107 (-0.76)	0.0411* (2.27)	-0.0334 (-1.76)	-0.0259** (-2.62)
Some schooling	0.0395** (2.99)	0.00402 (0.29)	0.000037 1 (0.00)	0.0347* (2.08)	0.0118 (0.89)	0.0478** (2.92)	0.0454* (2.46)	0.00979 (1.04)
Female-headed household	0.0601*** (3.37)	0.0703*** (3.60)	0.0842*** (4.17)	0.0151 (0.61)	0.0710*** (3.89)	0.0711** (2.94)	0.0208 (0.81)	0.006 (0.40)
Per-capita expenditure	-0.0196*** (-3.53)	0.00143 (0.28)	0.00436 (0.85)	0.0110* (1.97)	0.00678 (1.46)	0.0351*** (5.95)	0.0470*** (5.25)	0.0107** (2.60)
Per-capita expenditure squared	0.0001*** (3.94)	-0.00001 (-0.25)	-0.0003 (-0.87)	-0.0001* (-2.20)	-0.0000 (-1.25)	-0.0002*** (-5.74)	-0.0003*** (-5.61)	-0.0001** (-2.80)
Land	0.0001 (0.25)	-0.0011** (-2.66)	0.0003 (0.80)	-0.0012** (-2.59)	0.0004 (1.95)	0.0002 (0.43)	0.0004 (0.66)	-0.0002 (-1.05)
Observations	5190	3284	3280	3283	3279	3299	3299	3299
Adjusted R-squared	0.276	0.119	0.119	0.150	0.077	0.135	0.149	0.051

Notes: (1) Source: Author's calculations based on data collected by Social Observatory, World Bank and Government of Tamil Nadu. . Notes (2) - (5) of Table 3(a) apply.

**Table 4: Empowerment regressions with caste categories interacted with per capita monthly consumption expenditure (exp.)**

	Input					Mobility			
	Employed	Durables	Tuition	Livelihoods	Politics	Store	Health Centre	Friend	Bank
<b>(a) Bihar</b>									
ST x exp	0.416* (2.28)	0.176 (1.43)	-0.0509 (-0.28)	0.197 (1.41)	-0.210 (-1.48)	0.129 (0.51)	0.00211 (-0.01)	0.162 (1.43)	-0.493* (-2.06)
OBC x exp	-0.0491 (-1.24)	0.000703 (0.02)	0.0678 (1.74)	0.0453 (1.04)	0.0829* (2.02)	-0.00848 (-0.17)	0.0303 (1.02)	0.0183 (0.99)	-0.0837 (-1.81)
EBC x exp	0.00654 (0.09)	-0.0837 (-1.33)	-0.0484 (-0.64)	-0.149 (-1.80)	0.0930 (1.28)	-0.0155 (-0.20)	0.00958 (-0.20)	-0.0433 (-0.94)	0.0859 (0.90)
Muslim x exp	-0.0614 (-0.77)	0.0632 (1.14)	0.0117 (0.12)	-0.135 (-1.26)	-0.0305 (-0.32)	0.0303 (0.32)	-0.0793 (-1.10)	-0.0178 (-0.40)	-0.0268 (-0.30)
FC x exp	-0.183** (-2.72)	0.0335 (0.92)	0.0815 (1.33)	0.0366 (0.45)	-0.0650 (-0.89)	0.0234 (0.25)	-0.0115 (-0.28)	0.0175 (0.57)	-0.0836 (-1.09)
<b>(b) Odisha</b>									
ST x exp	-0.0418 (-0.95)	0.0171 (1.08)	0.0323 (0.84)	0.0125 (0.26)	0.0556 (1.54)	0.0532 (1.77)	0.0175 (1.21)	0.00632 (0.76)	-0.0399 (-1.60)
OBC x exp	-0.0115 (-1.73)	0.00804 (0.67)	0.0131 (1.16)	-0.00263 (-0.21)	0.0169 (1.56)	0.00563 (0.45)	0.00534 (0.59)	-0.000744 (-0.25)	0.000194 (0.01)
Muslim x exp	0.00351 (0.19)	-0.00375 (-0.19)	-0.00671 (-0.20)	-0.0321 (-1.14)	-0.0208 (-1.21)	0.0000347 (-0.00)	0.00458 (0.57)	-0.00215 (-0.63)	-0.00692 (-0.31)
FC x exp	-0.00238 (-0.35)	0.00631 (0.66)	0.00969 (1.21)	0.00260 (0.32)	0.0167* (2.35)	0.00557 (0.60)	0.00547 (1.27)	0.000148 (0.07)	0.00509 (0.57)
<b>(c) TN</b>									
	Employed	Durables	Tuition	Livelihood	Politics	Bank	Taluk Office	Police Station	
ST x exp	-0.00738 (-0.23)	0.0164 (0.33)	0.0324 (0.66)	0.0496 (0.96)	0.0645 (1.81)	0.0400 (0.83)	-0.0673 (-1.45)	-0.0212 (-1.49)	
MBC x exp	-0.00862 (-0.61)	-0.00203 (-0.14)	-0.0107 (-0.83)	-0.0177 (-1.16)	-0.0118 (-0.92)	-0.0314* (-2.03)	-0.0277 (-1.38)	-0.00177 (-0.16)	
BC x exp	-0.0116 (-1.11)	0.00119 (0.14)	-0.00241 (-0.28)	0.00142 (0.15)	-0.00679 (-0.96)	0.00430 (0.40)	0.0145 (0.82)	-0.00670 (-0.79)	

Notes: (1) Source: Author's calculations based on data collected by Social Observatory, World Bank and Government of Bihar, Odisha and Tamil Nadu for the respective states. (2) SC is the omitted caste group. (3) Each column represents a separate regression wherein an 'empowerment indicator' is regressed on variables that are reported as well as additional controls: age, age squared, marital status of the woman, age at marriage, and a dummy variable for some schooling of the female respondent; a dummy variable for whether it is female-headed household, per-capita expenditure, per-capita expenditure squared, landholdings, education of the household head, number of members in the household and panchayat level fixed-effects. The female employment is run for all female adults in the sample (individual level). (4) We report robust standard errors in the brackets. (5) We report the level of significance: \* p value < 05, \*\* p value < .01 and \*\*\* p value < .001.

**Table 5: Empowerment regressions with jati identifiers, Bihar**

	Employed	Input: Durables	Tuition	Livelihood	Politics	Store	Health center	Friend	Bank
<b>Panel (a): SC-ST Jatis</b>									
SC: Chamar	0.125*** (10.79)	-0.00461 (-0.52)	-0.00392 (-0.34)	0.102*** (7.52)	0.0221 (1.69)	0.126*** (9.26)	0.00781 (0.97)	0.00661 (1.27)	0.00429 (0.31)
SC: Dobha	0.0673** (2.70)	-0.0264 (-1.35)	0.0164 (0.70)	0.0667* (2.25)	-0.0563 (-1.89)	-0.00181 (-0.06)	0.0291* (2.20)	-0.00699 (-0.57)	0.0154 (0.53)
SC: Dushad	0.0872*** (7.05)	0.0152 (1.74)	-0.00129 (-0.11)	0.0975*** (6.75)	0.00896 (0.67)	0.0979*** (6.84)	0.0159 (1.84)	0.00948 (1.87)	0.0467** (3.19)
SC: Musahar	0.172*** (15.93)	-0.00449 (-0.47)	-0.0312** (-2.68)	0.123*** (9.61)	-0.0102 (-0.78)	0.156*** (11.56)	0.0189* (2.14)	0.00109 (0.19)	-0.0219 (-1.67)
SC: Sardar	0.0366 (0.93)	0.0112 (0.31)	-0.0160 (-0.38)	0.141*** (3.40)	0.0944* (2.15)	0.0180 (0.35)	0.00144 (0.05)	0.000129 (0.00)	0.0251 (0.50)
SC: Others	0.0757** (2.87)	0.0152 (0.85)	-0.0747** (-2.64)	0.143*** (5.29)	0.00961 (0.32)	0.0710* (2.37)	-0.00892 (-0.45)	-0.00359 (-0.28)	-0.0389 (-1.40)
ST	0.0976* (2.47)	-0.0492 (-1.35)	-0.0634 (-1.55)	0.0830* (2.05)	-0.0977* (-2.17)	0.149** (3.16)	-0.0603 (-1.52)	0.00741 (0.39)	0.0455 (0.96)
Observations	12584	8637	8637	8637	8637	8637	8637	8637	8637
Adjusted R-squared	0.300	0.087	0.123	0.117	0.136	0.204	0.090	0.023	0.088
<b>Panel (b): Non-SC Jatis</b>									
OBC: Dhanuk	-0.0424 (-1.30)	0.0244 (0.78)	0.0159 (0.47)	-0.0558 (-1.43)	0.00743 (0.18)	-0.0872 (-1.94)	-0.0922** (-2.62)	-0.00324 (-0.21)	-0.0292 (-0.76)
OBC: Kurmi	-0.0910** (-2.84)	0.0285 (1.29)	0.0571 (1.89)	-0.0394 (-0.94)	0.00484 (0.12)	-0.0584 (-1.50)	0.0179 (0.85)	0.00726 (0.72)	0.00790 (0.19)
OBC: Yadav	-0.0877*** (-5.36)	0.00336 (0.26)	0.0184 (1.20)	-0.0936*** (-4.57)	0.0284 (1.63)	-0.157*** (-7.20)	-0.00916 (-0.75)	0.00732 (1.19)	-0.0104 (-0.54)
OBC: Other	-0.101*** (-6.69)	-0.00327 (-0.29)	0.0227 (1.55)	-0.109*** (-6.07)	-0.0277 (-1.64)	-0.104*** (-5.53)	-0.0285* (-2.38)	-0.00269 (-0.41)	0.00182 (0.10)
EBC	-0.0801*** (-4.63)	-0.00666 (-0.52)	0.0173 (1.09)	-0.0913*** (-4.41)	0.0165 (0.86)	-0.0423* (-2.16)	-0.000900 (-0.08)	-0.00815 (-0.98)	0.0202 (0.93)
FC: Brahmin	-0.336*** (-10.10)	-0.00521 (-0.25)	-0.0136 (-0.45)	-0.238*** (-5.34)	-0.0166 (-0.48)	-0.255*** (-5.60)	0.0253 (1.41)	-0.0184 (-1.03)	-0.0906* (-2.28)
FC: Rajput	-0.218*** (-6.21)	-0.00985 (-0.47)	0.00279 (0.10)	-0.165*** (-3.90)	-0.0491 (-1.37)	-0.383*** (-9.30)	0.00328 (0.15)	-0.0279 (-1.55)	-0.0186 (-0.44)
FC: Others	-0.242*** (-5.51)	-0.0195 (-0.65)	0.00648 (0.16)	-0.120* (-2.22)	0.0510 (1.33)	-0.106* (-1.98)	-0.0264 (-0.92)	-0.0113 (-0.55)	-0.0421 (-0.79)
Muslims	-0.190*** (-8.69)	0.000654 (0.04)	-0.00842 (-0.40)	-0.133*** (-4.94)	-0.0325 (-1.36)	-0.118*** (-4.73)	0.000623 (0.04)	-0.0130 (-1.12)	-0.0223 (-0.93)
Observations	12584	8637	8637	8637	8637	8637	8637	8637	8637
Adjusted R-squared	0.302	0.086	0.122	0.118	0.135	0.208	0.090	0.023	0.086

Notes: (1) Source: Authors' calculations based on data collected by Social Observatory, World Bank and Government of Bihar. (2) In panel (a), Non-SC jatis are the excluded group while in Panel (b), SCs are the excluded group. (3) Each column represents a separate regression wherein an 'empowerment indicator' is regressed on variables that are reported as well as additional controls: age, age squared, marital status of the woman, age at marriage, and a dummy variable for some schooling of the female respondent; a dummy variable for whether it is female-headed household, per-capita expenditure, per-capita expenditure squared, landholdings, education of the household head, number of members in the household and panchayat level fixed-effects. The female employment is run for all female adults in the sample (individual level). (4) We report robust standard errors in the brackets. (5) We report the level of significance: \* p value < .05, \*\* p value < .01 and \*\*\* p value < .01.

**Table 6: Empowerment regressions with jati identifiers, Odisha**

	Input:					Mobility:			
	Employed	Durables	Tuition	Livelihood	Politics	Store	Health center	Friend	Bank
<b>Panel (a): SC-ST Jatis</b>									
SC: Barui	0.179*** (4.53)	0.0695 (1.22)	-0.0483 (-0.77)	0.00416 (0.07)	0.0719 (1.16)	0.183** (2.94)	-0.0356 (-1.07)	0.0173 (0.70)	-0.0190 (-0.40)
SC: Dobha	0.0501 (1.63)	0.106* (1.98)	0.0676 (1.01)	0.172** (3.21)	-0.0123 (-0.17)	0.0612 (0.87)	0.0210 (1.94)	-0.00333 (-0.09)	0.00376 (0.07)
SC: Keuta	0.0706 (1.82)	0.0980*** (3.53)	-0.0206 (-0.35)	0.0957 (1.65)	-0.151* (-2.40)	0.0213 (0.34)	0.00288 (0.09)	0.0239* (1.99)	-0.0653 (-1.12)
SC: Kondara	-0.00784 (-0.29)	0.126** (2.96)	0.00819 (0.17)	0.0975* (2.00)	-0.0259 (-0.52)	-0.0184 (-0.39)	0.0355* (2.24)	0.0300 (1.53)	-0.0448 (-1.04)
SC: Pana	0.0152 (0.63)	-0.0105 (-0.30)	-0.0186 (-0.42)	0.0981* (2.27)	-0.00120 (-0.03)	0.0136 (0.32)	-0.0228 (-0.88)	-0.0475 (-1.92)	0.0167 (0.46)
SC: Others	0.111*** (4.02)	0.0452 (1.48)	-0.0423 (-1.02)	0.00767 (0.20)	-0.114* (-2.45)	0.0449 (1.04)	-0.00315 (-0.13)	-0.0248 (-1.13)	-0.0827* (-2.29)
ST	0.250*** (6.77)	0.0492 (1.45)	-0.0468 (-0.94)	0.0139 (0.29)	-0.105* (-2.27)	0.0889 (1.86)	0.0237 (1.22)	0.00590 (0.47)	-0.0762 (-1.87)
Observations	4077	2246	2246	2246	2246	2246	2246	2246	2246
Adjusted R-squared	0.214	0.138	0.187	0.200	0.204	0.246	0.075	0.067	0.088
<b>Panel (b): Other Jatis</b>									
OBC: Chasa	-0.0533* (-2.12)	-0.122*** (-3.86)	0.0117 (0.29)	-0.0604 (-1.42)	0.115** (3.11)	-0.0531 (-1.24)	-0.00199 (-0.13)	-0.00522 (-0.31)	0.105** (2.79)
OBC: Goala	-0.124*** (-4.48)	-0.131** (-3.14)	-0.00955 (-0.19)	-0.0717 (-1.51)	-0.0239 (-0.48)	-0.0658 (-1.36)	-0.00921 (-0.42)	0.0246 (1.19)	0.00334 (0.08)
OBC: Guria	-0.114** (-2.99)	-0.0342 (-0.51)	0.0762 (1.03)	0.00820 (0.13)	0.122 (1.65)	0.104 (1.25)	-0.0293 (-0.72)	-0.0640 (-1.35)	-0.0307 (-0.45)
OBC: Tanti	-0.106** (-2.85)	0.0188 (0.32)	0.0700 (1.10)	-0.102 (-1.54)	-0.00954 (-0.14)	-0.0199 (-0.27)	0.000958 (0.02)	0.00808 (0.24)	0.0851 (1.43)
OBC: Teli	-0.0382 (-1.13)	-0.0311 (-0.63)	0.0602 (0.88)	-0.0988 (-1.60)	0.0210 (0.29)	-0.126 (-1.96)	0.00476 (0.16)	0.0378 (1.56)	0.0249 (0.41)
OBC: Others	-0.0893*** (-4.75)	-0.0880*** (-3.36)	-0.0195 (-0.58)	-0.0979** (-2.99)	0.0561 (1.60)	-0.0436 (-1.31)	-0.0174 (-0.85)	0.00873 (0.58)	0.00812 (0.27)
FC: Brahmin	-0.173*** (-7.64)	0.0430 (1.15)	0.0492 (1.00)	-0.0384 (-0.81)	0.0543 (1.04)	-0.0592 (-1.21)	0.0457* (2.24)	0.0200 (0.89)	0.0383 (0.83)
FC: Karan	-0.0940** (-2.96)	-0.0730 (-1.32)	0.0220 (0.35)	-0.205** (-3.05)	-0.00969 (-0.14)	-0.0698 (-1.19)	0.0186 (0.52)	0.00570 (0.23)	0.0624 (0.94)
FC: Khandayat	-0.105*** (-6.56)	-0.0569* (-2.20)	0.00384 (0.12)	-0.0496 (-1.70)	0.0167 (0.53)	-0.0765* (-2.44)	-0.00327 (-0.22)	0.00821 (0.56)	0.0334 (1.20)
FC: Others	-0.0995** (-2.96)	0.0101 (0.24)	0.0722 (1.25)	0.0190 (0.34)	0.146** (2.89)	0.0206 (0.43)	0.0172 (0.65)	0.000242 (-0.01)	0.0879 (1.74)
Muslims	0.0814 (1.34)	0.124 (1.65)	0.157 (1.70)	-0.0576 (-0.63)	0.0192 (0.20)	-0.00512 (-0.06)	0.00275 (0.05)	0.0106 (0.79)	-0.0339 (-0.50)
Observations	4077	2246	2246	2246	2246	2246	2246	2246	2246
Adjusted R-squared	0.206	0.145	0.188	0.199	0.203	0.245	0.073	0.064	0.089

Notes: (1) Source: Authors' calculations based on data collected by Social Observatory, World Bank and Government of Odisha. . Notes (2) - (5) of Table 5 apply.

**Table 7: Empowerment regressions with jati identifiers, Tamil Nadu**

	Employed	Input:				Mobility:		
		Durables	Tuition	Livelihood	Politics	Bank	Taluk Office	Police Station
<b>Panel (a): SC-ST Jatis</b>								
SC: Adidraavidar	0.0394** (2.72)	0.0136 (0.96)	0.0400** (2.70)	0.0222 (1.27)	0.0254 (1.79)	-0.0176 (-0.96)	0.0599** (3.05)	0.0208* (1.99)
SC: Chakkaliyan	0.0454 (0.87)	-0.0276 (-0.46)	0.0226 (0.41)	-0.0798 (-1.28)	-0.0560 (-0.96)	0.0126 (0.20)	-0.0342 (-0.47)	0.0436 (1.01)
SC: Pallar	0.0365 (1.10)	-0.0109 (-0.34)	-0.0237 (-0.68)	-0.00954 (-0.25)	0.0541 (1.83)	-0.0160 (-0.39)	0.0191 (0.45)	-0.00603 (-0.32)
SC: Others	-0.0200 (-0.51)	-0.0208 (-0.58)	-0.0135 (-0.36)	-0.0555 (-1.31)	0.00477 (0.13)	-0.143** (-3.03)	-0.0167 (-0.39)	0.0352 (1.21)
ST	0.116* (2.36)	-0.0497 (-0.94)	-0.0784 (-1.46)	-0.0792 (-1.21)	-0.0730 (-1.28)	-0.0565 (-0.81)	0.0637 (0.92)	0.0139 (0.40)
Observations	5190	3284	3280	3283	3279	3299	3299	3299
Adjusted R-squared	0.276	0.117	0.119	0.151	0.076	0.136	0.149	0.050
<b>Panel (b): Non-SC Jatis</b>								
MBC: Ambalakarar	0.0463 (1.25)	-0.0110 (-0.24)	-0.0867 (-1.95)	0.00655 (0.14)	-0.0636 (-1.64)	-0.0640 (-1.36)	-0.141** (-3.18)	0.00288 (0.10)
MBC: Muthuraja	0.0383 (0.77)	-0.0558 (-0.95)	0.0171 (0.35)	0.00438 (0.07)	-0.0263 (-0.59)	-0.00620 (-0.11)	-0.0146 (-0.24)	-0.0165 (-0.57)
MBC: Vanniyar	-0.00369 (-0.17)	-0.0143 (-0.68)	-0.0261 (-1.23)	-0.0203 (-0.79)	-0.0124 (-0.57)	0.0388 (1.35)	-0.0440 (-1.40)	-0.0154 (-1.02)
MBC: Others	-0.0745** (-2.65)	-0.0492 (-1.61)	-0.0485 (-1.65)	-0.0299 (-0.89)	-0.0729* (-2.51)	0.00309 (0.10)	-0.0549 (-1.62)	-0.00608 (-0.33)
BC: Chettiar	-0.0327 (-0.57)	-0.0101 (-0.18)	-0.00425 (-0.08)	-0.0505 (-0.73)	-0.0364 (-0.60)	0.0261 (0.40)	-0.0150 (-0.21)	0.0362 (0.91)
BC: Kallar	-0.00500 (-0.15)	0.0276 (0.81)	-0.00618 (-0.17)	0.0739 (1.78)	-0.0458 (-1.32)	0.00543 (0.13)	0.0194 (0.44)	-0.0103 (-0.38)
BC: Nadar	-0.0761 (-1.16)	-0.0258 (-0.45)	-0.0564 (-0.87)	-0.0439 (-0.66)	-0.0408 (-0.72)	0.0539 (0.90)	0.00706 (0.08)	-0.0481** (-2.62)
BC: Naidu	-0.155* (-2.14)	0.0730 (1.39)	-0.0141 (-0.21)	-0.0149 (-0.20)	0.0607 (1.39)	0.0948* (2.11)	-0.0340 (-0.51)	-0.0370 (-1.06)
BC: Parkavakulam	0.0434 (1.16)	0.0354 (1.18)	0.00918 (0.25)	-0.0390 (-0.80)	0.0129 (0.46)	0.0879* (2.08)	-0.0472 (-0.94)	0.00936 (0.34)
BC: Reddiyar	-0.147* (-2.52)	-0.0949 (-1.44)	-0.104 (-1.54)	-0.0691 (-0.98)	-0.123 (-1.82)	-0.0652 (-0.89)	-0.00880 (-0.13)	-0.0601* (-2.45)
BC: Thevar	0.0522 (1.03)	0.0191 (0.53)	-0.0178 (-0.43)	0.0625 (1.87)	0.0224 (0.56)	0.0559 (0.95)	0.0616 (1.02)	0.00206 (0.06)
BC: Vellalar	-0.0669** (-2.74)	0.0177 (0.73)	-0.00181 (-0.07)	0.0224 (0.79)	0.00684 (0.28)	0.00447 (0.15)	-0.0605* (-2.08)	-0.0404** (-2.58)
BC: Vishwakrma	-0.0127 (-0.25)	-0.0426 (-0.76)	0.0312 (0.59)	0.0342 (0.52)	0.0414 (0.84)	0.0446 (0.80)	-0.0930 (-1.34)	-0.0329 (-0.97)
BC: Yadava	-0.0692	-0.00205	-0.0310	-0.0200	-0.0276	0.171***	0.0448	-0.0363

	Employed	Input:				Mobility:		
		Durables	Tuition	Livelihood	Politics	Bank	Taluk Office	Police Station
BC: Others	(-1.46) -0.0806*** (-3.70)	(-0.04) 0.00856 (0.41)	(-0.65) -0.0187 (-0.82)	(-0.35) -0.00469 (-0.18)	(-0.61) -0.0139 (-0.64)	(3.38) 0.0506 (1.89)	(0.72) -0.0572* (-2.09)	(-1.18) -0.0328* (-2.39)
Observations	5190	3284	3280	3283	3279	3299	3299	3299
Adjusted R-squared	0.279	0.117	0.117	0.149	0.077	0.136	0.149	0.050

Notes: (1) Source: Authors' calculations based on data collected by Social Observatory, World Bank and Government of Tamil Nadu. . Notes (2) - (5) of Table 5 apply..

**Table 8: Empowerment regressions with jati identifiers interacted with per capita monthly consumption expenditure (exp.), Bihar**

	Employed	Input:				Mobility:			
		Durables	Tuition	Livelihood	Politics	Store	Health center	Friend	Bank
<b>Panel (a): SC-ST Jatis</b>									
SC: Chamar x exp	0.129** (2.94)	0.00700 (0.24)	-0.131** (-2.83)	0.0445 (0.91)	-0.0615 (-1.29)	-0.0257 (-0.49)	-0.00361 (-0.12)	0.00937 (0.59)	0.0387 (0.77)
SC: Dobha x exp	-0.139 (-1.52)	0.0899 (1.39)	0.177* (1.98)	0.0195 (0.19)	-0.216 (-1.90)	0.00440 (0.03)	0.0104 (0.28)	-0.0383 (-0.83)	0.139 (1.16)
SC: Dushad x exp	0.115* (2.32)	-0.0263 (-0.73)	0.0214 (0.41)	-0.0164 (-0.29)	-0.0227 (-0.43)	0.0402 (0.72)	0.0422 (1.16)	-0.0302 (-1.07)	0.0648 (1.14)
SC: Musahar x exp	0.106* (2.42)	-0.0159 (-0.36)	-0.0775 (-1.42)	-0.0274 (-0.52)	-0.0212 (-0.37)	0.0766 (1.41)	-0.0577 (-1.28)	-0.00331 (-0.12)	0.0263 (0.52)
SC: Sardar x exp	-0.0661 (-0.54)	0.0443 (0.56)	-0.0493 (-0.48)	0.0115 (0.10)	-0.137 (-1.36)	0.0430 (0.29)	0.00305 (0.06)	0.0670 (1.32)	0.159 (1.14)
SC: Others x exp	0.143 (1.26)	-0.130 (-1.13)	-0.0604 (-0.47)	-0.0131 (-0.11)	-0.257* (-2.02)	0.186 (1.52)	-0.0142 (-0.13)	-0.0348 (-0.43)	0.0811 (0.55)
ST x exp	0.496** (2.69)	0.223 (1.02)	-0.0175 (-0.07)	0.192 (0.78)	-0.190 (-0.82)	0.152 (0.59)	-0.0131 (-0.06)	0.157 (1.37)	-0.437 (-1.81)
Observations	12584	8637	8637	8637	8637	8637	8637	8637	8637
Adjusted R-squared	0.301	0.087	0.124	0.116	0.136	0.204	0.090	0.023	0.088
<b>Panel (b): Non-SC Jatis</b>									
OBC: Dhanuk x exp	-0.0148 (-0.09)	0.0495 (0.43)	0.117 (0.82)	-0.162 (-0.90)	0.0608 (0.35)	0.112 (0.53)	-0.168 (-0.90)	0.0357 (0.89)	-0.266* (-2.06)
OBC: Kurmi x exp	0.126 (1.39)	-0.0133 (-0.32)	0.134 (1.61)	0.0698 (0.65)	0.216* (2.31)	0.0532 (0.44)	0.0730 (1.20)	0.0272 (1.23)	-0.274* (-2.27)
OBC: Yadav x exp	-0.0858 (-1.45)	-0.0121 (-0.28)	0.0245 (0.44)	0.101 (1.70)	0.0552 (1.00)	-0.0246 (-0.31)	0.0296 (0.67)	0.00520 (0.17)	0.0217 (0.32)
OBC: Other x exp	-0.0518 (-0.98)	0.0229 (0.55)	0.0958 (1.78)	0.0187 (0.30)	0.117* (2.06)	-0.0298 (-0.46)	0.0377 (0.97)	0.0252 (1.08)	-0.117 (-1.92)
EBC x exp	0.00208 (0.03)	-0.0947 (-1.42)	-0.0640 (-0.82)	-0.153 (-1.83)	0.0826 (1.11)	-0.0156 (-0.20)	-0.0103 (-0.22)	-0.0447 (-0.97)	0.0905 (0.95)
FC: Brahmin x exp	-0.128 (-1.14)	0.0276 (0.41)	0.0628 (0.56)	0.0246 (0.18)	0.0337 (0.30)	0.105 (0.84)	-0.0181 (-0.26)	-0.0165 (-0.31)	-0.0613 (-0.53)
FC: Rajput x exp	-0.271** (-3.18)	0.0735 (1.67)	0.220*** (3.66)	0.253** (2.68)	-0.0167 (-0.16)	0.0827 (0.58)	0.0190 (0.40)	0.0213 (0.65)	-0.114 (-1.01)
FC: Others x exp	0.0125 (0.06)	-0.0951 (-0.81)	-0.249 (-1.08)	-0.532** (-2.80)	-0.289 (-1.33)	-0.0625 (-0.26)	-0.180 (-1.14)	0.124 (1.35)	0.00479 (0.03)
Muslims x exp	-0.0645 (-0.81)	0.0693 (1.19)	0.0516 (0.55)	-0.0878 (-0.81)	-0.0320 (-0.32)	0.0270 (0.28)	-0.0799 (-1.12)	-0.0191 (-0.43)	-0.0237 (-0.26)
Observations	12584	8637	8637	8637	8637	8637	8637	8637	8637
Adjusted R-squared	0.303	0.086	0.122	0.119	0.135	0.207	0.090	0.023	0.087

Notes: (1) Source: Authors' calculations based on data collected by Social Observatory, World Bank and Government of Bihar. (2) In panel (a), Non-SC jatis are the excluded group while in Panel (b), SCs are the excluded group. (3) Each column represents a separate regression wherein an 'empowerment indicator' is regressed on variables that are reported as well as additional controls: age, age squared, marital status of the woman, age at marriage, and a dummy variable for some schooling of the female respondent; a dummy variable for whether it is female-headed household, per-capita expenditure, per-capita expenditure squared, landholdings, education of the household head, number of members in the household and panchayat level fixed-effects. The female employment is run for all female adults in the sample (individual level). (4) We report robust standard errors in the brackets. (5) We report the level of significance: \* p value < .05, \*\* p value < .01 and \*\*\* p value < .001.

**Table 9: Empowerment regressions with jati identifiers interacted with per capita monthly consumption expenditure (exp.), Odisha**

	Employed	Durables	Input:			Mobility:			
			Tuition	Livelihood	Politics	Store	Health center	Friend	Bank
<b>Panel (a): SC-ST Jatis</b>									
SC: Barui x exp	0.0129 (1.29)	-0.0109 (-0.89)	-0.00341 (-0.33)	-0.00705 (-0.62)	-0.0102 (-1.31)	0.00304 (0.35)	-0.00349 (-0.79)	0.00101 (0.41)	-0.00480 (-0.43)
SC: Dobha x exp	0.0152 (1.10)	0.000230 (0.02)	-0.0805*** (-4.29)	0.00749 (0.47)	0.0154 (0.53)	-0.0391 (-1.18)	-0.00732 (-1.77)	0.000160 (0.02)	-0.0125 (-0.84)
SC: Keuta x exp	-0.00437 (-0.55)	0.00518 (0.57)	-0.00274 (-0.30)	0.0139* (2.10)	-0.00742 (-0.74)	-0.0144 (-1.49)	0.00173 (0.49)	-0.00212 (-1.42)	-0.0123 (-1.14)
SC: Kondara x exp	-0.0126 (-0.71)	-0.00888 (-0.48)	-0.0308 (-0.67)	-0.0518 (-1.00)	-0.114*** (-5.03)	-0.0223 (-0.57)	-0.0162 (-1.79)	0.000544 (0.07)	-0.0687** (-3.11)
SC: Pana x exp	0.0172 (1.07)	-0.0265 (-1.22)	0.00513 (0.20)	-0.00362 (-0.17)	-0.0365** (-2.90)	0.0132 (0.72)	-0.0307 (-1.52)	-0.00148 (-0.21)	0.0216 (1.02)
SC: Others x exp	-0.0208* (-2.32)	-0.0150 (-0.75)	-0.0446 (-1.82)	0.00101 (0.04)	-0.00281 (-0.11)	-0.0317 (-1.14)	0.00727 (0.93)	-0.00373 (-0.36)	0.0193 (0.78)
ST x exp	-0.0353 (-0.82)	0.00899 (0.66)	0.0195 (0.52)	0.0125 (0.27)	0.0400 (1.09)	0.0496 (1.70)	0.0103 (0.77)	0.00751 (0.93)	-0.0411 (-1.77)
Observations	4077	2246	2246	2246	2246	2246	2246	2246	2246
Adjusted R-squared	0.214	0.137	0.187	0.198	0.205	0.245	0.075	0.064	0.088
<b>Panel (b): Other Jatis</b>									
OBC: Chasa x exp	-0.00168 (-0.16)	0.0139 (0.92)	0.000250 (0.01)	0.0137 (0.72)	0.0350** (2.73)	-0.00662 (-0.32)	0.0185* (2.29)	0.00172 (0.39)	0.00234 (0.14)
OBC: Goala x exp	0.0623 (1.56)	0.0858* (2.52)	0.0231 (0.39)	-0.0609 (-0.83)	0.110* (2.36)	0.00607 (0.09)	-0.0233 (-1.24)	-0.000751 (-0.09)	0.0689 (1.32)
OBC: Guria x exp	0.00247 (0.26)	0.0269 (1.51)	0.0271 (1.51)	-0.00708 (-0.53)	-0.00735 (-0.50)	0.00933 (0.37)	-0.00628 (-0.50)	0.00436 (0.75)	-0.0196 (-0.81)
OBC: Tanti x exp	-0.0177* (-2.19)	0.0130 (1.19)	0.0118 (0.48)	0.00893 (0.33)	0.0167 (0.67)	-0.0225 (-0.72)	0.0250* (2.37)	-0.00750 (-1.40)	0.0443** (2.62)
OBC: Teli x exp	-0.000442 (-0.04)	-0.0375 (-1.52)	-0.0204 (-0.64)	-0.0170 (-0.35)	0.0169 (0.49)	0.0504 (1.70)	-0.000685 (-0.08)	0.00395 (0.45)	-0.0266 (-0.75)
OBC: Others x exp	-0.00806 (-1.05)	0.00456 (0.24)	0.0114 (0.87)	-0.0129 (-0.66)	0.00554 (0.29)	-0.000207 (-0.01)	0.00169 (0.09)	-0.00165 (-0.45)	-0.000155 (-0.01)
FC: Brahmin x exp	-0.00168 (-0.13)	0.00928 (0.83)	-0.00921 (-0.75)	0.0109 (1.07)	0.0186 (1.35)	-0.0112 (-1.00)	0.00524 (0.79)	-0.00445 (-1.50)	0.00878 (0.66)
FC: Karan x exp	0.00101 (0.09)	0.0187 (1.47)	0.0112 (0.73)	0.0370* (2.32)	0.0488** (3.07)	0.0115 (0.82)	0.0220* (2.31)	-0.000402 (-0.07)	0.0290 (1.61)
FC: Khandayat x exp	0.0175 (1.58)	0.0200 (1.61)	0.0176 (1.16)	0.00197 (0.15)	0.0117 (0.88)	0.00682 (0.45)	0.00429 (0.58)	0.0000429 (0.01)	-0.00229 (-0.17)
FC: Others x exp	-0.00724 (-0.84)	-0.00500 (-0.36)	0.00958 (1.08)	-0.00638 (-0.76)	0.00752 (0.95)	0.00735 (0.58)	0.00320 (0.91)	0.00190 (0.94)	0.00304 (0.28)
Muslims x exp	0.00803 (0.42)	-0.00135 (-0.07)	-0.00871 (-0.26)	-0.0303 (-1.07)	-0.0212 (-1.19)	-0.00201 (-0.09)	0.00575 (0.69)	-0.00286 (-0.77)	-0.00578 (-0.26)
Observations	4077	2246	2246	2246	2246	2246	2246	2246	2246
Adjusted R-squared	0.206	0.145	0.186	0.199	0.203	0.243	0.072	0.060	0.088

Notes: (1) Source: Authors' calculations based on data collected by Social Observatory, World Bank and Government of Odisha. . Notes (2) - (5) of Table 8 apply.

**Table 10: Empowerment regressions with jati identifiers interacted with per capita monthly consumption expenditure (exp.), Tamil Nadu**

	Employed	Durables	Tuition	Input: Livelihood	Politics	Bank	Mobility: Taluk Office	Police Station
<b>Panel (a): SC-ST Jatis</b>								
SC: Adidravidar x exp	0.0177 (1.67)	0.00194 (0.23)	0.00623 (0.72)	0.00984 (1.00)	0.00633 (0.89)	0.00780 (0.71)	0.000753 (0.04)	0.00695 (0.73)
SC: Chakkaliyan x exp	-0.0169 (-0.35)	-0.0132 (-0.20)	0.0455 (1.16)	-0.0345 (-0.61)	0.0542 (1.55)	0.00115 (0.03)	-0.0950* (-2.55)	-0.00241 (-0.11)
SC: Pallar x exp	-0.0249 (-0.75)	-0.0338 (-0.82)	-0.0362 (-1.05)	-0.0258 (-0.93)	0.0130 (0.62)	-0.0115 (-0.29)	-0.0444 (-1.07)	0.0104 (0.54)
SC: Others x exp	0.000451 (0.02)	0.0000963 (-0.01)	0.00343 (0.22)	-0.0177 (-0.88)	0.00307 (0.16)	-0.00491 (-0.15)	0.00553 (0.18)	-0.00554 (-0.27)
ST x exp	0.00767 (0.24)	0.0133 (0.27)	0.0352 (0.72)	0.0509 (1.00)	0.0687* (1.98)	0.0449 (0.95)	-0.0730 (-1.61)	-0.0144 (-1.06)
Observations	5190	3284	3280	3283	3279	3299	3299	3299
Adjusted R-squared	0.275	0.116	0.119	0.150	0.076	0.135	0.149	0.049
<b>Panel (b): Non-SC Jatis</b>								
MBC: Ambalakarar x exp	-0.0270 (-0.80)	-0.0276 (-0.54)	-0.0361 (-0.84)	-0.0595 (-1.28)	-0.0586 (-1.23)	-0.0267 (-0.75)	0.0144 (0.24)	0.00520 (0.18)
MBC: Muthuraja x exp	-0.0320 (-0.48)	-0.0283 (-0.33)	-0.0522 (-0.67)	-0.187* (-2.26)	-0.00308 (-0.05)	-0.0475 (-0.65)	0.156* (2.04)	-0.0264 (-1.04)
MBC: Vanniyar x exp	-0.00775 (-0.47)	0.0000716 (0.00)	-0.00678 (-0.40)	-0.0192 (-0.99)	-0.0278 (-1.74)	-0.0382* (-2.00)	-0.0215 (-0.87)	0.000573 (0.04)
MBC: Others x exp	0.00618 (0.26)	0.00205 (0.10)	-0.0121 (-0.66)	0.00982 (0.46)	0.0180 (1.05)	-0.0367 (-1.44)	-0.0767*** (-3.34)	-0.00700 (-0.46)
BC: Chettiar x exp	-0.0647 (-1.16)	0.0206 (0.64)	0.0303 (0.89)	-0.140* (-2.51)	-0.0852 (-1.41)	-0.0885 (-1.69)	-0.0220 (-0.40)	-0.0444 (-1.92)
BC: Kallar x exp	0.00104 (0.07)	0.0340 (1.49)	0.0507* (2.19)	0.0105 (0.37)	-0.0407 (-1.63)	-0.0189 (-0.55)	0.00292 (0.09)	-0.0321 (-1.69)
BC: Nadar x exp	0.0193 (0.22)	-0.109 (-1.40)	-0.00155 (-0.02)	-0.0659 (-0.69)	0.0225 (0.30)	0.0259 (0.27)	0.0307 (0.32)	-0.0254 (-1.01)
BC: Naidu x exp	-0.0302 (-0.59)	-0.0249 (-0.94)	-0.0265 (-0.74)	0.00721 (0.18)	-0.0203 (-0.92)	-0.00865 (-0.30)	0.102* (2.29)	0.0213 (0.38)
BC: Parkavakulam x exp	-0.0102 (-0.30)	0.00358 (0.16)	0.0152 (0.69)	0.132*** (4.10)	-0.00849 (-0.46)	0.0160 (0.59)	0.0753 (1.56)	-0.00258 (-0.13)
BC: Reddiyar x exp	-0.000492 (-0.01)	-0.00871 (-0.25)	-0.0301 (-0.79)	0.00392 (0.12)	-0.0108 (-0.29)	-0.0103 (-0.29)	-0.0876* (-1.99)	-0.00951 (-0.86)
BC: Thevar x exp	-0.0948* (-2.11)	-0.0171 (-0.78)	-0.0777 (-1.63)	-0.0265 (-1.06)	0.0131 (0.43)	0.0454 (1.15)	0.149*** (3.30)	0.0285 (0.71)
BC: Vellalar x exp	-0.0147 (-1.03)	0.00301 (0.33)	-0.0127 (-1.24)	-0.0125 (-1.27)	-0.00714 (-0.87)	-0.000204 (-0.02)	-0.0120 (-0.60)	-0.0123 (-1.39)
BC: Vishwakrma x exp	0.0609* (2.41)	-0.0392 (-1.41)	-0.0481 (-1.85)	-0.0395 (-1.20)	-0.0251 (-1.24)	-0.0399 (-1.16)	-0.0225 (-0.66)	-0.0313 (-1.49)
BC: Yadava x exp	0.0126 (0.36)	0.0263 (0.99)	0.0411 (1.39)	0.0562 (1.83)	0.00217 (0.08)	0.0398 (1.24)	0.0420 (0.74)	-0.0136 (-0.53)

	Employed	Durables	Tuition	Input: Livelihood	Politics	Bank	Mobility: Taluk Office	Police Station
BC: Others x exp	-0.0142 (-0.95)	0.000136 (0.01)	0.00290 (0.20)	0.00559 (0.43)	0.00259 (0.25)	0.0148 (0.98)	0.0410* (2.05)	0.0116 (0.99)
Observations	5190	3284	3280	3283	3279	3299	3299	3299
Adjusted R-squared	0.278	0.115	0.117	0.156	0.076	0.136	0.157	0.050

Notes: (1) Source: Authors' calculations based on data collected by Social Observatory, World Bank and Government of Tamil Nadu. . Notes (2) - (5) of Table 8 apply..

**Table 11: Percentage of pairwise differences that are significantly different**

		Input in intra- household decision making		
		Employment		Mobility
Bihar	SC-ST	47.6	28.6	25.0
	Others	66.7	45.8	58.3
Odisha	SC-ST	61.9	14.3	19.0
	Others	38.2	16.8	9.5
TN	SC-ST	10.0	15.0	13.3
	Others	31.4	7.6	9.8

Source: Authors' calculations based on data collected by Social Observatory, World Bank and state Government of Bihar, Odisha and Tamil Nadu, respectively.

**Table 12: Targeting of livelihoods program in the three states**

<b>Panel (a): Government defined caste categories</b>						
	<b>Bihar</b>		<b>Odisha</b>		<b>Tamil Nadu</b>	
	JEEViKA household		TRIPTI household		PVP household	
ST	-0.170	ST	-0.186**	ST	-0.052	
	(0.089)		(0.063)		(0.101)	
OBC	-0.084***	OBC	-0.009	MBC	-0.101**	
	(0.023)		(0.038)		(0.031)	
EBC	-0.083*			BC	-0.028	
	(0.036)				(0.025)	
Muslim	-0.173***	Muslim	-0.204*			
	(0.042)		(0.095)			
FC	-0.307***	FC	-0.054			
	(0.040)		(0.039)			
Some Schooling	-0.018	Some Schooling	0.044	Some Schooling	0.013	
	(0.021)		(0.033)		(0.024)	
Female headed household	0.066**	Female headed household	0.132	Female headed household	0.046	
	(0.022)		(0.089)		(0.031)	
Per capita expenditure	0.119	Per capita expenditure	-0.026*	Per capita expenditure	-0.006	
	(0.103)		(0.010)		(0.007)	
Per capita expenditure squared	-0.037	Per capita expenditure squared	0.001***	Per capita expenditure squared	0.000	
	(0.054)		(0.000)		(0.000)	
Land	-0.019***	Land	0.001	Land	0.001	
	(0.005)		(0.013)		(0.001)	
Observations	4187	Observations	1298	Observations	1629	
Adjusted R-squared	0.129	Adjusted R-squared	0.194	Adjusted R-squared	0.195	

Notes: (1) Source: Author's calculations based on data collected by Social Observatory, World Bank and Government of Odisha. (2) Non-SC jatis are the omitted group. (3) Each column represents a separate regression wherein an `empowerment indicator' is regressed on variables that are reported as well as additional controls: age, age squared, marital status of the woman, age at marriage, and a dummy variable for some schooling of the female respondent; a dummy variable for whether it is female-headed household, per-capita expenditure, per-capita expenditure squared, landholdings, education of the household head, number of members in the household and panchayat level fixed-effects. The female employment is run for all female adults in the sample (individual level). (4) We report robust standard errors in the brackets. (5) We report the level of significance: \* p value < .05 , \*\* p value < .01 and \*\*\* p value < .001.

**Panel (b): SC Jatis**

	<b>Bihar</b>		<b>Odisha</b>		<b>Tamil Nadu</b>	
	JEEViKA household		TRIPTI household		PVP household	
SC: Chamar	0.146*** (0.024)	SC: Barui	-0.056 (0.107)	SC: Adidraavidar	0.074** (0.028)	
SC: Dobha	0.048 (0.053)	SC: Dobha	0.034 (0.083)	SC: Chakkaliyan	-0.092 (0.066)	
SC: Dushad	0.184*** (0.024)	SC: Keuta	-0.012 (0.099)	SC: Pallar	-0.027 (0.050)	
SC: Musahar	0.070** (0.024)	SC: Kondara	-0.032 (0.065)			
SC: Sardar	0.053 (0.072)	SC: Pana	0.182** (0.064)			
SC: Others	-0.113* (0.055)	SC: Others	0.005 (0.059)	SC: Others	0.089 (0.050)	
ST	-0.066 (0.090)	ST	-0.149* (0.058)	ST	0.019 (0.101)	
Some Schooling	-0.026 (0.021)	Some Schooling	0.044 (0.033)	Some Schooling	0.013 (0.024)	
Female headed household	0.060** (0.022)	Female headed household	0.133 (0.088)	Female headed household	0.049 (0.031)	
Per capita expenditure	0.122 (0.104)	Per capita expenditure	-0.028** (0.011)	Per capita expenditure	-0.005 (0.007)	
Per capita expenditure squared	-0.042 (0.055)	Per capita expenditure squared	0.001*** (0.000)	Per capita expenditure squared	0.000 (0.000)	
Land	-0.021*** (0.005)	Land	0.001 (0.013)	Land	0.001 (0.001)	
Observations	4187	Observations	1298	Observations	1629	
Adjusted R-squared	0.133	Adjusted R-squared	0.195	Adjusted R-squared	0.195	

Notes: (1) Source: Author's calculations based on data collected by Social Observatory, World Bank and Government of Odisha. . Notes (2) - (5) of Table 12(a) apply.

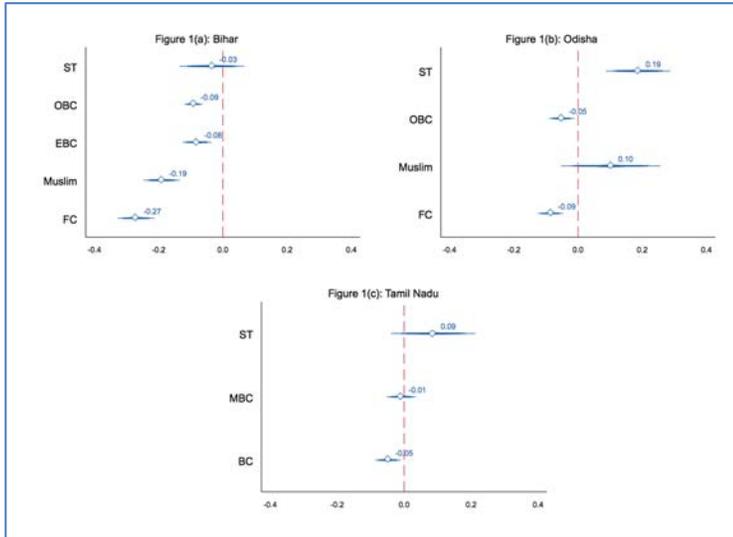
**Panel (c): Non-SC jatis**

	Bihar		Odisha		Tamil Nadu	
	JEEViKA household		TRIPTI household		PVP household	
OBC: Dhanuk	-0.135 (0.076)	OBC: Chasa	-0.017 (0.054)	MBC: Ambalakarar	0.017 (0.076)	
OBC: Kurmi	-0.199** (0.074)	OBC: Goala	-0.016 (0.076)	MBC: Muthuraja	-0.221* (0.101)	
OBC: Yadav	-0.057 (0.033)	OBC: Guria	0.159 (0.097)	MBC: Vanniyar	-0.117** (0.040)	
OBC: Other	-0.078* (0.031)	OBC: Tanti	0.132 (0.081)	MBC: Others	-0.104* (0.041)	
		OBC: Teli	-0.158 (0.098)	BC: Chettiar	0.297 (0.156)	
EBC	-0.082* (0.036)	OBC: Others	0.065 (0.048)	BC: Kallar	-0.050 (0.051)	
FC: Brahmin	-0.203** (0.063)	FC: Brahmin	-0.099 (0.069)	BC: Nadar	-0.001 (0.088)	
FC: Rajput	-0.421*** (0.045)	FC: Karan	-0.071 (0.079)	BC: Naidu	-0.134 (0.088)	
FC: Others	-0.286** (0.089)	FC: Khandayat	-0.007 (0.042)	BC: Parkavakulam	-0.092 (0.059)	
		FC: Others	0.031 (0.071)	BC: Reddiyar	0.012 (0.094)	
Muslim	-0.173*** (0.042)	Muslims	-0.184 (0.096)	BC: Thevar	-0.005 (0.104)	
				BC: Vellalar	-0.017 (0.041)	
				BC: Vishwakrma	0.045 (0.079)	
				BC: Yadava	-0.036 (0.082)	
				BC: Others	-0.014 (0.037)	
Some Schooling	-0.014 (0.021)	Some Schooling	0.047 (0.033)	Some Schooling	0.011 (0.024)	
Female headed household	0.065** (0.022)	Female headed household	0.124 (0.092)	Female headed household	0.045 (0.031)	
Per capita expenditure	0.109 (0.103)	Per capita expenditure	-0.024* (0.011)	Per capita expenditure	-0.005 (0.007)	
Per capita expenditure squared	-0.028 (0.054)	Per capita expenditure squared	0.001*** (0.000)	Per capita expenditure squared	0.000 (0.000)	
Land	-0.020*** (0.005)	Land	-0.000 (0.013)	Land	0.001 (0.001)	
Observations	4187	Observations	1298	Observations	1629	
Adjusted R-squared	0.129	Adjusted R-squared	0.192	Adjusted R-squared	0.196	

Notes: (1) Source: Author's calculations based on data collected by Social Observatory, World Bank and Government of Odisha. . Notes (2) - (5) of Table 12(a) apply.

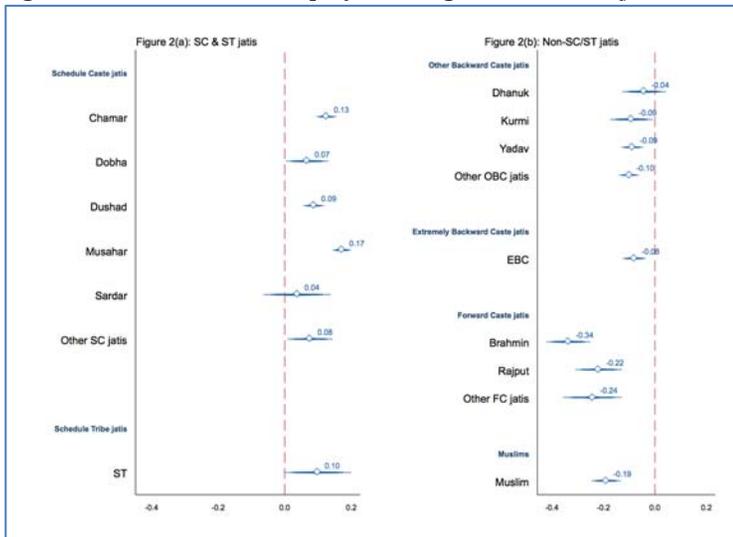
## Appendix: Figures

**Figure 1: Estimates from employment regression (caste coefficients)**



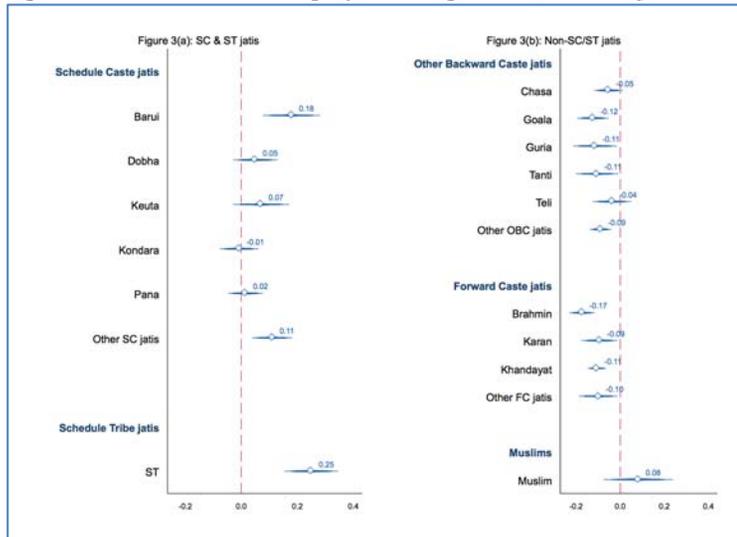
Notes: 1) SC is the omitted caste group. (2) 99%, 95% and 90% confidence intervals included  
 Source: Authors' illustration based on data used in column 1 of Table 3, panel (a), (b) & (c) respectively.

**Figure 2: Estimates from employment regression, Bihar (jati coefficients)**



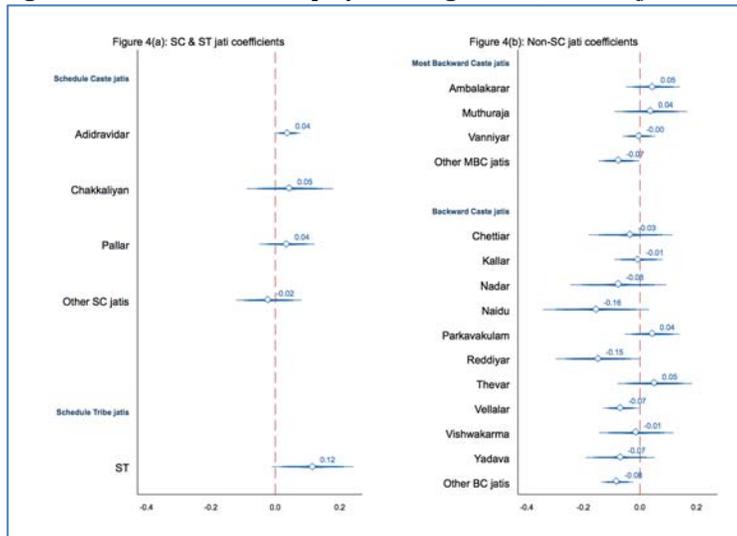
Notes: (1) In panel (a), OBC, EBC, FC and Muslim jatis are the omitted group and in panel (b) SC-ST jatis are the omitted group. (2) 99%, 95% and 90% confidence intervals included  
 Source: Authors' illustration based on data used in column 1, Table 4.

**Figure 3: Estimates from employment regression, Odisha (jati coefficients)**



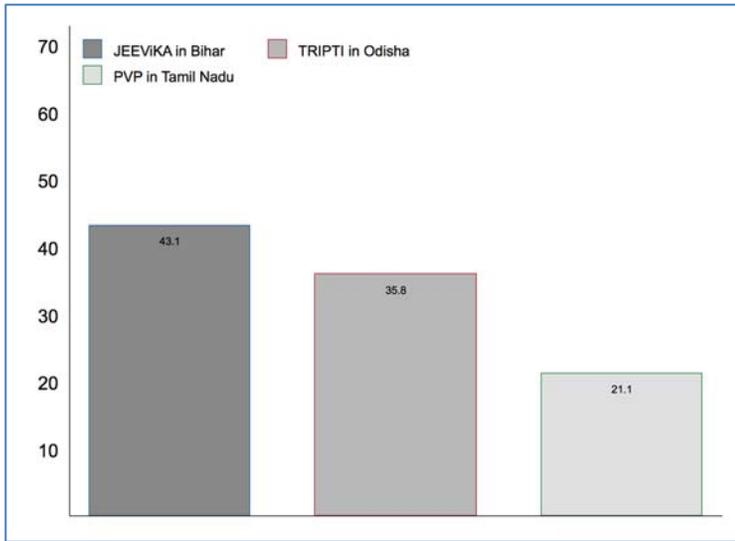
Notes: (1) In panel (a), OBC, FC and Muslim jatis are the omitted group and in panel (b) SC-ST jatis are the omitted group. (2) 99%, 95% and 90% confidence intervals included  
 Source: Authors' illustration based on data used in column 1, Table 5.

**Figure 4: Estimates from employment regression, Odisha (jati coefficients)**



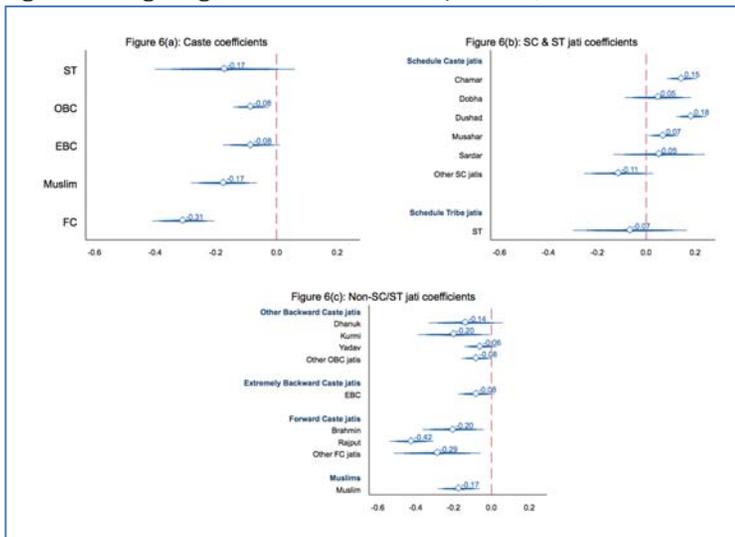
Notes: (1) In panel (a), MBC and BC jatis are the omitted group and in panel (b) SC-ST jatis are the omitted group. (2) 99%, 95% and 90% confidence intervals included  
 Source: Authors' illustration based on data used in column 1, Table 6.

**Figure 5: Proportion of households covered under State Rural Livelihoods Programmes**



Source: Authors' illustration based on data collected by Social Observatory, World Bank and State governments of Bihar, Odisha and Tamil Nadu, respectively.

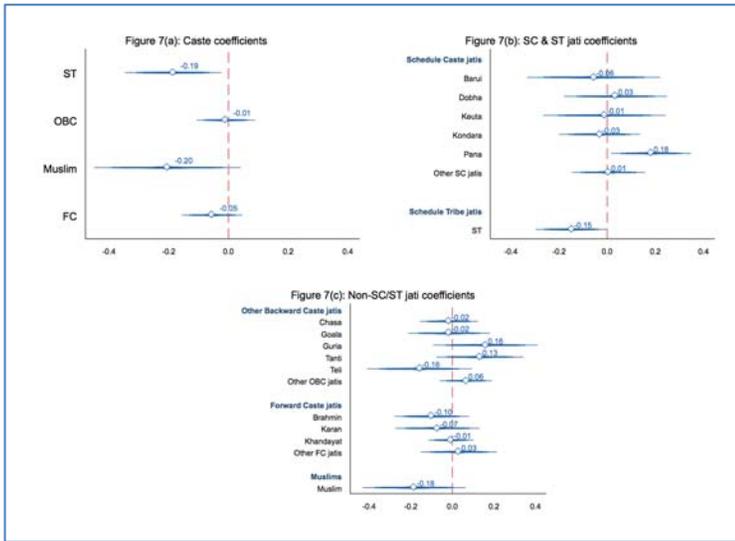
**Figure 6: Targeting of households under JEEVIKA, Bihar**



Notes: (1) In panel (a), SC is the omitted caste group. In panel (b), OBC, EBC, FC and Muslim jatis are the omitted group. And in panel (c), SC-ST jatis are the omitted group. (2) 99%, 95% and 90% confidence intervals included.

Source: Authors' illustration based on data used in column 1 of Table 12, panel (a), (b) and (c), respectively.

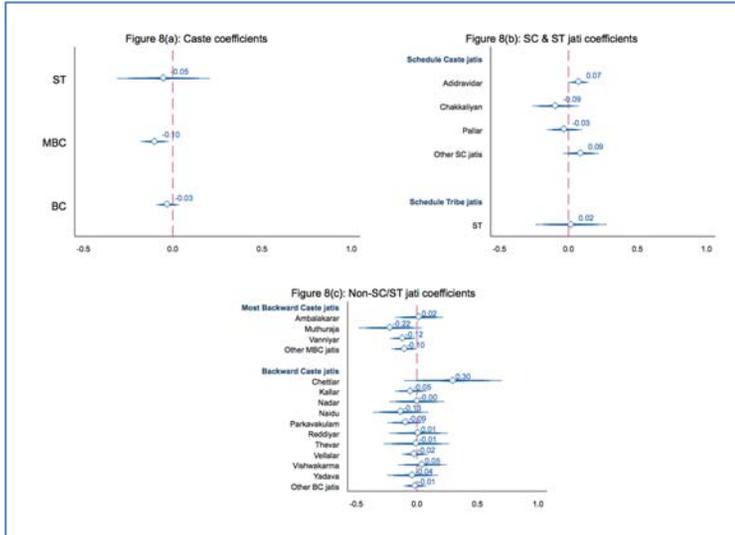
**Figure 7: Targeting of households under TRIPTI, Odisha**



Notes: (1) In panel (a), SC is the omitted caste group. In panel (b), OBC, FC and Muslim jatis are the omitted group. And inn panel (c), SC-ST jatis are the omitted group. (2) 99%, 95% and 90% confidence intervals included.

Source: Authors' illustration based on data used in column 2 of Table 12, panel (a), (b) and (c), respectively.

### Figure 8: Targeting of households under PVP, Tamil Nadu



Notes: (1) In panel (a), SC is the omitted caste group. In panel (b),MBC and BC jatis are the omitted group. And inn panel (c), SC-ST jatis are the omitted group. (2) 99%, 95% and 90% confidence intervals included.

Source: Authors' illustration based on data used in column 3 of Table 12, panel (a), (b) and (c), respectively.