

# Absent but Not Idle: the Social Roots of Demand for Flexible Work\*

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## Abstract

High absenteeism and excess labor supply often coexist in labor markets across developing countries, creating significant challenges for both firms and workers. In this paper, we show that workers frequently experience unpredictable disruptions to their daily labor supply, hindering their ability to work regularly. Using an incentivized-choice experiment with 605 participants, we find that individuals are willing to forgo 8% of total potential earnings for *day-to-day* flexibility – specifically the ability to take time off without advance planning or notice. Randomly offering day-to-day flexibility leads to a 47% increase in contract compliance and a 13% increase in total earnings. Next, we document that demands from individuals’ social networks are substantial and contribute to labor supply disruptions. Consistent with this mechanism, demand for day-to-day flexibility is significantly higher when caste-based network demands are more likely to bind. Our findings provide new insight into how worker demand for flexibility shapes labor supply in developing countries.

**Keywords:** flexibility, absenteeism, social network, labor supply, productivity

**JEL classification:** O11, L11, L25, M14

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# 1 Introduction

A large share of the labor force in low- and middle-income countries (LMICs) engage in the informal sector, typically in low-wage casual work or self-employment. Wage employment rates are highly variable and particularly low in lean seasons — casual workers in India, for instance, report an average of only 6–8 days of paid wage work per month during these periods ([Muralidharan et al., 2016](#); [Breza et al., 2021](#); [Muralidharan et al., 2023](#); [Kaur et al., 2025](#)). As [Breza, Kaur and Shamdasani \(2021\)](#) argue, these labor markets are characterized by excess labor supply, and a substantial share of workers who turn to self-employment are, in effect, “disguised unemployed.”

At the same time, despite this apparent surplus of labor, firms that employ casual workers in LMICs frequently report high rates of worker absenteeism and turnover ([Donovan et al., 2023](#); [Barker et al., 2024](#)). In India’s manufacturing sector, approximately 9% of scheduled workdays are lost to absences each month ([Goraya et al., 2025](#)), which contrasts with 2.8% in the United States (Bureau of Labor Statistics).<sup>1</sup> Absences are often unscheduled, with firms typically notified the day before or the day of. As a result, firms resort to costly coping strategies and suffer adverse productivity consequences ([Krueger and Mas, 2004](#); [Zane, 2018](#); [Goraya et al., 2025](#)).

At first glance, excess labor supply alongside high absenteeism appear to be at odds with each other. If workers are underemployed, why would they so frequently be absent from work when it is available? We propose a novel hypothesis: frequent and often unpredictable disruptions – such as illnesses or social obligations — impede workers’ ability to supply labor regularly. Consequently, workers require day-to-day flexibility, particularly the ability to take time off without advance planning or notice. This paper provides empirical evidence supporting this hypothesis and sheds light on the nature and frequency of these labor supply disruptions.

We begin by estimating worker demand for flexibility using an incentivized choice

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<sup>1</sup>[Adhvaryu et al. \(2024\)](#) document an average daily absenteeism rate of 11% in a large ready-made garment firm in India. Prior work in LMICs has documented high levels of absenteeism in the public sector, particularly among teachers and health workers ([Banerjee and Duflo, 2006](#); [Duflo et al., 2012](#); [Chaudhury et al., 2006](#)).

survey with 605 male workers drawn from 66 caste-segregated hamlets across 33 villages in rural Odisha, India. We advertise a six-week long job opportunity in low-skill manufacturing to interested individuals and estimate demand for job contracts that offer different dimensions of job flexibility using a Becker-DeGroot-Marschak mechanism, holding fixed beliefs about all other job amenities. In particular, we elicit willingness to pay for three dimensions of flexibility that may be valuable to individuals in this context: (1) the ability to pre-specify when they take time off from work at the start of the employment contract, (2) the ability to spontaneously take time off from work as needed, without advance planning or notice, and (3) simply having more time off from work.

We find substantial demand for contracts with flexibility dimensions. First, individuals are willing to forgo INR 518 on average for the ability to pre-specify at the start of the employment contract when they take time off from work. This suggests that individuals value being able to choose when they take time off, even if this has to be pre-determined on the first day at work, at approximately 4% of total potential earnings. Second, individuals are willing to forgo more than double this amount – INR 1,207, on average, or 8% of total potential earnings – for the ability to spontaneously take time off as needed. This constitutes strong evidence that *day-to-day* flexibility — more specifically, the option to take time off work as needed without advance planning or notice — is highly valued. Third, individuals have a similar valuation (INR 1,212 on average) for contracts that offer twice as much time off from work. This equivalence in individuals’ valuation of spontaneously taking time off and having twice as much time off underscores a pronounced demand for day-to-day flexibility. Fourth, when jointly offered both spontaneity and more off-days, average willingness to pay increases significantly to INR 1,369 on average, corresponding to 9% of total potential earnings.

We next estimate causal impacts of providing workers with day-to-day flexibility at the workplace using a randomized control trial. We offer six-week long jobs with a default contract of one fixed off-day every week to a random subset of 172 study par-

ticipants. 69% of participants take up the job. On the first day of employment, approximately half the participants are randomly upgraded to a flexible contract with twelve off-days that can be taken at any time. This contract jointly offers two dimensions of flexibility described previously — spontaneity and double off-days. Participants under flexible contracts are 28.3 percentage points more likely to satisfy the terms of their contract. Relative to a 60% contract compliance rate among workers with the default contract, this represents a 47% increase. Further, we find no significant differences in daily attendance and productivity across contract types — participants with flexible contracts attend work just as frequently as participants with default contracts, despite having additional flexibility. This implies, by revealed preference, that participants do not place much value in simply having more time off. Rather, the ability to exercise day-to-day flexibility is what they find particularly beneficial.

Results from both the incentivized choice survey and randomized control trial provide consistent evidence that individuals value day-to-day flexibility in the workplace. Specifically, they place a high valuation on the ability to take time off as needed, without advance planning or notice. This pattern suggests that demand for flexibility is driven by the need to accommodate unforeseen disruptions to labor supply. Survey evidence confirms the unpredictable nature of these disruptions — 87% of respondents in the incentivized survey state that flexibility is important for managing unexpected shocks such as illnesses or funerals. Similarly, in our worksite absenteeism data, we document an absenteeism rate of 21% with no discernible pattern across workers – the timing of absences appears to be highly idiosyncratic and random.

We now shed light on what these day-to-day disruptions to labor supply look like. In the incentivized survey, the top two reasons reported for desiring a flexible contract are illness (both self and family, 79%) and social commitments (funerals, religious festivals etc., 77%). Turning to the worksite sample, workers report being absent from work due to farm and domestic work (43%), wage work (18%), illness (18%) and social commitments (17%). The role of illness ([Strauss and Thomas, 1998](#)), caregiving responsibilities ([Bjorvatn et al., 2025](#)), environmental factors ([Somanathan et al., 2021](#);

Adhvaryu et al., 2022) and seasonal agricultural work (Fernando, 2022) in influencing labor supply has been discussed in prior literature. While some of these disruptions are predictable (e.g. agricultural work in the peak season), others are not.

We highlight a new and potentially important consideration: demands arising from individuals' social networks. Although the prevalence of social commitments — attending weddings and funerals, participating in religious festivals, visiting relatives, helping neighbors — has been noted, the degree to which these interactions are obligatory in nature and potentially conflict with wage employment remains largely unexplored. We fill this gap by investigating linkages between social ties and worker demand for flexible work.

We first provide motivational survey evidence that suggests a possible link between social network demands and labor supply. Individuals report strong community expectations for heads of households to be both the primary breadwinner and family representative at social events (Figure 1 panel a), suggesting a need to possibly trade off time allocation between work and social commitments. A majority of respondents view physical presence at social events as mandatory — one cannot simply substitute attendance with other gestures such as sending gifts (panel b). The gravity of fulfilling network obligations is clear when we elicit respondents' beliefs about possible repercussions from shirking these responsibilities. A majority of respondents expect negative reactions from both the host family and others in the hamlet if someone were to choose work over a hamlet wedding or funeral (panel c).<sup>2</sup> These negative reactions are wide-ranging, manifesting as bad-mouthing or suspicions of fractured relationships (panel d). Finally, when presented with a vignette describing two workers choosing between work and a village event for Diwali (an important religious holiday), 53% of respondents agree with the worker who chooses to attend the village event in place of going to work (panel e). In this instance, a majority view fulfilling

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<sup>2</sup>Appendix Figure A.4 summarizes the precise nature of these reactions. Negative emotional responses (e.g. people being upset) account for the majority of expected repercussions (panels a to d). Approximately 25% of respondents describe social punishments, such as being scolded, getting silent treatment, or demanding a public apology. A small subset of respondents also highlight financial penalties, such as being denied financial help in the future or having to pay a fine.

social obligations as more important than attending work.

Next, we present novel survey data on the sheer magnitude of social network demands. We carefully elicit how much time individuals spend fulfilling various social obligations in a typical year, and we find that obligations arising from one's social network take place at a strikingly high frequency and in some instances require long absences from work. As an example, respondents report 9 weddings and 6 funerals per year on average and state that they typically forgo wage work for 2-9 days per event (depending on their relationship with the host). In total, respondents report forgoing wage work for 101 days in a typical year across five event categories — weddings, funerals, festivals, visiting relatives and helping neighbors.

We proceed to investigate how the strength of social network ties may influence worker demand for flexibility by exploiting a unique feature of the Indian context — social networks are organized along caste lines ([Munshi and Rosenzweig, 2016](#)). We examine differences in willingness to pay for dimensions of flexibility across caste groups by stratifying our survey sample to include an equal number of lower and higher caste workers within each village. In particular, we hypothesize that maintaining social ties is particularly useful for lower caste workers who are poorer and exhibit greater dependencies on their networks for informal insurance. As a result, these workers have greater demand for day-to-day flexibility.

Lower caste workers have a higher willingness to pay for the option to spontaneously take time off without prior planning or notice, relative to higher caste workers within the same village.<sup>3</sup> While higher caste workers also demand this feature — they are willing to forgo INR 1,090 for spontaneity, on average — lower caste workers are forgoing a significant 23% more (INR 248.8,  $p = 0.070$ ).<sup>4</sup> In contrast, lower caste and higher caste workers have a similar willingness to pay for double-off days ( $p = 0.828$ ). This suggests that lower caste workers particularly value day-to-day flexibility in choosing when to take time off, instead of simply having a higher valuation

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<sup>3</sup>A within-village comparison allows us to hold constant general local labor market conditions, which may impact labor supply and demand for flexibility.

<sup>4</sup>These results are not driven by caste differences in risk and time preferences or demand for commitment; we provide details in Section 5.

for all dimensions of flexibility.

While higher demand for spontaneity among lower caste workers may be due to demands that arise from social networks, it could also be driven by other disruptions — for example, lower caste workers may experience a higher incidence of illness relative to higher caste workers — or simply by the condition of poverty, since lower caste workers are generally poorer. To provide direct evidence on the significance of network obligations, we conduct a test where we temporarily shut down social network demands. Specifically, in our BDM exercise, we elicit worker demand for flexibility for distant jobs in an adjacent district several hours away from the village. Under this scenario, workers leave their village for six weeks, and this relocation exempts them temporarily from network demands.<sup>5</sup> We find two important results with this exercise. First, demand for spontaneity is lower at the distant job for both higher caste and lower caste workers. Second, the caste gap in demand for flexibility is no longer statistically significant ( $p = 0.421$ ). These results suggest that social commitments are locally binding and more consequential for lower caste workers, potentially contributing to caste gaps in regular employment.

Taken together, our findings convincingly capture a heightened need for day-to-day flexibility among workers in this setting. We describe a conceptual framework that illustrates how worker-driven demand for day-to-day flexibility can give rise to an equilibrium where there exists many low-tech (low-productivity) firms that hire through the casual labor market and a few high-tech (high-productivity) firms that offer regular salaried jobs. Under this scenario, a large share of workers remain in casual employment — which is *de facto* flexible — and as a consequence, face underemployment.

Our paper makes contributions to three distinct literatures. First, we highlight a novel dimension of day-to-day flexibility that appears to be valuable to Indian workers. Prior research on job flexibility across various contexts has largely focused on

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<sup>5</sup>We find evidence supporting this exemption in our survey data – temporary migrant workers are less likely to face negative repercussions when they fail to fulfill social obligations. More details are provided in Section 5.

measuring demand for flexible scheduling, work from home and part-time work, as well as estimating causal effects of such flexibility on worker outcomes (Bloom et al., 2015; Mas and Pallais, 2017; Chen et al., 2019; He et al., 2021; Boltz et al., 2023; Barrero et al., 2023; Bloom et al., 2024; Ho et al., 2025). These studies broadly find that workers value being able to choose when they work during the day and to work from home. Our study focuses on an under-explored dimension that influences the intensive margin of labor supply: day-level absences. Further, we unpack key reasons why workers value flexibility, offering new insights on the role of social obligations.

Second, our paper extends the literature on worker absenteeism in the private sector across LMICs. A large existing literature investigates the negative consequences of and the underlying reasons for absenteeism in the *public* sector. Despite the different incentive structure – with absences directly leading to loss of income – absenteeism in the private sector is strikingly high and yet has received relatively little attention. Ongoing work has largely focused on the demand-side: for example, Zane (2018) and Krishnaswamy (2019) estimate impacts of absences on firm output, while Adhvaryu et al. (2020) discuss mitigation strategies firms adopt. Varun (2025) shows that although firms in the Indian casual labor market would like to reduce worker absences, firm liquidity issues combined with workers’ fears about wage thefts impede efficient contracting. Barker et al. (2024) provide an explanation for why small firms in Kenya resort to short-term, high-turnover contracting in equilibrium — they trade off variation in demand for goods and services with adjustment costs. We contribute to this literature by shedding light on an important supply-side constraint: workers have a heightened need for day-to-day flexibility. Using an experimental setup, we demonstrate that providing workers with day-to-day flexibility increases worker welfare, without adverse productivity consequences.

Third, our findings speak to the literature on social and cultural constraints on labor supply. Our results are reminiscent of how workers resisted industrial work norms during the industrial revolution, because they were not in the habit of going to work every day at the same time (Dohrn-van Rossum, 1996; Applebaum, 1998). In rural



India, cultural traditions appear persistent in that social commitments often fall on weekdays, obliging workers to take time off work in order to attend. Cultural practices hindering work may have aggregate output consequences, as shown in case studies of fasting during Ramadan ([Campante and Yanagizawa-Drott, 2015](#)) and Catholic Saint Day Festivals in Mexico ([Montero and Yang, 2022](#)). Our research is in line with studies that reveal the “dark” side of social networks ([Munshi and Rosenzweig, 2016](#); [Jakiela and Ozier, 2016](#); [Carranza et al., 2022](#)). While social ties that workers maintain by upholding norms may be extremely beneficial, the unfortunate side effect includes interruptions to regular labor supply.

The remainder of the paper proceeds as follows. Section 2 describes the key hypotheses of our study. Section 3 lays out the sampling frame, experimental design, and estimation strategy. Section 4 describes results on worker demand for flexibility, while Section 5 presents evidence in support of social commitments as an important driver. Section 6 outlines a simple conceptual framework to illustrate how disruptions to workers’ labor supply can reconcile the co-existence of excess labor supply and high absenteeism in the labor market. Section 7 concludes.

## 2 Hypotheses

The goal of the paper is to document and explore worker-driven demand for flexible work, in order to understand absenteeism in the labor market. We begin by laying out our first main hypothesis:

- A. Workers demand flexible absences because they face frequent and often unpredictable day-to-day disruptions to their labor supply.

To provide empirical support for this hypothesis, we proceed in the following steps:

1. Measure workers’ willingness to pay for a contract with different dimensions of flexibility relative to a default contract if given a real 6-week work opportunity.
2. Measure the value of flexibility by randomizing workers into a default vs. flexi-

ble contract and examining consequences on workplace outcomes including attendance, productivity, and contract compliance.

We then delve into the sources of disruptions to workers' labor supply. We focus on the role of social networks by developing our second main hypothesis:

- B. Social obligations are an important component driving worker demand for flexibility.

An implication of this hypothesis is that workers who are more dependent on social networks may demand more flexibility in their work schedules in order to meet social demands. Social networks in India are typically segregated by caste, and lower caste workers may be more reliant on networks due to their socioeconomic disadvantage. Hence, we utilize caste segregation in networks to provide empirical evidence that social obligations influence workers' need for flexibility. We proceed in the following steps:

1. Analyze novel survey data documenting the trade-off between attending work and performing social duties, and the importance of the latter in maintaining social network relationships.
2. Test whether lower caste workers have higher demand for flexibility compared to higher caste workers, particularly when caste-based network demands are more likely to bind.

### **3 Experiment: design and implementation**

The experiment proceeds in two steps: first, we conduct an incentivized choice survey, and second, we conduct a workplace experiment where we randomly make real job offers with varying levels of flexibility to interested workers. The choice survey aims to quantitatively measure worker demand for different dimensions of job flexibility and investigate the role of social obligations in driving the need for flexibility.

The workplace experiment evaluates causal impacts of offering flexible contracts on worker attendance, productivity, contract compliance and earnings.

Data collection took place from August to December 2024 and February to April 2025. We suspended field activities between December and February in order to avoid conducting surveys and offering jobs during the peak agricultural harvest season.<sup>6</sup>

### **3.1 Sample selection**

Our target population for the experiment consists of prime-age individuals who primarily engage in the casual labor market. We recruit a sample that is representative of this population through a multi-stage selection process. First, we select districts in Odisha, India, that are in close proximity to the state capital where our field team is based, and identify study worksites across these districts. Second, we use the 2011 Population Census Abstract (PCA) to shortlist villages within the catchment area of each worksite that satisfy two criteria: they have between 60 to 200 households, and at least two distinct social groups co-reside in the village. Third, we conduct field visits to shortlisted villages to confirm suitability, accounting for migration and other demographic shifts that may have taken place since the time of the Census. Fourth, we conduct a brief census of all households in study villages. We restrict to individuals who satisfy the following criteria: (1) prime-age male (i.e. between the ages of 18 to 55), (2) primary decision maker in the household (i.e. household head), (3) not currently employed in regular salaried job, and (4) interested in a six-week job opportunity in low-skill manufacturing and able to work at least 15 days a month if offered such a job. Within this sample, we randomly select 20 individuals per village, stratified by hamlet, to participate in the experiment.

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<sup>6</sup>During this pause, we added some qualitative survey questions to obtain more instructive information about network relationships. To maintain survey length, we removed a few questions.

### 3.2 Types of work contracts

We describe a 6-week long job opportunity in low-skill manufacturing, where the task involves individual production of paper bags. Working hours match that of typical jobs in the local labor market — 9am to 5pm, with an hour-long lunch break. Wages are paid at the end of each work day, with the daily wage set at the prevailing wage in the village (typically INR 300-400). In addition to daily wages, individuals are eligible for a bonus at the end of the employment period if they fulfill the terms of their contract.

Table 1 describes different pairs of contracts that are offered in the experiment. The base contract (i.e. Contract 1) is FIX 6, a fixed schedule contract with one fixed off-day every week (e.g. every Sunday) as chosen by the individual, resulting in a maximum of six off-days during the employment period. This contract mimics a typical contract offered by employers for similar jobs in the local labor market. For each contract pair, we elicit participants' preference between FIX 6 and:

1. ANY 6, a flexible schedule contract with up to six off-days that can be taken at any time during the employment period. This comparison sheds light on how much individuals value being able to spontaneously taking time off from work as needed.
2. FIX 12, a fixed schedule contract with two fixed off-days each week. This comparison captures how much individuals value more time off from work.
3. ANY 12, a flexible schedule contract with up to twelve off-days that can be taken at any time during the employment period. This comparison jointly elicits how much individuals value both spontaneity in scheduling and having more time off from work.
4. PRE-SPEC 6, a semi-flexible schedule contract with up to six off-days that can be taken anytime during the employment period, but must be pre-specified on the first day of employment. This comparison captures how much individuals value pre-specifying – at the start of the employment contract – when they take time

off from work.

5. PRE-SPEC 12, a semi-flexible schedule contract with up to twelve off-days that can be taken anytime during the employment period, but must be pre-specified on the first day of employment. This comparison jointly captures how much individuals value both having more time off from work and the ability to pre-specify when they take time off.

All contracts allow for a one-off emergency leave (up to three consecutive days). Individuals can also choose to continue working on off-days, if they wish to do so.

### 3.3 Experimental procedures

**Measuring demand for flexibility.** The incentivized choice survey begins with questions about household characteristics and work experience over the past 30 days, including reasons for foregoing work, i.e., being absent from scheduled work or not taking up work offers when they were available. The survey also asks detailed questions about how many days they are unable to work in a typical year due to social obligations, such as weddings, funerals, religious festivals, helping neighbors, and visiting relatives. These questions are asked prior to the contract choice questions so that all workers have a chance to carefully consider their history of absences and future needs before choosing job contracts.<sup>7</sup>

Next, we explain the procedure for a Becker-DeGroot-Marschak (BDM) exercise. Importantly, we inform workers that one of their choices will be randomly implemented with a small probability, implying there are real stakes associated with their decisions. To ensure comprehension, we start with a practice BDM exercise with pairs of offers that consists of edible goods such as packets of ghee, sugar, tea, and biscuits, as illustrated in Appendix Figure A.1. After workers choose their preferred choice of

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<sup>7</sup>We deem this important as our sample is characterized by low levels of education. In particular, a concern is that some workers (e.g., those with lower education) make haste decisions that could potentially bias the comparison across caste groups. While these questions could make absence needs salient in respondents' mind, the benefit of ensuring careful thinking appears larger.

goods in each offer pair, one offer pair is randomly selected and workers are given the item selected in that pair.

The BDM exercise involves offer pairs consisting of different contract types for a real 6-week employment opportunity, as described in Section 3.2. The offer pairs are structured such that Contract 1 is always the base contract (FIX 6) with a bonus amount of 4000 INR (approx. 47 USD). Contract 2 involves a contract with one or more flexibility dimensions (e.g. ANY 6, FIX 12 etc., as described in Table 1), with a price list of different bonus levels (ranging from 100 to 3900 INR).<sup>8</sup> Additional sets of questions involve contracts with a different price list (e.g., the base contract involves a higher bonus), or contracts offered at a distant workplace.

The final component of the choice survey explores how social network demands influence labor supply. The survey asks about consequences of missing social commitments, attitudes towards social events and networks, and dependence on network insurance. In addition, we conduct various incentivized exercises to measure risk aversion and present bias to understand how behavioral factors unrelated to social networks affect preferences. At the end of the survey, we determine if a participant receives a job offer through a lottery ( $\sim 35\%$  chance). If selected, with a small probability, the offer chosen by the participant during the BDM exercise is implemented. The remaining lottery winners are enrolled in the workplace experiment.

**Contract randomization at workplace.** At the time of the job offer (i.e. at the end of the survey after the lottery), participants are given a base contract (FIX 6) which allows them to take off one fixed day per week (as chosen by the worker, e.g., every Sunday) with a compliance bonus of 2000 INR. Participants are allowed to start at the worksite up to five days after the initial start date and are given a daily reminder, so that we can measure initial take-up.

For a randomly selected 50% of participants, we upgrade their contract to ANY 12, which allows them to take up to 12 days off at any time with a compliance bonus of

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<sup>8</sup>The more flexible contracts appear in this given order or in the opposite order, randomized across subjects. The order of price lists (ascending or descending) are consistent within the survey, but are also randomized across subjects.

2000 INR. Participants are informed about this upgrade on their first day of employment, once they arrive at the workplace. For participants who turn down the job or do not show up at the worksite, we inform them about this upgrade over the phone / in their village. At the worksite, we measure daily attendance and productivity over six weeks, and administer weekly questionnaires to record reasons for absences.

This procedure allows us to estimate causal impacts of offering flexible contracts on worker attendance, productivity, contract compliance and earnings, taking into account any initial selection effects into contract take-up. This workplace experiment informs trade-offs firms face when offering different types of contracts.

### 3.4 Estimation strategy

To quantify worker demand for different dimensions of flexibility, we estimate a linear model using observations at the offer pair level:

$$WTP_{ivo} = \alpha + \beta FlexDimension_o + \lambda A_i + \rho_v + \epsilon_{ivo} \quad (1)$$

The dependent variable  $WTP_{ivo}$  is the maximum bonus amount that worker  $i$  in village  $v$  is willing to forego in order to choose the more flexible contract in the offer pair  $o$ .  $FlexDimension_o$  is a vector of indicators which describes the flexibility dimensions that differ across offer pairs.  $A_i$  is an indicator for ascending (vs. descending) order of the price list, which is randomized across respondents.  $\rho_v$  describes village fixed effects. Standard errors are clustered at the village level.

To examine impacts of contract flexibility on workplace outcomes and earnings, we estimate a linear model using observations at the worker-day (or worker) level:

$$Y_{ivt} = \alpha + \beta FlexUpgrade_i + \rho_v + \phi_t + \epsilon_{ivt} \quad (2)$$

The dependent variable  $Y_{ivt}$  is a work-related outcome for worker  $i$  at worksite  $v$  on work day  $t$ , such as daily attendance or total output.  $FlexUpgrade_i$  is a binary indicator that takes the value 1 if the worker receives the flexible contract upgrade.  $\rho_v$  and  $\phi_t$

describe worksite and calendar date fixed effects respectively. For outcomes such as receipt of compliance bonus or earnings, we use worker-level observations. Standard errors are clustered at the worker level.

## 4 Worker demand for flexibility

### 4.1 Descriptive statistics

Table 2 provides a snapshot of our study sample, which consists of 605 individuals in 33 villages across 4 districts in Odisha, India. Each village consists of a higher caste and lower caste hamlet, giving rise to 66 hamlets in total.<sup>9</sup> Study participants are equally distributed across higher and lower caste hamlets, consistent with our sample stratification described in Section 3.1.

We demonstrate representativeness of our study sample by contrasting it with villages and individuals across Odisha using two secondary data sources in Appendix Table A.1. In Panel A, we compare study villages (column 1) with an average census village in Odisha (column 2) using data from the 2011 Primary Census Abstract. Study villages are comparable to census villages in terms of size, composition by social group as well as by occupational categories. In Panel B, we compare participants in our study sample (column 1) with an average prime-age male household head in Odisha (column 2) using data from the National Sample Survey, a large nationally representative survey of Indian households. Study participants are slightly older, own less land and belong to larger households, relative to an average individual in Odisha. Broadly, our study sample is representative of the general population in Odisha.

Table 3 describes basic demographic characteristics and wealth measures of study participants. We present means and standard deviations of each covariate for the full study sample in column 1. The average participant in our sample is 42 years old and has completed 6.3 years of schooling. Approximately half our sample belongs

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<sup>9</sup>Following the literature ([Kijima, 2006](#); [Hnatkovska et al., 2012](#)), we classify general caste and other backward class (OBC) as higher caste, and scheduled caste (SC) and scheduled tribe (ST) as lower caste.



to higher caste (general caste and other backward class) groups. 29% of participants do not own land, 76% have outstanding loans and 42% have outstanding credits.

Table 4 describes labor market engagement among study participants. 51% of participants have prior experience with a long-term job (defined as having worked for a single employer for more than six months). Consistent with the characterization of the Indian labor market, wage employment is relatively low, with participants reporting an average of 12 days of wage work in the past 30 days. Average daily wage earned is Rs. 369, in line with the prevailing wage for unskilled casual labor in these villages. Participants report forgoing work (i.e. not working when they had work scheduled or a job available to them) on 10 days in the past 30 days, on average. Reasons for foregone work include working on own land (35%), social commitments (25%), illness (19%), domestic work (11%) and leisure with family and friends (6%). When asked about desired labor supply, participants report wanting wage work on 24 (out of 30) days in months where there is a high frequency of social events (marriages, religious events and festivals) and on 26 (out of 30) days in months where there is a low frequency of social events.

In both Tables 3 and 4, we present means and standard deviations of each covariate separately for participants in higher and lower caste hamlets (columns 2 and 3), and p-values from a comparison of means across hamlets, obtained using a simple univariate regression with village fixed effects (column 4). Higher caste participants are older, have completed more schooling and are more likely to own land, relative to lower caste participants. They also report fewer days of wage work in the past 30 days, and are more likely to forgo work due to work on their own land. Finally, both higher and lower caste workers report similar attachment to the labor market – there is no significant difference in desired labor supply across the two groups.

## **4.2 Willingness to pay for dimensions of flexibility**

Figure 2 illustrates worker demand for various dimensions of flexibility. We find significant demand for spontaneity. Relative to a contract with one fixed off-day every

week, study participants are willing to pay INR 1,207 on average for the ability to spontaneously take time off from work as needed. This corresponds to 3.5 days worth of earnings at the prevailing wage, or 8% of total potential earnings. We document almost identical demand for more off-days — study participants are willing to pay INR 1,212 on average for a contract that offers two fixed off-days every week instead of one. Finally, when jointly offered both dimensions of flexibility (i.e. double off-days and spontaneity), study participants are willing to pay INR 1,369 on average. This valuation is significantly higher than their valuation of spontaneity alone ( $p$ -value = 0.004). Corresponding regression estimates are presented in panel A of Table 5 (column 1).

Next, we examine demand for contracts that offer upfront flexibility in scheduling off-days. Relative to a contract with one fixed off-day every week, study participants are willing to pay INR 518 on average for the ability to pre-specify — at the start of the employment contract — when they take time off from work. This suggests that workers continue to place some value in being able to flexibly choose when they take time off, even if this has to be pre-determined on the first day of work. Demand for double pre-specified off-days is similar (difference = -30.3,  $p$ -value = 0.761, Table 5 panel B column 1). Importantly, we find that study participants continue to significantly value spontaneity: they are willing to pay an additional INR 732 ( $p$ -value < 0.001) for the ability to spontaneously take time off from work as needed, relative to a pre-specified contract that offers an equal number of off-days. Finally, when jointly offered both dimensions of flexibility (i.e. double off-days and spontaneity), study participants are willing to pay an additional INR 895 ( $p$ -value < 0.001).

We present estimates using an alternate specification of our outcome variable — a binary indicator that takes the value 1 if willingness to pay for flexibility is positive — in column 2 of Table 5. Results are quantitatively similar to those in column 1 — 37% of study participants are willing to pay a positive amount for spontaneity, and this share significantly increases to 41% when participants are asked for their valuation of double off-days and spontaneity jointly. 24% of study participants are willing to pay

a positive amount for a pre-specified contract, and this share increases significantly by 14.1 and 17.9 percentage points respectively when participants are asked for their valuation of spontaneity and double off-days and spontaneity jointly.

### **4.3 Impacts of flexibility at the workplace**

We randomly offer jobs at worksites within commuting distance of the village to 172 study participants. At the time of the job offer, participants are offered a default FIX 6 contract, a fixed schedule contract with one fixed off-day every week (e.g. Sunday), as chosen by the individual. A total of 118 participants take up the job. On the first day of employment, we randomly upgrade 58 study participants ( $\sim 49.2\%$ ) to a FLEX 12 contract that offers two dimensions of flexibility — spontaneity and double off-days. Among these workers, we estimate causal impacts of offering flexibility in Table 6.

Workers who receive a flexible contract upgrade are 28.3 percentage points more likely to satisfy the terms of their contract (column 1), which make them eligible for a bonus payment on the last day of employment. Among workers who receive the default contract, 60% successfully comply with the terms of their contract, so this represents a 47% increase in contract fulfillment for workers who receive an upgrade.

Next, we estimate impacts on daily attendance and productivity at the workplace. We find a coefficient of 0.07 on attendance in column 2, though this effect is not statistically significant ( $p$ -values = 0.232). Workers who receive a flexible contract upgrade are thus showing up to work as often as workers under the default contract, in spite of the flexible contract permitting more off-days. By revealed preference, this implies that workers do not place a high valuation on simply having more time off from work. Instead, what they value is the ability to spontaneously take time off from work as needed. Conditional on showing up to work, workers who receive a flexible contract upgrade are as productive as workers under the default contract — we find a coefficient of 3.48 on productivity, as measured by total number of paper bags produced in a day in column 3 ( $p$ -value = 0.372). There are thus no significant differences in labor supply and effort provision across workers under the two contracts.

Finally, we examine implications for earnings. We present results for three different measures of earnings in columns 4 to 6 — worksite wage earnings, worksite total earnings (wage + contract bonus payment), and overall total earnings which includes worksite total earnings and any other wage income workers may receive during the employment period (for example, if they engage in wage work in the local labor market). We find a significant INR 1,550 increase in total earnings ( $p\text{-value} = 0.086$ ) — this corresponds to a 13% increase in earnings relative to that of workers under the default contract. Workers who receive the contract upgrade thus experience significant and large income gains from the provision of flexibility.

#### **4.4 What drives demand for flexibility?**

Our results confirm the first hypothesis laid out in Section 2: individuals demand flexibility at the workplace. In the incentivized choice survey, respondents exhibit a high willingness to pay for dimensions of flexibility. In the randomized experiment, participants have difficulty complying with fixed schedule contracts, and flexible contracts lead to greater contract compliance and large income gains. Taken together, our results seem to suggest that demand for flexibility arises from a need to manage unpredictable day-to-day disruptions to labor supply, making the ability to spontaneously take time off as needed particularly valuable. We present additional pieces of qualitative evidence to shed light on what these disruptions might be.

First, in the incentivized choice survey, we ask respondents why they choose ANY 6/ANY 12 over FIX 6, despite the smaller bonus. Without any prompting, 99% attribute this choice to increased flexibility. When we probe why flexibility is valuable, 87% state that it is important for dealing with unexpected shocks (e.g. illness or funerals), while 41% state that is important for dealing with expected absences (e.g. weddings or festivals). Respondents also report their top three reasons for desiring a more flexible contract as follows: illness of self and family (79%), social commitments (77%), and work on own land (34%).

Second, in the worksite absenteeism data, we observe an average absenteeism rate

of 21%. From the attendance records (which we summarize in Appendix Figure A.2), timing of absences appears to be highly idiosyncratic and random, with no clear discernible pattern across workers. Participants report being absent from the workplace due to farm and domestic work (43%), wage work (18%), illness (18%) and social commitments (17%) (Appendix Figure A.3).

Existing literature that describes disruptions to labor supply have discussed the role of poverty-driven shocks e.g. illness ([Strauss and Thomas, 1998](#)), seasonality in agricultural work ([Fernando, 2022](#)), as well as caregiving needs ([Bjorvatn et al., 2025](#)). On the other hand, the role of social commitments in influencing labor supply has been overlooked.

## 5 The social roots of demand for flexible work

### 5.1 Survey evidence on the frequency of social commitments

Our results suggest that social commitments feature as a prominent reason why individuals require absences from work. In order to understand the magnitude of these commitments, we precisely quantify the number of days individuals dedicate to fulfilling various social obligations in a typical year.

We find that social events happen at a strikingly high frequency, and some events require long absences from work. Survey respondents typically attend 8.9 weddings and 6.1 funerals per year on average (Figure 3 panel A). The length of absence spells (i.e., the number of days they expect to be unable to engage in paid work) varies depending on the relationship with the event host. Respondents take more than 9 days off on average for weddings and funerals of a close family member,<sup>10</sup> and 2 days off for weddings and funerals of a neighbor in the same hamlet.

We plot the average number of days respondents take off in a typical year for different types of social events in Figure 3 panel B. For weddings and funerals, we calculate

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<sup>10</sup>Close family here has a broader definition extending beyond immediate household members, e.g., siblings in the hamlet.

a lower bound of 27.7 days by multiplying the number of events with the average number of days taken off for events hosted by a hamlet neighbor. Respondents devote 26.9 days to religious festivals (e.g. Sankranti, Dussehra), 35.6 days to helping village neighbors with work on their land or house,<sup>11</sup> and 10.8 days to visiting relatives. In total, respondents dedicate an average of 101 days in a typical year to such social obligations.

As estimates are based on survey responses considering a typical year, they could be subject to biased recall and/or measurement error. For instance, respondents would not have work available on some of the days when events are happening, which may increase the tendency to prioritize social events over attendance at work. Nonetheless, they provide a useful and rare data point for understanding the frequency at which Indian workers potentially face having to make the tradeoff between social duties and labor supply.

Social obligations can reduce daily labor supply both due to their sheer volume and also due to coordination failures at the societal level. Consider the example of a full-time worker in the private sector in the US who typically get 15 days of paid leave in addition to 11 federal holidays, after 5 years of experience at the firm. Even if we assume all social events take place during weekends, these social obligations would account for 78% of off-days for American workers. Furthermore, given that there is no strong cultural norm in India for the events to take place on weekends and many people in a village attend events together, there would be large day-to-day fluctuations in local labor supply.<sup>12</sup>

## **5.2 Caste gap in demand for flexibility**

We investigate whether the strength of social network ties influence worker demand for flexibility by exploiting a feature that is unique to the rural Indian context – so-

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<sup>11</sup>While neighbors may provide payments in some instances, workers describe it being difficult to turn down such requests.

<sup>12</sup>It is customary for funerals to begin immediately on the day of a death and to continue for multiple days. Weddings and religious festivals typically take place on auspicious days according to the Hindu calendar, and this varies year to year.

cial networks are organized along caste lines (Munshi and Rosenzweig, 2016). In our empirical setting, villages are often physically demarcated into two (or more) hamlets, and members of the same caste (social group) live together within a hamlet. We use data from our incentivised survey to test whether workers belonging to different castes within the same village vary in their demand for flexibility.<sup>13</sup> This within-village comparison allows us to hold constant general local labor market conditions that may impact labor supply and demand for flexibility. We hypothesize that maintaining social ties is particularly useful for lower caste workers who are poorer and exhibit greater dependencies on their networks for informal insurance.

We find that lower caste workers have a greater willingness to pay for flexibility dimensions, particularly for spontaneity of absences. We modify Equation 1 to include interaction terms of contract type and an indicator for belonging to the lower caste hamlet, and present results in Figure 4 (panel A) and Appendix Table A.2 (column 1). Higher caste workers are willing to pay INR 1,090.4 for spontaneity, and lower caste workers are willing to pay 23% more ( $\beta = 248.8$  INR,  $p = 0.070$ ).

In terms of double off-days, higher caste workers value it more than spontaneity ( $\beta = 147.8$  INR,  $p = 0.087$ ), whereas lower caste workers value it less ( $\beta = -277.6$  INR,  $p = 0.007$ ). There is no statistically significant difference by caste in the demand for double off-days ( $\beta = -28.8$  INR,  $p = 0.828$ ). Once spontaneity is offered along with double off-days, lower caste workers again have a higher willingness to pay compared to higher caste workers ( $\beta = 169.4$  INR,  $p = 0.192$ ), although the difference is not statistically significant at standard levels. Lower caste workers thus appear to particularly value the option of being able to spontaneously take time off from work without advance planning or notice, rather than having more time off from work.

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<sup>13</sup>We proxy for caste-based social networks using hamlet. Our survey evidence suggests that this is a reasonable proxy — when asked about who attends a wedding in the respondent’s hamlet, 81% of respondents state that almost all households from their hamlet attend, whereas only 7% of respondents state that almost all other households in the village outside of their hamlet attend.

### 5.2.1 Alternate explanations for the caste gap

**Confusion or experimenter demand.** Given that lower caste workers are not simply indicating higher willingness to pay for all dimensions of flexibility, the observed caste difference is unlikely to be driven by general confusion about the contracts or by what surveyors wish to hear.

**Demand for commitment.** The observed caste gap implies that higher caste workers value having a fixed schedule contract more than lower caste workers. This interpretation would be inaccurate if both groups of workers had similar valuations of FIX 6, while higher caste workers had a higher willingness to pay for a contract that mimics a commitment device due to differences by caste in sophistication. We measure whether workers have a strictly positive willingness to pay for commitment by making them trade off a FIX 6 contract and flexible contracts with a *larger* bonus.

We find that, if anything, lower caste workers have a higher demand for commitment. Consistent with results in Section 4.2, demand for commitment is small (INR 90) among respondents who value flexibility, with no significant differences by caste. Among respondents who do not value flexibility, we observe a larger willingness to pay for commitment, and this is significantly higher for lower caste workers (Appendix Figure A.5 and Appendix Table A.3 panel A). We can thus conclude that the observed caste gap does indeed capture differences in valuation of flexibility rather than differences in sophistication.

**Risk and time preferences.** Another possible confound is that lower caste workers are more risk-averse and therefore more willing to pay for flexible contracts, despite having similar need for absences. This seems unlikely given that they are not willing to pay more for double off-days which also decreases the risk of not complying with the contract. Further, given that all payments are made in the future, it is unlikely that differential time discounting is driving the key results. Nonetheless, we carefully elicit risk preferences, present bias over money as well as present bias over effort, following recent papers in the literature. We do not find any statistically significant differences in these parameters across caste groups (Appendix Table A.3 panels B and C). Hence



if risk-related preferences were driving contract choice, it would unlikely be due to generalized risk preferences, but likely due to specifically being averse to the risks associated with forfeiting work or social obligations with a base contract.

### 5.2.2 Caste gap in social network ties

We now explore caste differences in social network dependencies in our survey data, and present results in Appendix Table A.4. We find that in a typical year, lower caste workers report forgoing work more often than higher caste workers when it comes to fulfilling social obligations such as attending weddings and funerals, helping neighbors and visiting relatives in a typical year (panel A). We also find caste differences in network reliance for loans and jobs (panel B). Lower caste workers approached households to borrow money 31% more often, relative to higher caste workers ( $p = 0.068$ ). Lower caste workers also approached a larger number of households – both inside and outside the hamlet – for loans. They are less likely to have obtained their last loan from family/hamlet neighbors, and more likely to have obtained it from village neighbors outside of the hamlet or households outside the village. Results are qualitatively similar for job search support (panel C) – lower caste workers rely more on their social network for help with job search, although most differences are not statistically significant.

In contrast, we do not observe substantive differences by caste in workers' attitudes towards social commitments or network relationships, as summarized in Appendix Table A.5. Respondents were asked a wide range of questions on repercussions of shirking social duties, primary motivations for fulfilling social commitments, collective (vs. individualistic) tendencies (modified to match the local setting), and the frequency at which workers feel burdened by the demands from their network. Across all family-based indices, we do not observe significant caste differences, which suggests that workers' attitudes towards social network obligations are similar across hamlets within the same village.

Despite our extensive efforts, these survey questions only partially capture the

complex ways in which workers consider their network benefits and duties. Furthermore, as shown in Section 4, workers in different caste groups vary along other observable margins such as education and wealth. This makes it difficult to rely purely on survey questions in order to pinpoint which factors account for the observed caste difference in demand for flexibility.

To precisely quantify the importance of social obligations in explaining caste gaps in demand for flexibility, we carry out a direct test where we examine how workers' demand for flexibility changes when they are temporarily separated from their social networks.

### **5.2.3 Varying geographical proximity to social network**

If the caste gap in demand for flexibility is at least partly explained by their network obligations, we would expect the gap in willingness to pay for flexibility dimensions to decrease if workers were free from the demands of their network. We approximate this test in our incentivized survey by eliciting demand for dimensions of flexibility for the same job, except that it would take place at a distant worksite several hours away from the village. Conditional on one of these offers being randomly selected for implementation, workers would temporarily relocate to a distant district under short notice and stay in employer-offered housing. To compensate for this cost of moving, all distant job offers come with a relocation bonus of INR 5000.

The key idea is that for the duration of the job, individuals would be working and residing away from their own village, and during this time, they will not be subject to the same demands or expectations from their network. At the same time, any individual-specific factors that influence preferences for flexibility – such as wealth, education, or generalized risk preferences – should not change how they evaluate contract pairs for the distant job.

We find that workers' demand for flexibility for the distant job indeed decreases and in addition, the caste gap becomes smaller. Pooling across two offer pairs (FIX 6 vs. ANY 6 and FIX 6 vs. ANY 12), Figure 4 panel B show that lower caste workers

are willing to pay 220 INR more for spontaneity of absences for jobs within commuting distance of the village ( $p = 0.059$ ).<sup>14</sup> When the same offer pairs are given for the distant job, both higher and lower caste workers are less willing to pay for spontaneity. Furthermore, the caste gap decreases by 50% so that the difference is no longer statistically significant ( $p = 0.421$ ). While we are underpowered to reject the null of the differences-in-differences coefficient at standard significance levels, the direction of change clearly indicates that lower caste workers value flexibility more than higher caste workers, especially when they are physically proximate to their social network.

Survey responses are consistent with reductions in social duties while being away from the network lowering workers' need for flexibility. For workers who are less willing to pay for flexibility for the distant job, the most commonly cited reason (56% of responses) is that there are more demands on their time from the family and community when staying near home. The second most cited reason (48%) is that there are more leisure activities near home (e.g., spending time with family or friends). Having worse motivation/habit near home, more demands for wage earnings near home, or all other reasons each account for less than 15% of responses.<sup>15</sup>

A potential confound is that higher caste respondents may not take the distant offer pair seriously. For example, given that higher caste respondents are wealthier and have less experience with migration (as shown in Tables 3 and 4), it might be possible that they do not envision ever taking up a distant job offer and a consequence, simply state a higher willingness to pay for flexibility (which would give rise to a reduction in the caste gap). We think this is not likely for several reasons. First, it is not obvious why being disinterested in distant offers would lead respondents to state a *higher* willingness to pay, given they might prefer to portray themselves as more regular workers and choose (off-path) offers that provide the highest bonus. Second,

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<sup>14</sup>Corresponding regression results are reported in Appendix Table A.2 Column 2.

<sup>15</sup>In particular, pressure from the community to share wage earnings does not seem to explain the increase in demand for flexibility near home. While this type of pressure (and associated income hiding) has been documented in sub-Saharan Africa (Jakiela and Ozier (2016), Kaur et al. (2025)), it has not been documented in the Indian context. During the survey, we ask respondents how common it is that people do not go to work because they are worried that when they work a lot, other people will ask for money. 82% answer "Not at all". In contrast, when we ask how common it is that people do not go to work because of religious festivals like Ashta Prahari, 82% say it is "Very common" (Appendix Figure A.6).

before describing the offer pairs, we elicit how much respondents are willing to accept (WTA) as a relocation bonus if they were to consider taking up a similar distant job sometime during the upcoming lean season. 92% of respondents are willing to accept INR 2000 or less – this amount is substantially smaller than our relocation bonus of INR 5000. Third, controlling for migration experience and WTA for the relocation bonus does not substantively change estimates.

If anything, we are likely estimating a lower bound on the reduction in the caste gap driven by increasing distance to network, because the distant job may not be sufficiently far away. Respondents who are willing to pay *more* for flexibility for the distant job are most concerned about having health shocks when working away from home (67%). The second biggest concern is the need to travel back home due to seeing family for attending social commitments (56%). The distant worksite is approximately three hours away, and it is possible that some workers view this distance as not sufficient enough for skipping out of social duties.<sup>16</sup> If some lower caste workers demand flexibility because they still plan to attend social commitments despite the distance, then we would underestimate the reduction in caste gap.

Finally, our survey data confirms that working as a temporary migrant away from the village allows worker to skip social commitments without incurring the same negative consequences. We ask workers to imagine a scenario where they are unable to attend several hamlet weddings due to working as a temporary migrant and living away from the village for two months. Appendix Figure A.4 panels (g) and (h) show that the share of respondents who expect the host family or community to be upset decreases by nearly 60%, and very few people expect negative social or financial repercussions. These patterns are in line with the literature that describe temporary migration as a means to retain village connections while seizing higher wage opportunities, unlike permanent migration which severs network ties. Our study shows that temporary migration offers another advantage, which is being temporarily relieved from time demands of social duties without losing network benefits.

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<sup>16</sup>We were unable to set up the distant worksites even further away due to logistical and budget constraints.

## 6 Conceptual framework

We present a simple two-sector model to illustrate how disruptions to workers' labor supply can reconcile the coexistence of excess labor supply and high absenteeism in the labor market. The two sectors differ in the degree of co-worker complementarities and the presence of search frictions.

### 6.1 Household Side

A representative household consists of  $L$  homogeneous workers who supply labor to firms. Each worker faces a probability  $a \in [0, 1]$  of being absent in any given period, so that with probability  $1 - a$ , the worker is present. Firms anticipate this risk when contracting labor.

### 6.2 Production Side

**High-tech Sector.** This sector features heterogeneous firms with strong co-worker complementarities, so that worker absences disrupt production, in line with the O-ring framework (Kremer, 1993). We assume that workers match with High-tech firms without frictions.<sup>17</sup> Further, we assume that total labor demand is always smaller than the labor force, so wages are pinned down by workers' outside option—the wage they can earn in the Low-tech sector.

There is a unit mass of potential entrepreneurs. Firm productivity  $z$  is drawn from an exogenous distribution  $G(z)$ . Firms produce with a Cobb–Douglas technology,  $f(\ell) = z\ell^\alpha$ , where  $\ell$  is labor input, with a decreasing returns to scale parameter  $\alpha \in (0, 1)$ . We assume an absenteeism rate  $a \in [0, 1]$ , which is largely exogenous to the firm. One may interpret  $a$  as deviations from the firm's tolerable mean absenteeism.<sup>18</sup>

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<sup>17</sup>Introducing search frictions in the High-tech sector would not change the main results as long as job-finding probabilities remain higher in High-tech relative to Low-tech sector.

<sup>18</sup>This assumption reflects the idea that while firms may influence long-run absenteeism through workplace policies or incentives, they have limited control over short-run fluctuations, such as unexpected absences due to illness or personal emergencies.

The firm's profit is given by:

$$\pi_h = \underbrace{z\ell^\alpha}_{\text{Output}} - \underbrace{v(a)}_{\text{Cost of absenteeism}} - \underbrace{w(1-a)\ell}_{\text{Wage bill}}, \quad (3)$$

where,  $v(a)$  denotes the productivity loss associated with absenteeism, while  $w$  is the wage. The magnitude of  $v(a)$  depends on the degree of complementarities. When complementarities are strong, even small increases in absenteeism generate large productivity losses, i.e.  $v(a)$  is large. For simplicity, we assume absent workers are not paid. Thus, a higher absenteeism rate reduces the effective wage bill  $w(1-a)\ell$ , but simultaneously raises output losses through a larger  $v(a)$ . Overall, the net effect of higher absenteeism is assumed to be negative for firm profits in this sector. Firms maximize profits, and entry is governed by:

$$\chi(z) = \max\{\pi_h(z), 0\}, \quad (4)$$

implying the existence of a threshold productivity level  $\underline{z}$  such that all firms with  $z \geq \underline{z}$  enter the sector. For a sufficiently high cost of absenteeism  $v(a)$ , one can show that  $\frac{\partial \underline{z}}{\partial a} \geq 0$ , i.e., higher absenteeism raises the productivity threshold of firm entry. The mass of firms and labor demand are:

$$M_h = (1 - G(\underline{z})), \quad N_h = \int_{\underline{z}}^{\infty} \ell(z) dG(z) \quad (5)$$

**Low-tech Sector.** In this sector, firm productivity is  $A_\ell$  and they only hire a single worker, thus there are no co-worker complementarities. We introduce standard search frictions and assume free entry of vacancies with wages set through Nash bargaining. This setup implies that labor market tightness  $\theta$ , and thus the job-finding probability  $p(\theta)$ , depend only on fundamentals and are independent of the size of the search pool (see Appendix B for derivations). The flow of matches then determines employment ( $N_l$ ) in this sector. In equilibrium, the number of employed workers is  $N_l = p(\theta)[L_s - N_h]$ .

### 6.3 Aggregate Employment and Unemployment

Assume  $L_s = 1$ . Labor demand in the Low-tech sector is  $N_l = p(\theta)(1 - N_h)$ , and the overall unemployment rate is:

$$U = (1 - p(\theta))(1 - N_h) \quad (6)$$

In this economy, higher absenteeism raises unemployment through a labor demand channel. As absenteeism rises, productivity in the High-tech sector falls, the entry threshold  $\underline{z}$  increases and fewer firms produce in the High-tech sector. With free entry in the Low-tech sector, labor market tightness  $\theta$  (and thus  $p(\theta)$ ) is unchanged, so the aggregate unemployment rate rises purely via a composition effect: a larger share of workers search in the Low-tech sector, and only a fraction  $p(\theta)$  match each period.<sup>19</sup>

## 7 Conclusion

Our paper helps make sense of the staggering rate of absenteeism observed in developing labor markets against the backdrop of excess labor supply. When work schedules are not regularized at the society level and social network benefits are conditional on substantial time investments, workers face a difficult challenge of balancing time demands from work and network. Their daily labor supply gets frequently interrupted with the need to fulfill social obligations, in addition to other poverty-exacerbated shocks such as illness, causing them to demand flexible work.

Worker absenteeism imposes significant costs on the aggregate economy by constraining productivity of firms, especially those whose production technologies require co-worker complementarities. Even though workers may be optimally supplying daily labor in the short run, their flexibility needs could detain them in casual jobs, which tend to offer limited human capital development and wage growth prospects. The trade-off between investment in social capital and regular work is more critical for

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<sup>19</sup>By contrast, if vacancies do not adjust one-for-one with the larger search pool (i.e., free entry does not hold), then  $\theta$  falls,  $p(\theta)$  declines, and unemployment rate increases even more due to congestion.

the poorer workers who are heavily reliant on social network, potentially reinforcing poverty traps.

Reducing absenteeism is likely to be a complicated policy challenge. In addition to increasing individual worker income, it could also require reducing network dependence, which warrants substantial public investments in formal insurance systems and social infrastructure. These considerations also call into question the potential benefits of regularizing gig work. While the policies regularizing gig work could provide greater income stability and social protections, they would have to avoid undermining the primary benefit of gig employment—flexibility.

Could there be an alternate path of structural development for countries with predominantly flexible labor markets such as India—a path that “bypasses” the stage of regularizing labor supply? Modern developed economies also started initially as highly flexible labor markets with large agrarian or pastoral sectors, but most have gone through the (perhaps painful) transition of homogenizing work schedules—e.g., Monday to Friday, 9am to 5pm. However, developed economies are now looking towards another phase of transition, back to flexible work, with the rise of gig economy and remote work arrangements. For developing economies with workers who require flexibility, perhaps the answer is to find a new path of development that grants them exactly that, while continuing to foster skill development and social insurance.



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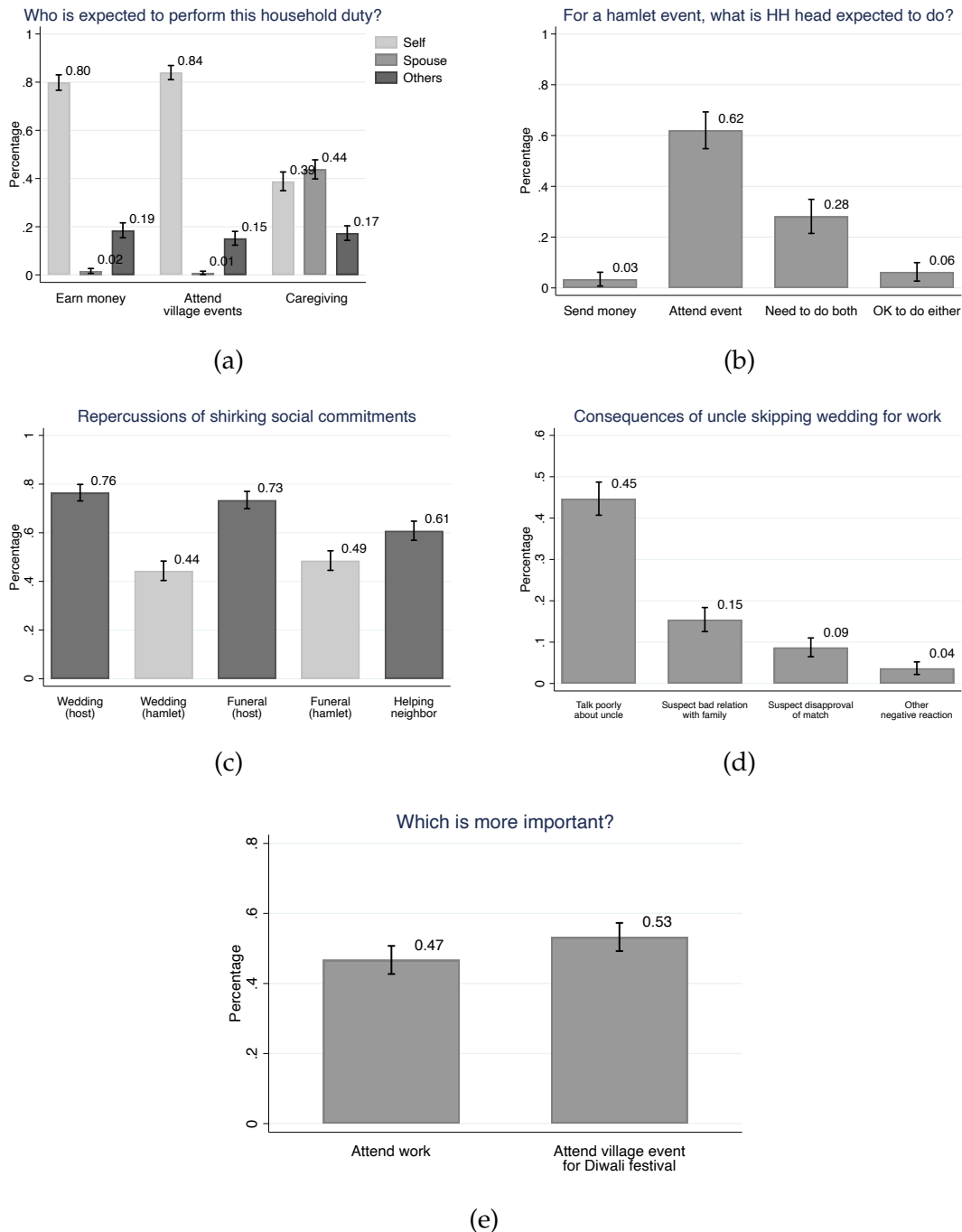
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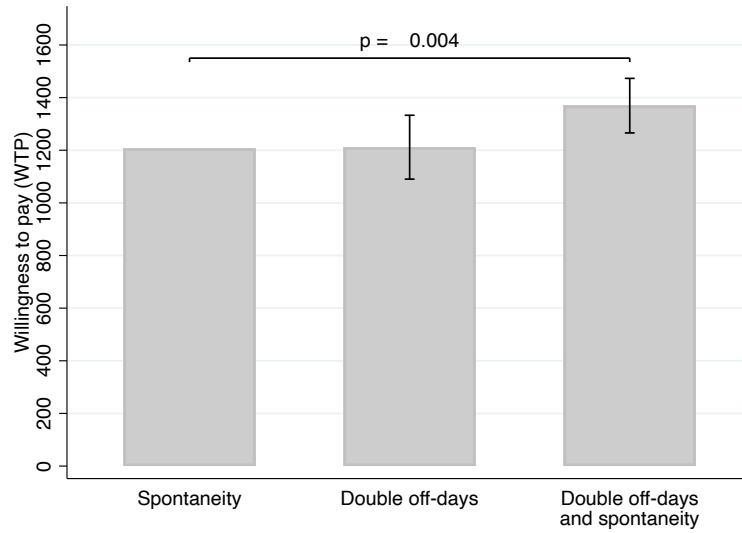
# Figures

Figure 1: Survey evidence on importance of social commitments

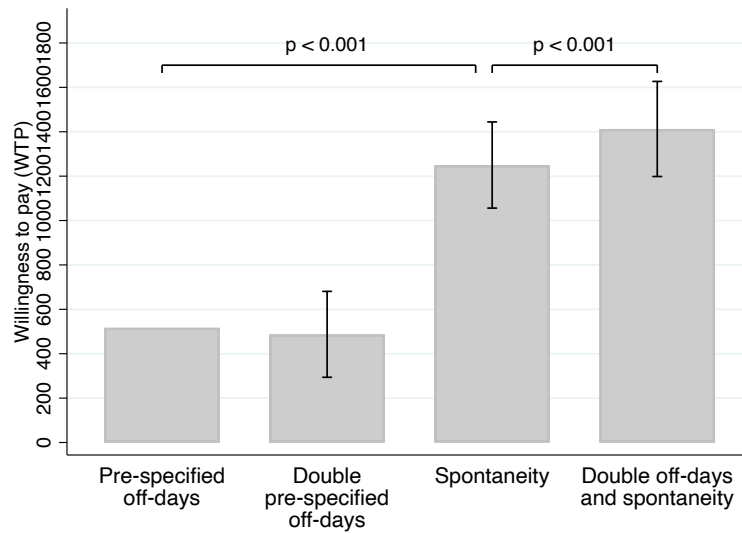


*Notes:* This figure illustrates responses to questions related to expectations from social networks and consequences of shirking social commitments. The question in (b) was asked to a subset of respondents (N=174), while all other questions were asked to our full sample of respondents (N=605). Panel headings summarize the relevant questions; the full text is presented in Appendix A. 95% confidence intervals are shown.

Figure 2: Willingness to pay for dimensions of flexibility



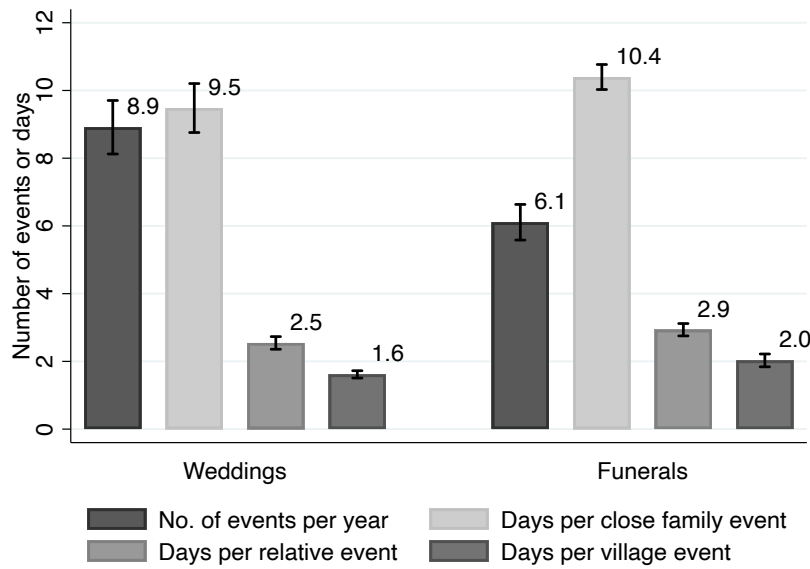
(a) Spontaneity and double off-days



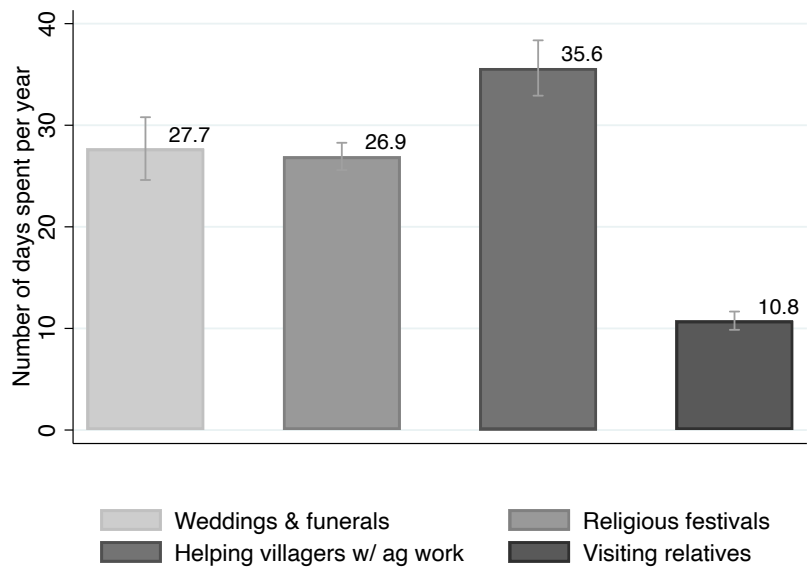
(b) Pre-specified and double off-days

*Notes:* This figure plots estimated WTP for flexibility dimensions, comparing the default contract FIX 6 with more flexible contracts. OLS coefficients are estimated using observations at the offer pair level, regressing WTP for more flexible contracts on a vector of indicators describing flexibility dimensions, controlling for the order of price lists and village fixed effects. The first bar in each panel shows the mean WTP for the offer pair (omitted category), while the remaining bars add estimated coefficients to the mean. In Panel (a), “Spontaneity” refers to a contract with up to six off-days that can be taken any time (ANY 6); “Double off-days” a contract with two fixed off-days each week (FIX 12); and “Double off-days and spontaneity” a contract with up to twelve off-days that can be taken at any time (ANY 12). In Panel (b), “Pre-specified off-days”/“Double pre-specified off-days” refer to semi-flexible schedule contracts with up to six/twelve off-days that can be taken anytime, but must be pre-specified on the first day of employment (PRE-SPEC 6/12). The WTP for these two contracts are imputed by comparing them with the fully flexible versions (FLEX 6/12). Standard errors are clustered at the village level and 95% confidence intervals are shown.

Figure 3: Survey evidence on time spent on social commitments



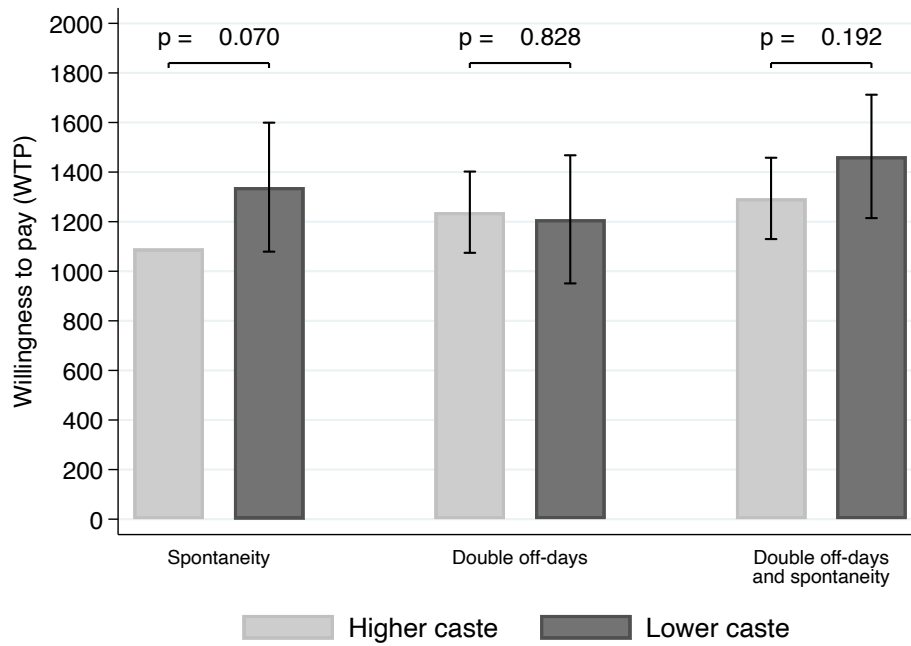
(a) Frequency and duration of weddings and funerals



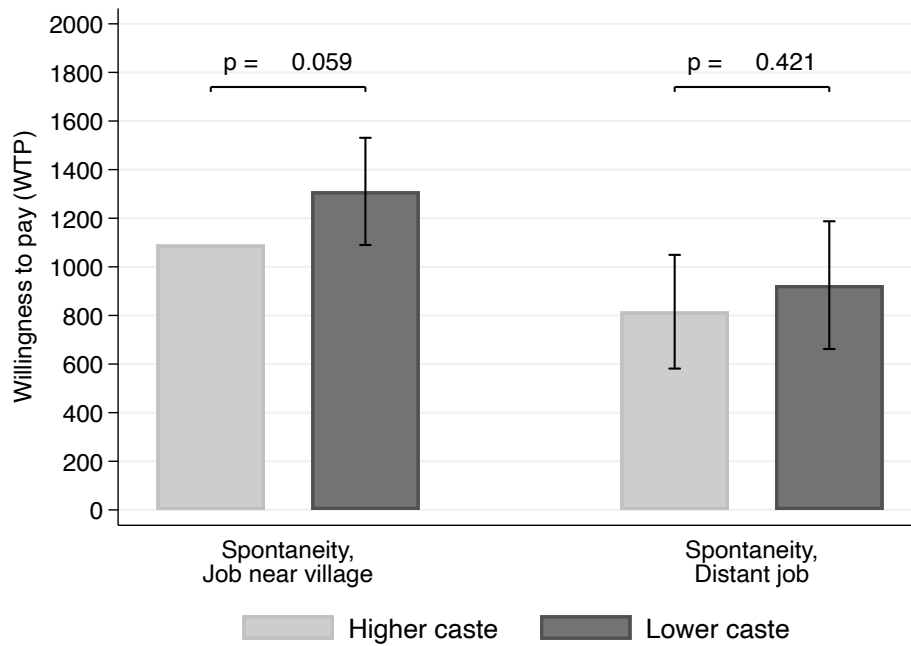
(b) Days spent on social commitments in a year

*Notes:* This figure summarizes responses to questions related to time spent on social commitments (N=605). In Panel (a), participants are asked about the average number of events that they attend over a typical year, and how many days they typically require leaves (i.e., unable to do other paid work) due to attending and helping prepare for the event, separately by type event host. In Panel (b), we calculate the number of days spent in a typical year on each event type by (i) multiplying the number of events with the days per village event shown in Panel (a); (ii) adding up the number of leave days for Shankranti, Dussehra, Diwali, Rath Yatra, Jhamu Yatra, Shitala Sashti, Rajaw, Dola Purnima, and all other religious events; (iii) averaging the number of leave days needed for helping a village member with working on their land/house in an agricultural month and a non-agricultural month, and multiplying the mean by 12; and (iv) asking about the number of leave days required for visiting relatives and in-laws in a typical year. 95% confidence intervals are shown.

Figure 4: Willingness to pay for flexibility dimensions, by caste



(a) Spontaneity and more off-days



(b) Spontaneity, by distance to social network

Notes: This figure plots estimated WTP for flexibility dimensions separately by caste, comparing the default contract and more flexible contracts, as in Figure 2. In Panel (b), “Job near village” refers to the job contracts offered at work-sites within commuting distance of the village, while “Distant job” refers to job contracts offered at a faraway worksite in a different district that come with employer-offered housing and a 5000 INR relocation bonus. Standard errors are clustered at the village level and 95% confidence intervals are shown.

## Tables

Table 1: Contract offer pairs

Offer pair	Contract 1	Contract 2	Flexibility dimension
1	FIX 6 (1 fixed off-day/week)	ANY 6 (6 off-days, any time)	Spontaneity
2	FIX 6 (1 fixed off-day/week)	FIX 12 (2 fixed off-days/week)	Double off-days
3	FIX 6 (1 fixed off-day/week)	ANY 12 (12 off-days, any time)	Double off-days and spontaneity
4	FIX 6 (1 fixed off-day/week)	PRE-SPEC 6 (6 off-days, pre-specified on Day 1)	Pre-specified off-days
5	FIX 6 (1 fixed off-day/week)	PRE-SPEC 12 (12 off-days, pre-specified on Day 1)	Double pre-specified off-days

*Notes:* This table describes contract offer pairs that are used to estimate WTP for flexibility dimensions. All participants are asked to compare offer pairs 1, 2, and 3, while participants are randomly asked to compare either offer pair 4 or 5. WTP for offer pairs 4 and 5 are imputed; the actual survey asked participants to compare PRE-SPEC 6/12 with ANY 6/12, so we subtract these answers from those for offer pairs 1 and 3 respectively.



Table 2: Experimental sample

Category	# hamlets	# participants
<b>Higher caste</b>		
General caste	20	138
Other backward class (OBC)	13	147
<b>Lower caste</b>		
Scheduled caste (SC)	22	201
Scheduled tribe (ST)	11	109
Full sample	66	605

*Notes:* This tables tabulates the sample size for the incentivized choice experiment by caste category.

Table 3: Descriptive statistics

	Full sample	Higher caste hamlet	Lower caste hamlet	p-value (3)-(2)
<i>Panel A: Demographics</i>	(1)	(2)	(3)	(4)
Age	42.27 (8.74)	44.30 (7.90)	40.37 (9.07)	0.000
Years of schooling	6.34 (3.74)	7.22 (3.79)	5.52 (3.51)	0.000
General caste	0.23 (0.42)	0.48 (0.50)	0.00 (0.00)	0.000
Other backward class	0.25 (0.43)	0.51 (0.50)	0.00 (0.00)	0.000
Scheduled caste	0.34 (0.47)	0.00 (0.00)	0.65 (0.48)	0.000
Scheduled tribe	0.18 (0.39)	0.01 (0.08)	0.35 (0.48)	0.000
Household size	5.08 (1.98)	4.94 (1.90)	5.21 (2.04)	0.182
HH members (18+)	3.69 (1.50)	3.74 (1.50)	3.64 (1.51)	0.373
<i>Panel B: Wealth</i>				
Does not own land	0.29 (0.45)	0.12 (0.32)	0.45 (0.50)	0.00
Land owned (acres)	0.92 (1.18)	1.27 (1.34)	0.59 (0.88)	0.00
Asset ownership	3.43 (1.52)	3.83 (1.49)	3.05 (1.45)	0.00
Monthly expenditure (Rs.)	12701.63 (9383.01)	13478.82 (9936.91)	11977.44 (8790.20)	0.11
Any outstanding loan	0.76 (0.42)	0.76 (0.43)	0.77 (0.42)	0.84
Any outstanding credit	0.42 (0.49)	0.45 (0.50)	0.40 (0.49)	0.12

*Notes:* This tables shows the summary statistics for the participants' demographic and wealth characteristics. Columns (1)-(3) report the means and standard deviations for the full sample, those in the higher caste hamlet, and those in the lower caste hamlet, respectively. Column (4) reports the p-value from regressing the row variable on an indicator for being in the lower caste hamlet, controlling for village fixed effects and clustering standard errors at the village level.

Table 4: Labor market engagement

	Full sample	Higher caste hamlet	Lower caste hamlet	p-value (3)-(2)
<i>Panel A: Employment history</i>	(1)	(2)	(3)	(4)
Ever worked in long-term job	0.51 (0.50)	0.51 (0.50)	0.51 (0.50)	0.713
Days worked for wage	12.10 (9.46)	10.08 (9.40)	13.99 (9.13)	0.000
Daily wage (Rs.)	369.37 (91.44)	368.97 (103.01)	369.74 (79.36)	0.800
Days failed to find work	2.48 (5.32)	2.43 (5.15)	2.54 (5.48)	0.551
Days of foregone work	9.87 (10.15)	10.58 (10.91)	9.20 (9.34)	0.144
Share of foregone work due to:				
Domestic/farm work	0.454 (0.407)	0.534 (0.395)	0.384 (0.405)	0.000
Social commitments	0.253 (0.321)	0.224 (0.286)	0.279 (0.347)	0.144
Illness	0.191 (0.337)	0.166 (0.314)	0.212 (0.355)	0.170
Leisure (with family / friends)	0.061 (0.193)	0.036 (0.147)	0.083 (0.225)	0.005
Other reasons	0.041 (0.141)	0.040 (0.156)	0.041 (0.127)	0.752
<i>Panel B: Migration history</i>				
Ever migrated for work	0.67 (0.47)	0.62 (0.49)	0.73 (0.45)	0.047
Migrated outside district	0.58 (0.49)	0.51 (0.50)	0.65 (0.48)	0.021
Frequency migrated for work	7.35 (17.71)	7.07 (22.80)	7.61 (10.98)	0.821
<i>Panel C: Labor supply preferences</i>				
Days would like wage work in:				
Social commitment-heavy month	23.912 (4.798)	23.563 (4.759)	24.240 (4.818)	0.177
Social commitment-light month	26.274 (4.929)	26.225 (4.578)	26.321 (5.244)	0.991

*Notes:* This tables shows the summary statistics for the participants' labor market engagement characteristics. Columns (1)-(3) report the means and standard deviations for the full sample, those in the higher caste hamlet, and those in the lower caste hamlet, respectively. Column (4) reports the p-value from regressing the row variable on an indicator for being in the lower caste hamlet, controlling for village fixed effects and clustering standard errors at the village level.

Table 5: Willingness to pay for dimensions of flexibility

	WTP	WTP > 0
<i>Panel A</i>	(1)	(2)
Double off-days	4.628 (61.911) [0.941]	-0.00661 (0.016) [0.680]
Double off-days and spontaneity	162.5 (52.896) [0.004]	0.0380 (0.014) [0.009]
Mean WTP for spontaneity	1206.9	0.369
N: respondents	605	605
N: respondent-offer pairs	1815	1815
	WTP	WTP > 0
<i>Panel B</i>	(1)	(2)
Double pre-specified off-days	-30.34 (98.715) [0.761]	-0.0571 (0.031) [0.078]
Spontaneity	732.5 (99.047) [0.000]	0.141 (0.026) [0.000]
Double off-days and spontaneity	895.0 (109.271) [0.000]	0.179 (0.028) [0.000]
Mean WTP for pre-specified off-days	517.7	0.240
N: respondents	605	605
N: respondent-offer pairs	1815	1815

*Notes:* This table shows the estimated WTP for flexibility dimensions, comparing the default contract (FIX 6: one fixed day off per week) with more flexible contracts. OLS coefficients are estimated using observations at the offer pair level, regressing WTP for more flexible contracts on a vector of indicators describing flexibility dimensions, controlling for the order of price lists and village fixed effects. In Panel (a), “Spontaneity” refers to a contract with up to six off-days that can be taken any time (ANY 6); “Double off-days” a contract with two fixed off-days each week (FIX 12); and “Double off-days and spontaneity” a contract with up to twelve off-days that can be taken at any time (ANY 12). In Panel (b), “Pre-specified off-days”/“Double pre-specified off-days” refer to semi-flexible schedule contracts with up to six/twelve off-days that can be taken anytime, but must be pre-specified on the first day of employment (PRE-SPEC 6/12). The WTP for these two contracts are imputed by comparing them with the fully flexible versions (FLEX 6/12). In Column (2), the dependent variable is an indicator for WTP being greater than zero. Standard errors clustered at the village level are in parentheses, and p-values are in brackets.

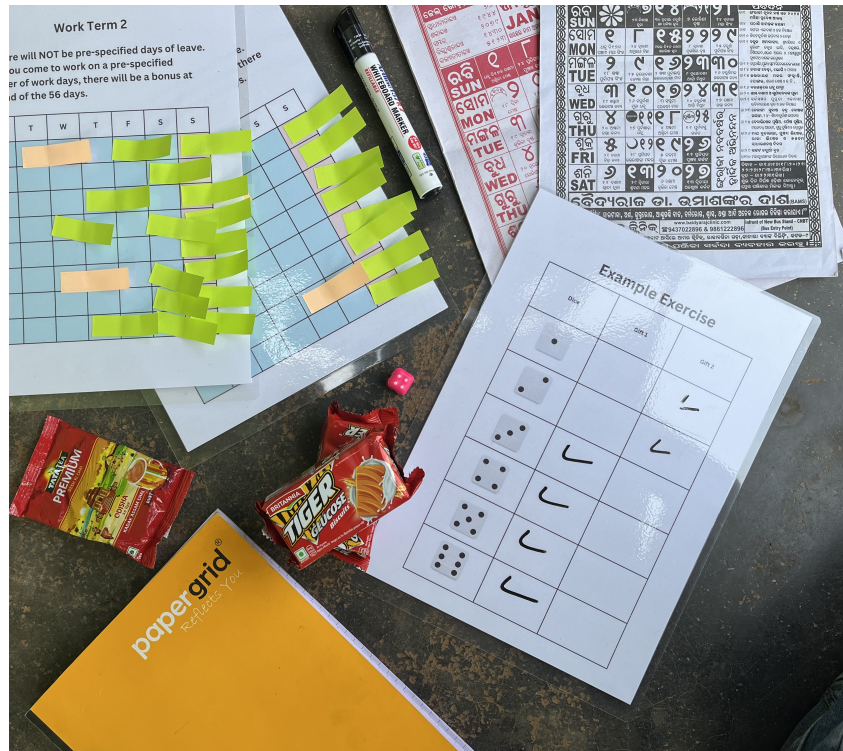
Table 6: Impact of flexible contracts at the workplace

	Workplace outcomes			Earnings		
	Bonus eligibility	Daily attendance	Daily productivity	Worksite wages	Worksite wages +bonus	All wages +bonus
	(1)	(2)	(3)	(4)	(5)	(6)
Flexible contract upgrade	0.28 (0.079) [0.001]	0.07 (0.055) [0.232]	3.48 (3.876) [0.372]	1,011.85 (779.646) [0.197]	1,577.64 (905.270) [0.084]	1,581.23 (896.076) [0.080]
Worksite FE	Yes	Yes	Yes	Yes	Yes	Yes
Date FE	No	Yes	Yes	No	No	No
Mean (default contract)	0.60	0.75	86.12	10,437.50	11,637.50	11,657.50
N	118	4,740	3,742	118	118	118
Level of observations	respondent	respondent-day	respondent-day	respondent	respondent	respondent

*Notes:* This table shows the impact of contract flexibility on workplace outcomes and earnings. OLS coefficients are estimated using observations at the respondent or respondent-day level, regressing the dependent variable on the indicator for randomly receiving a more flexible contract (ANY 12) instead of the default contract (FIX 6). The dependent variables are (1) a binary variable for receiving attendance bonus; (2) total number of days present at worksite; (3) daily output; (4) total daily wages earned at worksite; (5) sum of the previous amount and attendance bonus; (6) sum of the previous amount and all external wages during the contract period. Standard errors clustered at the village level are in parentheses, and p-values are in brackets.

# Appendix Figures

Figure A.1: Visual aids



(a) Calendars, work term schedules, and example exercise choices

## କାର୍ଯ୍ୟ ଯୋଡ଼ା ୧: ନିକଟସ୍ଥ କାର୍ଯ୍ୟସ୍ଥଳ

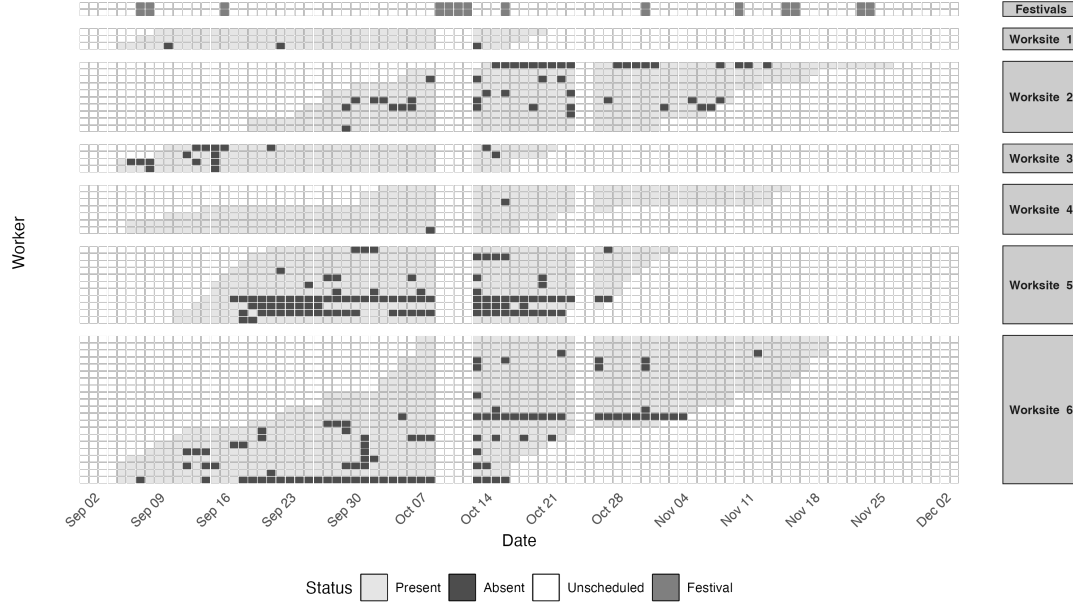
**FIXED 24** ବନାମ **FLEX 24**

✓	ଦାମ ପଡ଼ି ବୋଲନ୍ତୁ	ନାମ	ଦାମାଣ ପଡ଼ି ବୋଲନ୍ତୁ	✓
	୪୦୦୦	1	୧୦୦	
	୪୦୦୦	2	୫୦୦	
	୪୦୦୦	3	୧୦୦୦	
	୪୦୦୦	4	୧୫୦୦	
	୪୦୦୦	5	୨୦୦୦	
	୪୦୦୦	6	୨୫୦୦	
	୪୦୦୦	7	୩୦୦୦	
	୪୦୦୦	8	୩୫୦୦	
	୪୦୦୦	9	୩୯୦୦	

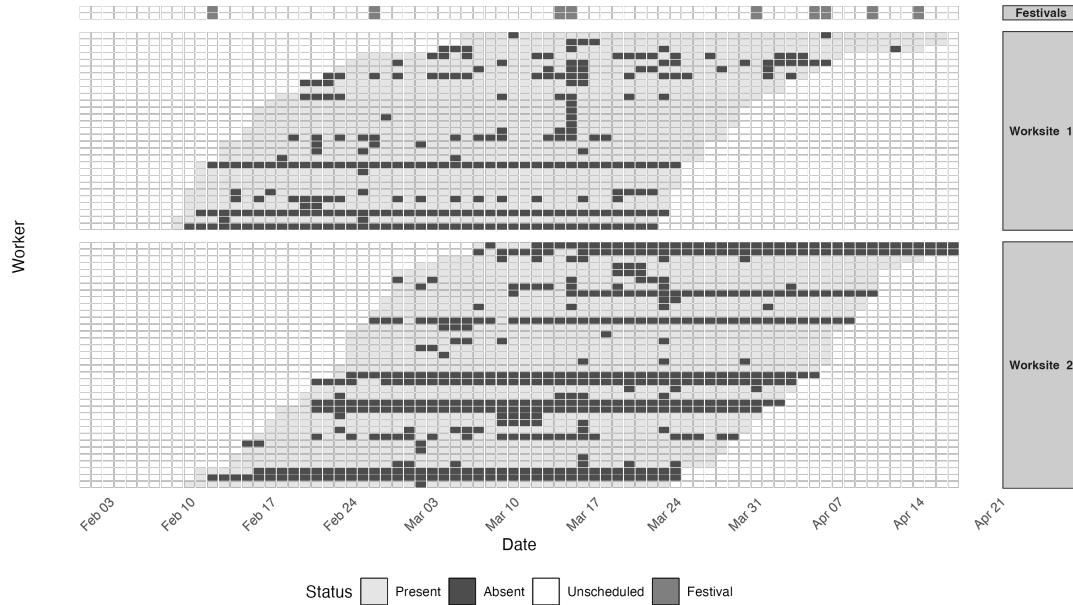
(b) Choice exercise for a pair of contracts with a price list

*Notes:* This figure illustrates the visual aids and price lists used when explaining the Becker-DeGroot-Marschak (BDM) exercise to survey participants.

Figure A.2: Daily attendance at the workplace



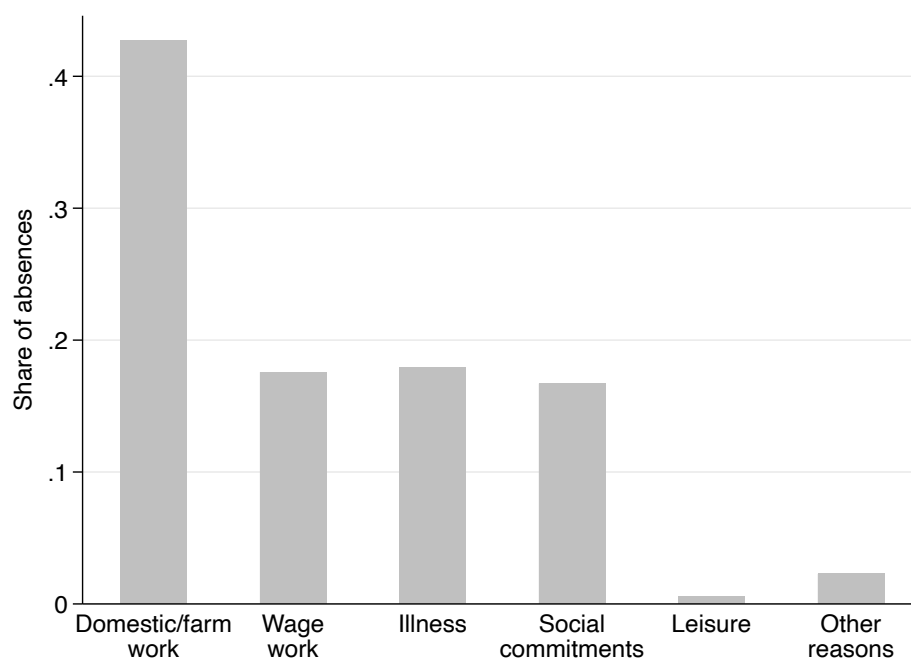
(a) September - December 2024



(b) February - April 2025

*Notes:* This figure plots daily attendance of all workers in the workplace experiment. Each row in this plot represents a worker, with light gray tiles indicating present days, dark gray tiles indicating absent days, and white tiles indicating unscheduled days (i.e. where the worker had not yet started work, had already finished their contract, or the worksite was closed). Medium gray tiles in the top two rows in each panel indicate days when there were festivals.

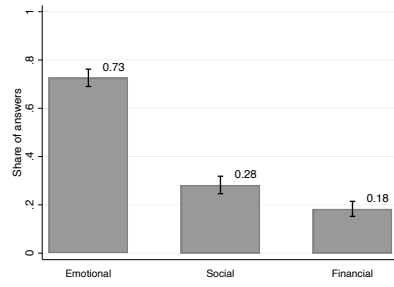
Figure A.3: Absenteeism at the workplace



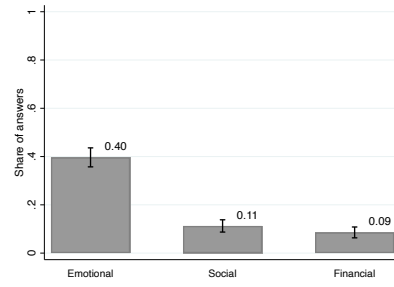
*Notes:* This figure illustrates the share of responses that indicated an activity as the primary activity when a worker was absent from the worksite. For each day a worker was absent from the worksite, we asked them what their primary activity was on that day. Respondents were only allowed to select one activity for a given day of absence. We asked this question to our study sample.



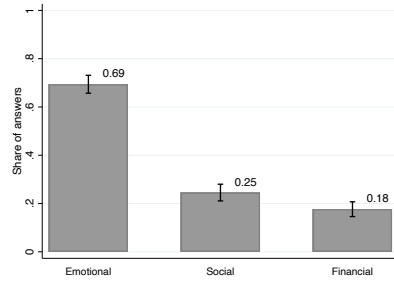
Figure A.4: Survey evidence: repercussions of missing social commitments



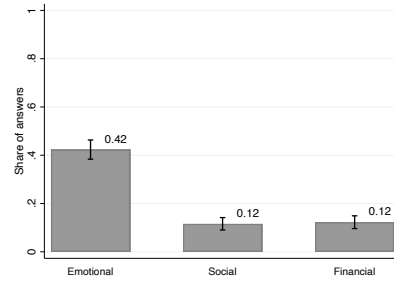
(a) Wedding (host reaction)



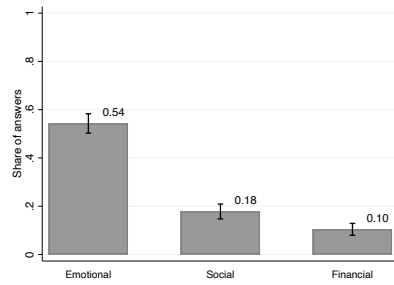
(b) Wedding (hamlet reaction)



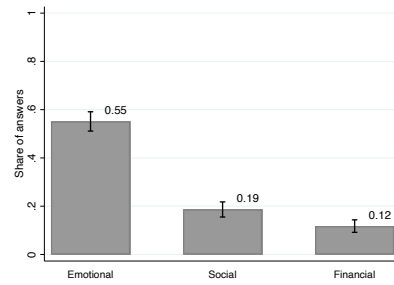
(c) Funeral (host reaction)



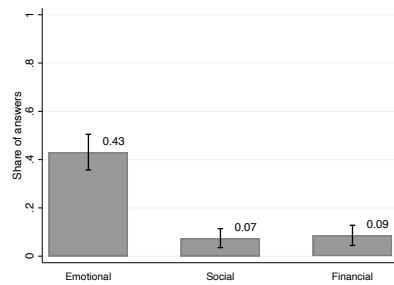
(d) Funeral (hamlet reaction)



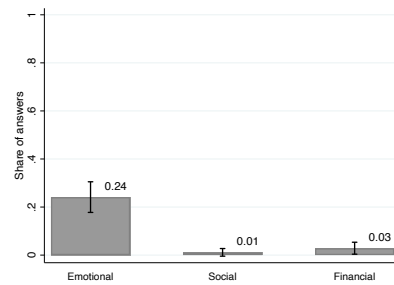
(e) Wedding (own reaction)



(f) Funeral (own reaction)



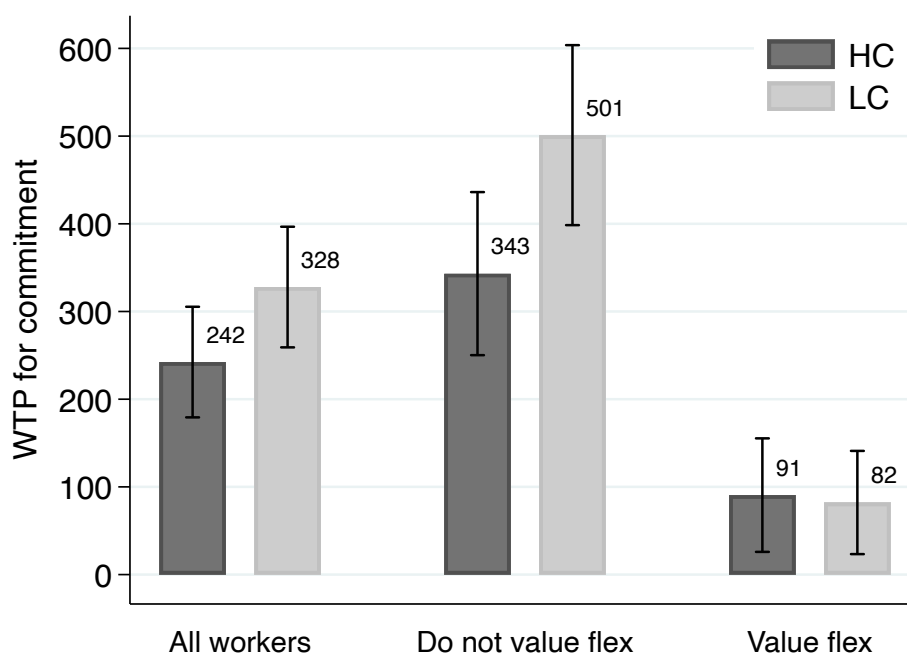
(g) Wedding while working away from the village (host reaction)



(h) Wedding while working away from the village (hamlet reaction)

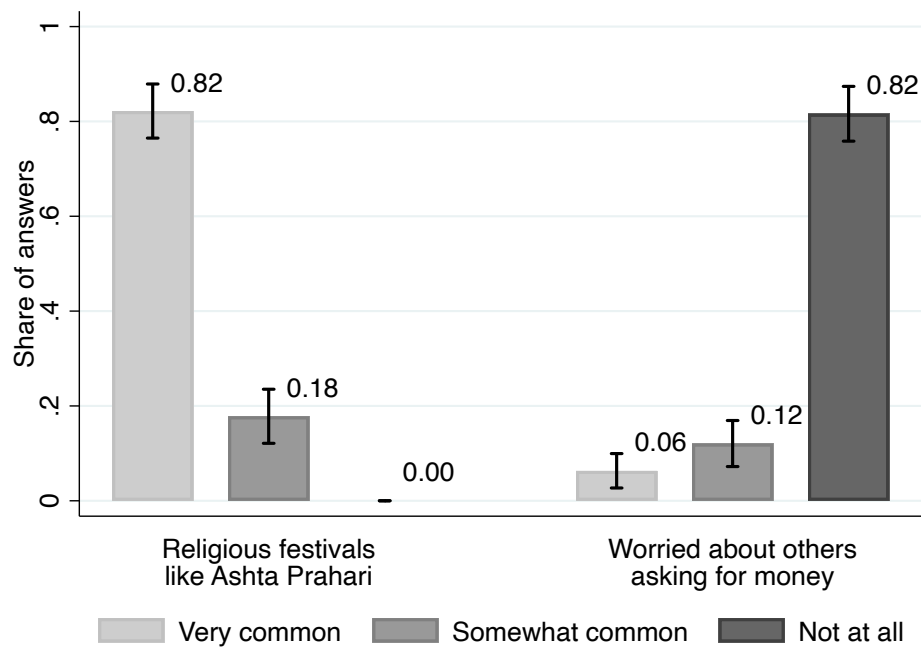
*Notes:* This figure illustrates responses to questions on the consequences of shirking social commitments. Panels (a)-(d) break down the answers shown in Figure 1 Panel (c) into three categories: Emotional (e.g., being upset), Social (e.g., no longer invited to events, demanded a public apology), and Financial (e.g., unable to borrow, obligated to pay a fine to the village fund). Panels (e)-(f) concern scenarios in which someone in the hamlet misses the participant's own events, whereas panels (g)-(h) concern scenarios where the participant is working as a temporary migrant away from the village.

Figure A.5: Willingness to pay for commitment by caste



*Notes:* This figure compares estimated WTP for commitment between high caste (HC) and low caste (LC) workers across three categories. “All workers” refers to our study sample. “Do not value flex” refers to workers who indicated that they do not value flexibility. “Value flex” refers to workers who indicated that they value flexibility. We asked respondents in our full sample to compare a “Double off-days” contract with two fixed off-days each week (FIX12) versus “Double off-days and spontaneity”, with up to twelve off-days that can be taken at any time (ANY12). A respondent is considered to value flexibility if they have a positive (non-zero) willingness-to-pay for the ANY12 contract, measured in terms of the bonus they were willing to forgo for ANY12 over FIX12. Dark gray bars represent high caste (HC) workers, and light gray bars represent low caste (LC) workers. Error bars show 95% confidence intervals. The WTP values are shown above each bar.

Figure A.6: Survey evidence on kin tax



*Notes:* This figure illustrates respondents' perceptions of kin tax in our study setting. In the left set of bars, we ask respondents in our full sample how common it is for people in their hamlet to not go to work because of religious festivals like Ashta Prahari. In the right set of bars, we ask respondents how common it is that people do not go to work because they are worried that if they work a lot, other people will ask for money. Light gray bars indicate that the phenomenon is very common, medium gray bars indicate that it is somewhat common, and dark gray bars indicate that it is not at all common to observe this phenomenon. The exact shares of respondents indicating each option are indicated at the top of each bar. Error bars show 95% confidence intervals.

## Appendix Tables

Table A.1: Representativeness of study sample

	Study villages	Census villages in Odisha	p-value (2)-(1)
<i>Panel A: Village-level</i>	(1)	(2)	(3)
Total households	152 (28)	158 (188)	0.873
Total population	640 (133)	682 (823)	0.771
SC/ST population	229 (105)	297 (398)	0.331
Literate population	435 (124)	417 (552)	0.845
Main workers	155 (75)	162 (201)	0.841
Cultivators	45 (35)	61 (85)	0.268
Agricultural laborers	54 (45)	44 (76)	0.479
HH industry/other workers	56 (47)	56 (103)	0.997
Observations	33	51271	51304
	Study sample	NSS sample in Odisha	p-value (2)-(1)
<i>Panel B: Individual-level</i>	(1)	(2)	(3)
Age	42.274 (8.742)	40.762 (8.236)	0.000
Years of schooling	6.338 (3.742)	6.310 (3.391)	0.857
General caste	0.232 (0.422)	0.233 (0.423)	0.959
Other backward class	0.247 (0.432)	0.353 (0.478)	0.000
Scheduled caste	0.338 (0.473)	0.205 (0.404)	0.000
Scheduled tribe	0.183 (0.387)	0.209 (0.407)	0.159
Land owned (acres)	0.917 (1.176)	1.183 (2.249)	0.005
Household size	5.076 (1.979)	4.197 (1.595)	0.000
Observations	605	2709	3314

*Notes:* This table compares the average characteristics of our study villages against those of Odisha villages in the the 2011 Population Census Abstract and the National Sample Survey (NSS) India. Panel A compares village-level characteristics of our study villages against Census villages in Odisha. Panel B compares individual-level characteristics of respondents in our study sample to people in the Odisha NSS sample. For both sets of comparisons, column (3) presents p-values from a regression comparing the difference in means between the study sample and comparison sample (Census/NSS).

Table A.2: Willingness to pay for flexibility by caste and distance

	WTP	WTP
	(1)	(2)
Lower caste	248.8 (132.710) [0.070]	220.0 (112.482) [0.059]
Lower caste $\times$ Double off-days	-277.6 (96.027) [0.007]	
Lower caste $\times$ (Double off-days and spontaneity)	-79.37 (121.617) [0.519]	
Double off-days	147.8 (83.633) [0.087]	
Double off-days and spontaneity	203.4 (83.694) [0.021]	
Lower caste $\times$ Distant		-110.7 (147.693) [0.459]
Distant		-275.1 (119.371) [0.028]
Mean WTP for spontaneity (higher caste)	1090.4	1090.4
N: respondents	605	605
N: respondent-offers	1815	2420

*Notes:* This tables presents estimates of WTP for flexibility dimensions separately by caste and distance of workplace to village. “Distant” refers to job contracts offered at a faraway worksite in a different district that come with employer-offered housing and a 5000 INR relocation bonus. “Spontaneity” refers to a contract with up to six off-days that can be taken any time (ANY 6); “Double off-days” a contract with two fixed off-days each week (FIX 12); and “Double off-days and spontaneity” a contract with up to twelve off-days that can be taken at any time (ANY 12). Standard errors are clustered at the village level.

Table A.3: Caste differences in WTP for commitment, time and risk preferences

	WTP for less flexible contract			
<i>Panel A: WTP for commitment</i>	(1)	(2)	(3)	
Lower caste	91.83 (43.74) [0.044]	168.61 (72.88) [0.027]	1.22 (36.64) [0.974]	
Sample restrictions	All respondents	Do not value flex	Value flex	
Mean dep. var. (higher caste)	242.32	343.18	90.60	
N: respondents	605	359	246	
	Presence bias in the money domain			
	r=1	r=1.1	r=1.25	r=1.5
<i>Panel B: Time preference over money</i>	(1)	(2)	(3)	(4)
Lower caste	-2.53 (4.02) [0.534]	0.36 (1.58) [0.823]	-1.68 (1.52) [0.275]	0.17 (1.38) [0.901]
Mean dep. var. (higher caste)	5.51	1.46	0.63	0.00
N: respondents	595	595	595	595
	Presence bias in the effort domain			Risk aversion
	r=1	r=1.25	r=1.5	
<i>Panel C: Time pref. over effort &amp; Risk pref.</i>	(1)	(2)	(3)	(4)
Lower caste	-0.09 (0.09) [0.321]	-0.07 (0.06) [0.218]	-0.05 (0.06) [0.364]	-0.81 (1.19) [0.499]
Mean dep. var. (higher caste)	0.12	0.05	0.02	10.12
N: respondents	595	595	595	595

*Notes:* This table summarizes results from conducting incentivized exercises to measure participants' willingness to pay for commitment, present bias in the money or effort domain, and risk aversion.

Table A.4: Caste differences in hamlet size, time spent on social commitments, and network reliance

	Hamlet size	Days in a year (per hamlet member) typically spent on:			
		Weddings & funerals	Religious festivals	Helping neighbors	Visiting relatives
<i>Panel A: Hamlet obligations</i>	(1)	(2)	(3)	(4)	(5)
Lower caste	-24.14 (5.38) [0.000]	0.13 (0.09) [0.186]	0.20 (0.07) [0.006]	0.20 (0.11) [0.080]	0.06 (0.03) [0.049]
Mean (higher caste)	70.76	0.49	0.43	0.59	0.18
N: respondents	605	605	605	605	605
<i>Panel B: Borrowing money</i>	No. times asked to borrow money	No. HH asked in hamlet	No. HH asked outside hamlet	Source of last loan: in hamlet	Source of last loan: outside hamlet
	(1)	(2)	(3)	(4)	(5)
	1.719 (0.910) [0.068]	0.738 (0.327) [0.031]	0.261 (0.138) [0.067]	-0.080 (0.059) [0.185]	0.036 (0.033) [0.283]
	Mean dep. var. (higher caste)	5.57	2.82	0.71	0.49
N: respondents	595	595	595	595	595
<i>Panel C: Job search</i>	No. times asked to find work	No. HH asked in hamlet	No. HH asked outside hamlet	Source of last job: in hamlet	Source of last job: outside hamlet
	(1)	(2)	(3)	(4)	(5)
	0.589 (1.040) [0.575]	0.457 (0.555) [0.416]	0.134 (0.191) [0.489]	-0.095 (0.047) [0.051]	0.052 (0.035) [0.149]
	Mean dep. var. (higher caste)	4.67	2.28	0.83	0.50
N: respondents	595	595	595	595	595

*Notes:* This table shows caste differences in hamlet size, time spent on social commitments, and network reliance. The dependent variable (in the column heading) is regressed on an indicator for being in the lower caste hamlet, controlling for village fixed effects and clustering standard errors at the village level.

Table A.5: Caste differences in attitudes towards social events and networks

	<b>Repercussion index</b>	<b>Event value index</b>	<b>For fun</b>	<b>Uphold tradition</b>	<b>Financial help</b>	<b>Social standing</b>
<i>Panel A: Reasons to attend</i>	(1)	(2)	(3)	(4)	(5)	(6)
Lower caste	-0.18 (0.15) [0.235]	0.07 (0.12) [0.594]	0.01 (0.03) [0.686]	0.01 (0.03) [0.608]	-0.01 (0.03) [0.670]	-0.01 (0.04) [0.843]
Mean (higher caste)	2.06	1.38	0.45	0.51	0.64	0.62
N: respondents	605	605	605	605	605	605
	<b>Collectivism index</b>	<b>Spending time</b>	<b>Withhold opinion</b>	<b>Community relation</b>	<b>Collaborative work</b>	
<i>Panel B: Collectivist attitudes</i>	(1)	(2)	(3)	(4)	(5)	
Lower caste	-0.12 (0.09) [0.202]	-0.06 (0.07) [0.391]	0.06 (0.03) [0.042]	-0.09 (0.04) [0.044]	-0.03 (0.03) [0.302]	
Mean (higher caste)	2.19	0.43	0.11	0.76	0.89	
N: respondents	421	421	421	421	421	
	<b>Network burden index</b>	<b>Ask or expect financial help</b>	<b>Disapproval if behave differently</b>	<b>Takes away leisure time</b>	<b>Obligated to attend events</b>	<b>Conspicuous spending</b>
<i>Panel C: Network burden</i>	(1)	(2)	(3)	(4)	(5)	(6)
Lower caste	0.20 (0.15) [0.194]	-0.03 (0.12) [0.798]	0.19 (0.09) [0.040]	-0.01 (0.11) [0.910]	0.08 (0.10) [0.421]	0.12 (0.11) [0.268]
Mean (higher caste)	2.28	2.19	1.49	1.63	1.57	1.74
N: respondents	421	421	421	421	421	421

*Notes:* This table shows caste differences in attitudes towards social events and networks. The dependent variable (in the column heading) is regressed on an indicator for being in the lower caste hamlet, controlling for village fixed effects and clustering standard errors at the village level. Repercussion index is the sum of five binary variables corresponding to a lack of reported repercussions in each of the scenarios shown in Figure 1 Panel (c). Event value index, collectivism index, and network burden index are also sums of binaries that are reported within the respective panels.



## A Survey details

### A.1 Survey questions

**Figure 1.** The full text of the relevant question in each panel is as follows:

- (a) “In your household, which household member is primarily expected to [earn money to provide for the household’s needs]/[represent the family in village events e.g., weddings, funerals]/[look after and care for a sick household member]?” (N = 605)
- (b) “For events like weddings in your hamlet, what are household heads staying in the hamlet generally expected to do?” (N = 174)
- (c) “Imagine someone in your hamlet [is hosting a wedding]/[is hosting a funeral]/[needs your help on their agricultural land], and you and your household are unable to [attend]/[help] due to paid work. How would the neighbor [hosting the event] react?” (N = 595)
- (d) “Imagine there was a wedding in a village that is similar to yours, and Pooja is the bride. A lot of guests attended the wedding, but her paternal uncle (older than her father), Santosh, who lives nearby, did not come to the wedding, went to work instead, and only sent some money. Would people in the village say anything about Santosh and/or the family? If so, what would they say?” (N = 595)
- (e) “Ramesh and Suresh live in the same village and work at the same factory. It is a busy season for work at the factory, and the boss asked them to try to come to work every day this week. However, this week coincides with Diwali and they have been attending the village event every year. Ramesh thinks it is important to attend work to show he is a reliable employee. Suresh thinks it is important to attend the village event to uphold traditions. Who do you agree with more?” (N = 595)

## B Appendix Model

### B.1 Environment and Matching

We model the Low-tech labor market with a Cobb–Douglas matching function

$$M(u, v) = \mu u^\rho v^{1-\rho}, \quad \mu > 0, \rho \in (0, 1),$$

where  $u$  is the mass of job seekers (unemployed searching in Low-tech) and  $v$  is the mass of posted vacancies. Labor-market tightness is

$$\theta \equiv \frac{v}{u}.$$

The implied matching probabilities are

$$p(\theta) = \frac{M}{u} = \mu \theta^{1-\rho} \quad \text{and} \quad q(\theta) = \frac{M}{v} = \mu \theta^{-\rho}.$$

We set the unemployment flow value  $b = 0$ . A filled Low-tech match produces  $A_\ell$  in the period, pays wage  $w$ , and thus yields firm profit

$$J = A_\ell - w.$$

An unfilled vacancy yields zero in the period, but incurs a posting cost  $c > 0$ . If filled with probability  $q(\theta)$ , the vacancy's expected payoff is  $q(\theta) J - c$ .

### B.2 Wage Determination under Nash

Let  $W$  denote the worker's value in a filled job, and  $U$  the value when unemployed. In one period,

$$W = w, \quad U = 0.$$

Under Nash bargaining with worker bargaining weight  $\psi \in (0, 1)$ , the wage maximizes

$$\max_w (W - U)^\psi J^{1-\psi} = w^\psi (A_\ell - w)^{1-\psi}.$$

The first-order condition yields

$$\frac{\psi}{w} = \frac{1 - \psi}{A_\ell - w} \implies w = \psi A_\ell, \quad J = (1 - \psi) A_\ell.$$

### B.3 Free Entry and Equilibrium Tightness

With free entry, expected vacancy profit is zero:

$$c = q(\theta) J = \mu \theta^{-\rho} (A_\ell - w).$$

Combining with  $w = \psi A_\ell$  gives

$$c = \mu \theta^{-\rho} (1 - \psi) A_\ell \implies \theta = \left( \frac{\mu (1 - \psi) A_\ell}{c} \right)^{1/\rho}.$$

Hence, in the free-entry benchmark,  $\theta$  is pinned solely by primitives  $(A_\ell, \mu, c, \psi)$  and is independent of the size of the search pool  $u$ .

### A.6. Employment and Unemployment

Let  $u = L_s - N_h$  be the mass of workers not employed in High-tech (i.e., searching in Low-tech). Then Low-tech matches and unemployment are

$$N_\ell = p(\theta) u = \mu \theta^{1-\rho} u, \quad U = u - N_\ell = u [1 - p(\theta)].$$

*Free entry:* since  $\theta$  is constant in  $u$ , a change in  $N_h$  scales  $v = \theta u$  one-for-one, leaving  $p(\theta)$  unchanged and moving  $U$  proportionally with  $u$ . *Fixed vacancies:* if  $v$  is exogenous, then  $\theta = v/u$  falls when  $u$  rises, so  $p(\theta)$  declines and  $U$  increases more than proportionally (congestion).

## B.4 Comparative Statics for Tightness

From the Nash/free-entry tightness,

$$\theta = \left( \frac{\mu (1 - \psi) A_\ell}{c} \right)^{1/\rho},$$

we obtain:

$$\frac{\partial \theta}{\partial A_\ell} > 0, \quad \frac{\partial \theta}{\partial \mu} > 0, \quad \frac{\partial \theta}{\partial c} < 0, \quad \frac{\partial \theta}{\partial \psi} < 0.$$

Intuition: higher productivity or matching efficiency raises surplus and induces more vacancies (higher  $\theta$ ); higher vacancy cost or worker bargaining power reduces firm surplus, lowering  $\theta$ .

## B.5 Fixed-Vacancy Benchmark (No Free Entry)

If  $v$  is fixed (e.g., by capacity or regulation), then  $\theta = v/u$  and

$$p(\theta) = \mu \theta^{1-\rho} = \mu \left( \frac{v}{u} \right)^{1-\rho}.$$

As  $u$  rises (e.g., when  $N_h$  falls),  $\theta$  and  $p(\theta)$  both fall, and

$$U = u [1 - p(\theta)] \text{ rises faster than linearly in } u \text{ (congestion).}$$

If wages are set by Nash with  $b = 0$ ,  $w = \psi A_\ell$  remains independent of  $\theta$  in this setting and does not offset the congestion effect.