

Unlocking Women's Workforce  
Potential in India:  
Quantifying the Labour Market  
Impact of Formalising Part-time  
Employment and Gender Equality in  
Unpaid Care Work

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# UNLOCKING WOMEN'S WORKFORCE POTENTIAL IN INDIA:

## QUANTIFYING THE LABOUR MARKET IMPACT OF FORMALISING PART-TIME EMPLOYMENT AND GENDER EQUALITY IN UNPAID CARE WORK\*

### NCAER Working Paper

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#### Abstract

In this paper, we investigate the macroeconomic and labour market implications of gender equality in unpaid care work and the formalisation of part-time employment in India. The unequal distribution of unpaid care responsibilities significantly limits women's labour force participation, perpetuating gender disparities in employment and economic outcomes. Using the McCall-Mortensen macroeconomic job search framework, this paper models the potential impacts of policy interventions on female labour force participation rates (LFPR). A key contribution of the paper is to derive quantitative estimates via model simulation. We find that formalising part-time employment contracts and equalising the time burden of unpaid care work between genders predict a 6-percentage point increase in female LFPR, raising the current rate from 37% to 43%. The findings underscore the critical need for formalising part-time employment contracts in India. Equalizing the burden of unpaid care would require raising public investment in childcare and eldercare infrastructure, and policies promoting paid parental leave and tax incentives for shared care. Drawing on best practices from the advanced world, the study emphasises the role of flexibility in enabling women to balance professional and domestic responsibilities.

**JEL Classification:** J21, J23, J31, J63, J64, J81, E24.

**Key Words:** Part-time employment, job search model, labour force participation rate, reservation wage.

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We are deeply grateful to Prof. Carlos A. Vegh for his insightful feedback and constructive suggestions, which have greatly enriched this research at various stages of its development.

**Disclaimer:** The findings, interpretations, and conclusions expressed in the paper are those of the authors and do not necessarily reflect the views of the Governing Body or Management of NCAER.

## 1. Introduction and Motivation

A nation's economic and social prosperity depends on an active and productive participation of its labour force. In many emerging and low-income economies, a substantial proportion of the female working-age population remains outside the labour force. This phenomenon is particularly striking in India, where 65% of India's female population are of working age but over 60% of this population remain out of the labour force.

There is extensive literature on identifying the factors that inhibit female labor force participation. They tend to focus on the interplay between demand and supply-side constraints, including in the Indian context (Mehrotra and Parida, 2017; Deshpande and Kabeer, 2021; Sarkar et. Al., 2019, Bhalla and Kaur, 2011). A prominent factor identified is the disproportionate amount of time women dedicate to household responsibilities and caregiving for children and elders. This unequal burden significantly raises the opportunity cost of engaging in paid employment, thereby limiting women's participation in the labour market. Women also experience motherhood penalties, facing reduced employment opportunities, wage gaps, and limited access to leadership roles due to caregiving responsibilities (Deshpande and Singh, 2021; ILO, 2019). This burden is particularly pronounced in informal sectors, where women endure precarious employment, low wages, and minimal social protections, compounding their long-term economic vulnerabilities.

Additionally, the dual burden of unpaid care and paid work takes a toll on women's mental health, increasing stress levels and reducing their ability to engage in social and economic activities. These intersecting challenges highlight the urgent need for policy interventions that allow women to engage in paid employment and reduce their caregiving burden. While the qualitative impact of unpaid care work is well-documented, quantifying the benefits of policy interventions is rare. This study attempts to fill this gap employing theoretical and empirical models to assess the impact of policy interventions on labour force participation rates (LFPR). To the best of our knowledge, this study represents the first quantitative analysis of the labour market potential associated with formalising part-time employment contracts in India. Addressing the redistribution of caregiving responsibilities between men and women necessitates behavioural change. We further empirically quantify the impact of such a shift on labour force participation rates.

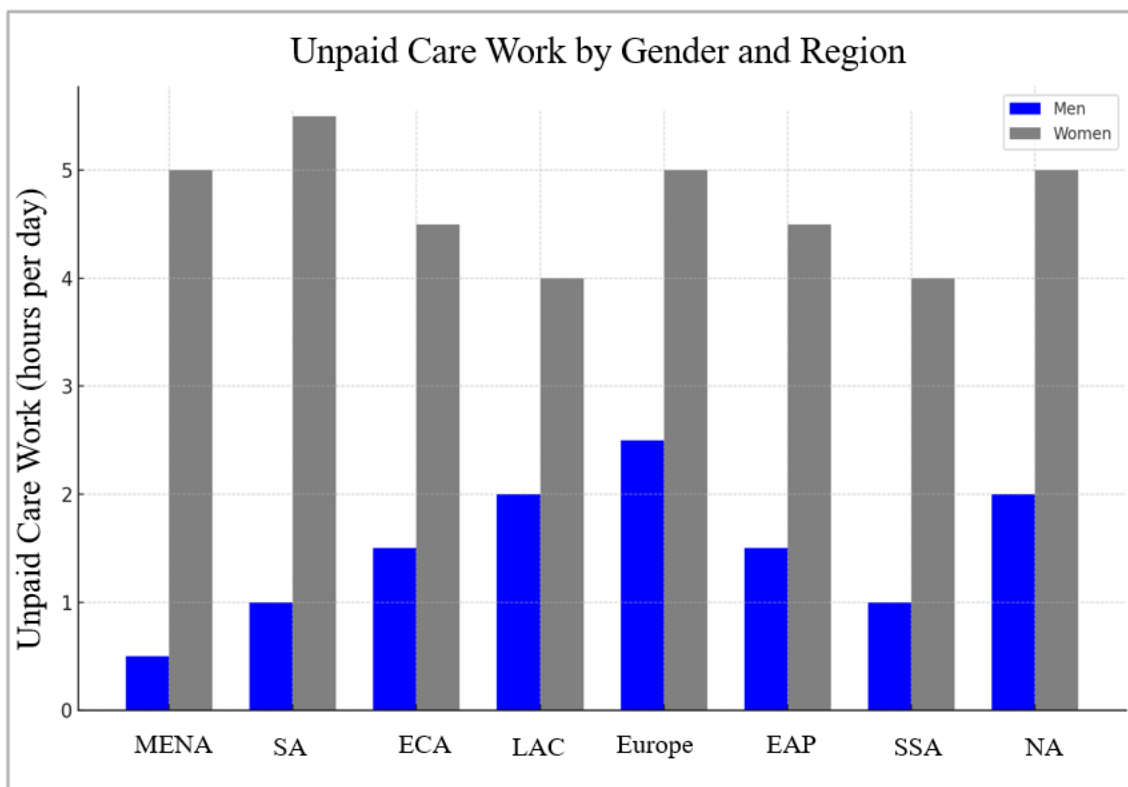
The care economy, encompassing both paid and unpaid care work, plays a critical role in determining female labour force participation rates. Unpaid care responsibilities, such as child-rearing, elderly care, and household chores, disproportionately fall on women in many societies, particularly in India, where cultural norms often dictate gender roles. This unequal distribution of care work creates significant barriers to women's engagement in the labour market, limiting their opportunities for economic participation and professional growth. Gender time patterns devoted to unpaid care work cut across geographic regions, and socio-economic groups.

Time-use data provide a valuable lens to examine how gender norms shape the division of labour within households and highlight disparities between men and women. According to the Organisation for Economic Co-operation and Development (OECD), regional averages reveal

stark differences in the time spent on unpaid care work by women and men worldwide, with women consistently shouldering a disproportionate share.

Figure 1 below presents the average hours per day spent on unpaid care work by women and men by regions of the world: Middle East and North Africa (MENA), South Asia (SA), Eastern Europe and Central Asia (ECA), Latin America and the Caribbean (LAC), East Asia and Pacific (EAP), Sub-Saharan Africa (SSA) and North America (NA). These disparities are particularly acute in the Middle East and North Africa (MENA) and South Asia (SA). India exemplifies this global pattern, as evidenced by the Time Use in India Report 2019, Government of India, which indicates that women, on average, devote approximately twice as many hours as men to unpaid domestic and caregiving activities.

*Figure 1: Time Spent on Unpaid Care Work; Source: OECD*



Faced with carrying a disproportionate burden of the unpaid care economy, flexibility in work hours can play a transformative role in increasing women’s participation in the workforce. By accommodating the dual responsibilities of employment and household duties, flexible work arrangements enable women to balance professional and domestic commitments more effectively. Such flexibility is particularly crucial for women with caregiving responsibilities, as it reduces the opportunity cost of paid employment and makes labour force participation more viable. Moreover, flexible schedules can help alleviate poverty, offering women greater autonomy in maintaining work-life balance.

In fact, *part-time employment*, formal or informal, is the most widespread type of employment found among women. The global share of women in part-time employment stands as high as 57 percent<sup>1</sup>. Part-time jobs offer flexibility for individuals with other time commitments such as child and elderly care, higher education and training, home production activities, or pursuing other interests. Women across the world work part-time to balance their time in the face of such constraints.

The International Labour Organization (ILO) Part-Time Work Convention, 1994 (No. 175) defines *Part-time employment* in terms of hours of work that are shorter than those for comparable *full-time jobs* (in the particular country, sector, and occupation). However, there is no official standard definition of full-time work internationally. Cross-country and cross-industry variations exist in the definition of full-time and part-time working hours. The usual number of working hours in a full-time job depends on the statutory provisions and those stipulated in collective agreements by industry and occupation. At the national level across countries, there is either a statutory definition recognising part-time (in relation to full-time) workers, or a statistical definition based on official labour force surveys. For example, per the U.S. statutory standards, the Internal Revenue Service (IRS), U.S. Govt. under the Affordable Care Act (ACA), defines part-time employment as those with work hours less than 30 hours per week or 130 hours monthly. This applies only to large firms. The U.S. Bureau of Labour Statistics (BLS), on the other hand, defines a threshold of 35 hours per week as part-time work for statistical purposes. Table 1 below presents a selection of some advanced economies with statutory / statistical definitions for part-time employment contracts.

*Table 1: Some Examples of Statutory/Statistical Definition of Part-time & Full-time Employment*

<b>Countries</b>	<b>Weekly cut-offs for part-time employment</b>	<b>Maximum weekly work hours for full-time employment</b>
France	24 hours < Work hours < 35 hours	35 hours
Spain	Work hours < 40 hours	40 hours
United Kingdom	Work hours < 40 hours	35 - 40 hours
Japan	20 hours < Work hours < 30 hours	40 hours
Norway	Work hours < 37.5 hours	37.5 hours
Sweden	Work hours < 40 hours	40 hours
India	Not defined in labour laws	48 hours

Unlike many developed nations, where part-time work is clearly defined within labour laws, workers in India who are employed on a part-time basis often lack formal protections. This absence of legal recognition leads to ambiguity regarding workers' rights, such as minimum wages, benefits, and job security. The lack of clear regulations also makes it difficult for part-time workers

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<sup>1</sup> ILO, 2016

to access social security benefits or other employment protections that are typically available to full-time employees.

The Indian labor laws define standard full-time contracts as 48 hours of work a week and nine hours a day. These can be found in legislations such as the Factories Act, 1948 and Minimum Wages Act, 1948. However, part-time contracts do not find a mention in any of the labour laws. The absence of specific regulations means that part-time workers are often treated as contract workers or casual employees, and their rights can vary depending on the employer's policies. Such contracts, by construction, are often biased against employees. India's current system of minimum wages is inadequate and unfair for part-time workers. This is because under the Minimum Wages Act of 1948, eight hours of work a day is the smallest unit for fixing minimum wages. Thus, paying proportionately for the work rendered for a part of the day may occur but is not legally required in India. In advanced economies, an hour is the smallest unit considered for employment. This distinction between minimum wages per day versus minimum wages per hour militates against part-time employment in any given day.

Moreover, India has yet to adopt the ILO's part-time work directives to promote part-time work and ensure equal treatment of part-time workers with regard to participation in the workplace, occupational safety and health, discrimination in occupation and health, statutory social security schemes, and leave provisions, among others. The European Union and most OECD countries adopted these directives in the late 1990s and integrated them into national laws. Such reforms are long awaited in India. While a major reform of labour codes has been introduced in India in 2019, *it is silent on the much-needed formalisation of part-time contracts.*

The rest of the paper is structured as follows: Section 2 provides a brief literature survey and highlights the contribution of this paper. Section 3 presents the data, sets up the job search model, and defines the equilibrium. Section 4 calibrates the model to Indian data, presents the main results, and conducts the simulation exercise. Section 5 summarises the findings, offers policy recommendations, and concludes the paper.

## **2. Literature Survey and Contribution of this Paper**

This paper frames the discourse of increasing female labor force participation within India's socio-economic context, by focusing on the need for policy interventions to tackle two systemic barriers. The first is the formalisation of employment contracts in India to include part-time employment; the second is to reduce the disproportionate burden of care work on women. In this paper, we examine LFPR in India using a macroeconomic job-search model. We also simulate the impact of formalising part-time employment practices and the redistribution of time burden of unpaid care work between men and women on women's labour market outcomes in equilibrium.

Our modeling technique is to adapt the well-established McCall – Mortensen Job Search framework (1970) in continuous time. The labour market search theory gained traction after the seminal work of McCall (1970), and Mortensen (1970) for the single-agent economy where on-the-job search is absent. Burdett (1978) extended the search models by allowing for on-the-job

search. Our paper extends the latter model to allow for heterogeneous agents to include men and women. Several factors affect reservation wages, such as job search costs and risk aversion (Mortensen and Pissarides, 2011; Adams-Prassl et al., 2023). Researchers have also explored the role of different frictions within this framework, such as location frictions, matching frictions, and others (Mortensen and Pissarides, 1994; Diamond and Maskin, 1979; Pissarides, 1984a; Pissarides, 1984b).

As in the literature, we calculate a threshold reservation wage to enter the labour market, for both men and women. The manner in which our paper adapts the McCall – Mortensen Job Search framework is as follows. The model determines the reservation wages at which job-seeking agents are willing to accept an incoming job offer. Any offers that promise a pay below this reservation wage are rejected. Once the job-seeking agent rejects the offer, he or she willingly chooses to remain unemployed. The reservation wage calculated by the model corresponds to a specific value of the labour force participation rate in the economy.

We solve the model under two scenarios: the first under the absence of formal contracts on part-time employment contracts and the actual home production time-share for men and women (the status quo), and the other in the presence of formal contracts on part-time contracts with an equalised time burden of unpaid care work for both men and women (the policy simulation case). We calibrate the model to the Indian data, to calculate the equilibrium labour force participation rate. By reducing the burden of unpaid care work that typically falls on women and allowing for greater flexibility in work hours through part-time jobs, the model facilitates improved labour market outcomes, reflected in a higher female labour force participation rate. An equal distribution of unpaid care work between men and women, in the presence of part-time employment opportunities, could significantly boost women's labour force participation rate. Projections indicate a 6-percentage point increase, from the current figure of 37%<sup>2</sup> to 43%. Part-time jobs play a pivotal role in alleviating time-related constraints, enabling more women to enter the workforce.

The policy recommendations are clear: adoption of formal measures on part-time employment contracts in India in India, coupled with a gradual easing of social norms through socio-economic interventions would increase female labour force participation.

### **3. Data and Model**

The Periodic Labour Force Survey (PLFS) serves as the primary official data source for labour market statistics in India. Introduced in 2017, it replaced the quinquennial Employment and Unemployment Surveys (EUS) that were previously conducted. The inaugural PLFS report, covering the reference period 2017–18, was released in June 2019. Subsequent rounds of the PLFS have been conducted annually, with reports available for 2018–19, 2019–20, 2020–21, 2021–22, and 2022–23. In this paper, we use PLFS data to calibrate most of the model parameters. Following Chatterjee and Dev (2023), we construct labour flow charts that capture the transition probabilities from unemployment to employment as job arrival probabilities. These probabilities are constructed

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<sup>2</sup> PLFS 2022-23. Government of India

using the Consumer Pyramids Household Survey (CPHS) data from the Centre for Monitoring Indian Economy (CMIE), which provides higher-frequency data and a longitudinal panel structure for regular tracking of workers. The Time Use in India Report (2019) is used to document the actual proportion of time spent by men and women on domestic caregiving and household activities in India. To estimate nominal interest rates for the preceding five-year period, we utilize data on India's real interest rates and GDP deflators sourced from the World Development Indicators published by the World Bank. These calculations enable us to derive average values for the corresponding time discount rates. We also construct the actual wage offer distribution obtained from the Income Pyramid database of CMIE–CPHS for both full-time and part-time employment.

**The model:** We use a job search model of individual decision-making, inspired by McCall-Mortensen job search framework (McCall, 1970; Mortensen, 1970). This continuous-time model considers a single job-seeking agent as the decision-maker, determining whether to accept an incoming job offer while accounting for time spent on home production. The key features of the model include:

- i. **Employment states:** Each agent can be either (i) employed, or (ii) unemployed and seeking employment. Job seekers are subject to the arrival of job offers. Those who are already employed are assumed not to be exposed to new job offers, i.e., for simplicity, we ignore cases of on-the-job search. Without altering the main essence of the model, job termination shocks are also not explicitly considered. It is assumed that agents, once employed, remain employed until the time of superannuation.
- ii. **Home production:** Each agent allocates a portion of their time to non-market household activities, which reduces the time available for employment. This includes time spent on non-market and unpaid care work at home. We assume that these activities are divisible among family members, regardless of gender. We normalise the non-leisure hours in a day to unity. For individual  $i$ , a time share  $\tau_i$  per day is devoted to home production, thus time share  $1 - \tau_i$  per day is left for employment related activities. We use the terms home production and unpaid care work interchangeably in the subsequent sections of the paper.
- iii. **Labour Market risks and decision choices:** Labour market risk is captured by the probabilities of arrival of job offers to the job seekers ( $\lambda$ ). Upon receiving a job offer, the job-seeking agent either accepts the offer and becomes employed or rejects it in search of better opportunities amid existing market uncertainty. If an offer is voluntarily rejected, the individual remains outside the labour force.
- iv. **Wage offers:** The wage offers follow an exogenous distribution with a density function  $F(w)$ . There is no non-wage income for individuals who are not employed.

The model assumes a constant relative risk aversion (CRRA) utility function to incorporate the agent's risk preferences in decision-making. Simplifying the model further, we assume the



coefficient of relative risk aversion is equal to unity, resulting in a logarithmic utility specification. Utility is derived from consumption, which, in turn, is generated from wages earned while working. Time spent on non-market care work reduces the time available for employment.

Agents maximize expected lifetime utility from consumption, expressed as:

$$E_0 \int_0^{\infty} e^{-\rho t} u [.] dt,$$

Equation 1

where  $\rho$  is the subjective rate of time preference,  $t$  refers to time period  $t$  that ranges from zero to infinity, and  $u(.)$  is the instantaneous utility function. Given  $\tau$  time share in unpaid care work, the logarithmic utility function is simplified as following:

$$u (w; \tau) = \text{Log} [(1 - \tau) \cdot w]$$

Equation 2

### Value Functions and Reservation Wages

Job seekers evaluate an incoming job offer based on expected pay, market uncertainty, and time-use considerations. The decision to accept the offer is based on their reservation wage—the minimum wage at which a job offer is accepted. Any offers with wages below the calculated reservation wage are rejected. The stationarity assumption allows us to express the model recursively. We now write the value function for each of the two states:

When already employed, the agents are not subject to further job arrival offers. Assuming no job loss shocks, the state of employment acts as an “absorbing state”<sup>3</sup>. Hence, value corresponding to the state of employment is given as:

$$V (w; \tau) = (\rho)^{-1} [u (w; \tau)]$$

$$\text{or, more specifically, } V (w; \tau) = (\rho)^{-1} [\text{Log} [(1 - \tau) \cdot w]]$$

Equation 3

If unemployed, there is no wage income. Job-seeking agents are subject to incoming job offers, derived from an exogenous distribution with probability  $\lambda$ . The value of unemployment is given by the sum of utility from zero wages and the option value of changing labour market states

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<sup>3</sup> An absorbing state is a state in a stochastic process that, once entered, cannot be exited. In job search models, it represents the end of the job search when a satisfactory job is accepted.

$$U = (\rho + \lambda)^{-1} [u(0; \tau) + \lambda \int \max \{U, V(w; \tau)\} dF(w)]$$

Equation 4

Guler, Guvenen, and Violante (2012) demonstrate how the value of employment, as a function of wages  $w$ , equals the value of unemployment, independent of the specific value of wages, at the reservation wage  $w^*$ . We adhere to the literature and state the existence of reservation wage  $w^*$ , such that:

$$V(w^*; \tau) = U$$

Given a continuum of wages, the agent's decision is to accept all offers where  $w > w^*$  and reject those otherwise. By incorporating  $w^*$  into the choice decision equation and simplifying the equations, we can obtain the expression for the equilibrium path as:

$$u(w^*; \tau) = u(0; \tau) + \frac{\lambda}{\rho} \int_{w^*}^{w^{\max}} (u(w; \tau) - u(w^*; \tau)) f(w) dw$$

$$\text{i.e., } \text{Log} [(1 - \tau) w^*] = \frac{\lambda}{\rho} \int_{w^*}^{w^{\max}} \text{Log} [(1 - \tau) w] - \text{Log} [(1 - \tau) w^*] f(w) dw$$

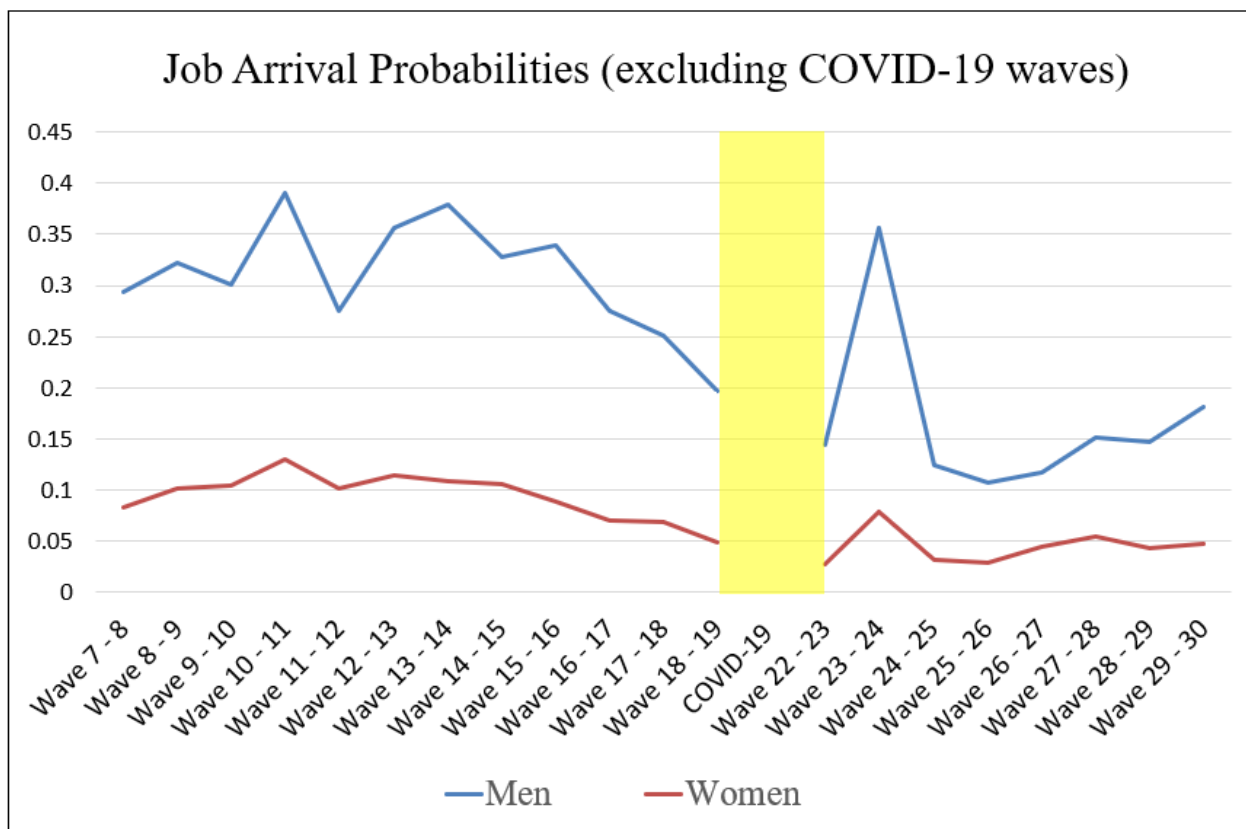
Equation 5: Equilibrium Path

We solve Equation 5 to determine the reservation wages for men and women, respectively. The calculated reservation wages correspond to a specific statistic for the actual labour force participation rate of the two genders.

#### 4. Calibration, Results and Simulation

**Calibration:** To solve for equilibrium, we fit parameters into Equation 5 and compute reservation wages. Following the methodology of Chatterjee and Dev (2023), we track the transition flow of workers from unemployment to employment, which provides an estimate of the probability of receiving job offers. For this analysis, we use CMIE - CPHS employment data across consecutive CPHS waves spanning from January 2016 to December 2023, corresponding to Waves 7 through 30. The period from Waves 19 to 21 coincides with the COVID-19-induced lockdown in India. We deliberately exclude this period from our analysis due to the potential distortions inherent in using it. Figure 2 below illustrates the trend of these probabilities for both men and women, with the COVID-19 period explicitly excluded. The average of the probability values outside this disturbance period is used to calibrate the value of  $\lambda$  for both men and women, respectively

Figure 2: Job Arrival Probabilities; Source: CMIE - CPHS

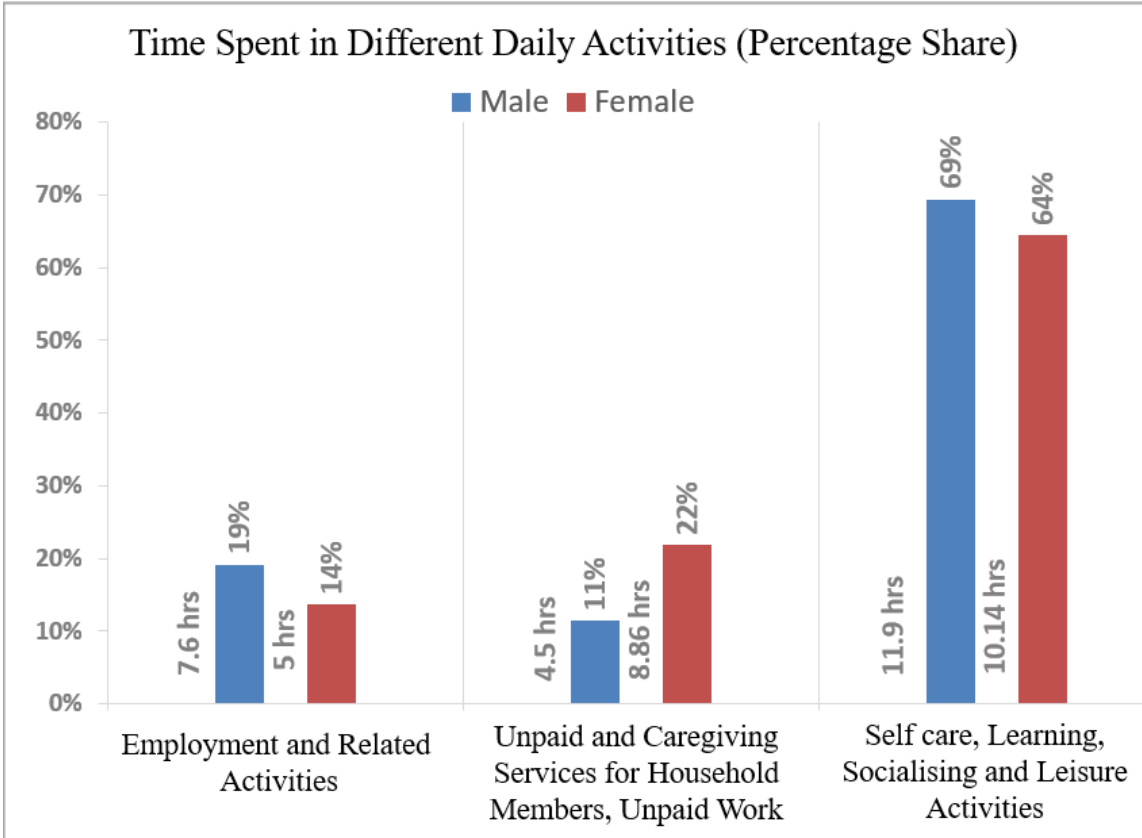


We use the *Time Use in India Report, 2019* to calibrate the time-use parameters in the model. The official data reveals that women, on average, spend nearly twice as much time on home production daily as men. Normalizing the non-leisure hours to unity, the home production time share for husbands and wives is calculated as 0.37 and 0.62, respectively. Figure 3 plots the official data, showing the percentage share of total time spent by men and women in daily activities.

We estimate the distribution of reported wages in the PLFS database. Figure 4 below shows the actual density function of the reported distribution of average monthly wages for part-time and full-time jobs, for both men and women, over the last six years, from 2017-18 to the most recent PLFS data for 2022-23. In line with standard literature on the job search paradigm, we observe a positively skewed wage offer distribution for both men and women when they are fully employed. Notably, the distribution exhibits greater variability in full-time job offers extended to women compared to those extended to men. Following the established McCall-Mortensen job search model framework, we assume that the wage offer distribution for men follows a standard log-normal distribution with parameters  $\mu = 0$  and  $\sigma = 1$ . In contrast, the wage offer distribution for women, exhibiting greater variability, follows a log-normal distribution with parameters  $\mu = 0$  and

$\sigma = 2$ . For part-time jobs, however, the wage offer distribution is less skewed, more symmetrical, bell-shaped, and closely approximating a standard normal distribution.

Figure 3: Time-use in India Report; Source: Govt. of India - 2019

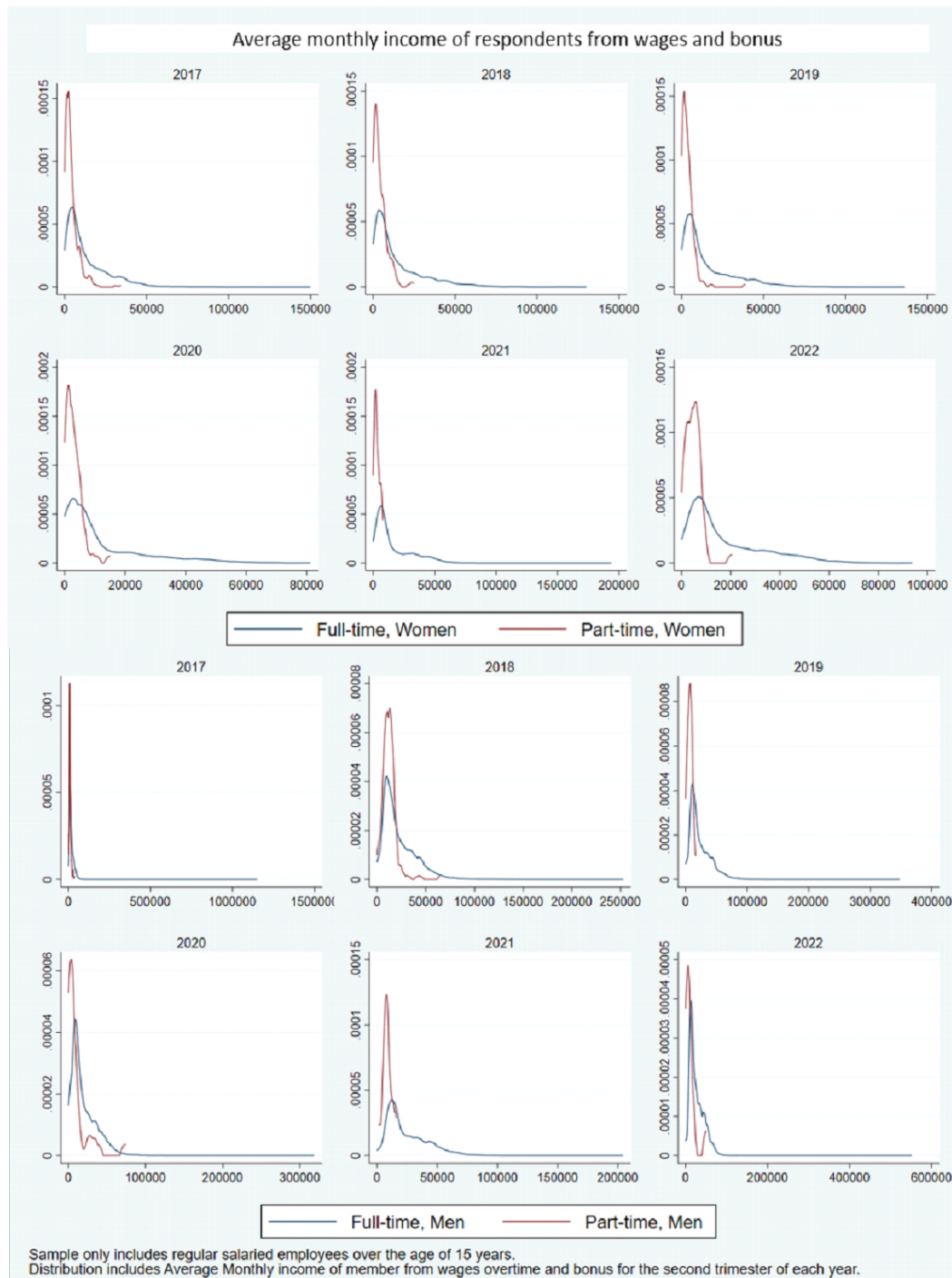


A summary of all calibrated values for the parameters appears in Table 2 below

Table 2: Calibrated Parameter Values

Parameters	Description	Values
$\rho$	Time discount factor	0.51025
$\lambda_m$	Job offers arrival probability for men	0.252
$\lambda_w$	Job offers arrival probability for women	0.074
$\tau_m$	Home production / Unpaid care time share for men	0.37
$\tau_w$	Home production / Unpaid care time share for women	0.62
$F(w_m)$	Density function for full-time job offers to men	Log Normal (0,1)
$F(w_w)$	Density function for full-time job offers to women	Log Normal (0,2)

Figure 4: Wage Offer Distribution for Salaried Jobs (age 15 years +); Source: PLFS



**Results:** Table 3 summarises the solution for the calculated reservation wages under the status quo scenario, i.e., a greater burden of unpaid care work on women and the absence of well-defined formal contracts regarding part-time employment.

Table 3: Calculated Reservation Wages (units) (Status quo)

Reservation Wage (Full-time Employment)	Calculated Value
$w_m^*$	1.73677
$w_w^*$	2.78401
$w_m^* - w_w^*$	- 1.04724

The calculated reservation wages represent the minimum wage at which a job-seeking agent will accept an offer. The equilibrium reservation wages derived from the model highlight gender disparities in labour force participation. As expected, the reservation wage for job-seeking women is higher than for men. The reservation wage for men  $w_m^*$ , is 1.73677 units and for women,  $w_w^*$  is 2.78401 units. The gender differential ( $w_m^* - w_w^*$ ) is thus negative. This gender disparity in the calculated reservation wage aligns well with the observed data, where women face higher opportunity costs of entering the workforce due to several factors discussed earlier. At a given labour demand, a higher reservation wage for women would result in fewer women than men working in equilibrium.

**Simulation:** In the policy simulation scenario, we assume that a formal framework on part-time employment exists, such that employers offer pro-rated part-time job contracts on par with those for full-time work compensation. This flexibility allows women to meet their time commitments to unpaid care work and other home production activities. We additionally assume that care work is equally distributed between both genders. To solve the model with these new assumptions, we make the following two changes to the calibrated parameters: (i) home production / unpaid care work time share is equalised between both genders ( $\tau_m = \tau_w = 0.37$ ), and (ii) part-time job offers to both men and women follow a standard normal distribution with parameters (0,1).

Table 4 below presents the results.

Table 4: Calculated Reservation Wages (units) - Simulation

Reservation Wage (Part-time Employment)	Calculated Value
$w_m^*$	35.4201
$w_w^{*unequal} (\tau_m = 0.37, \tau_w = 0.62)$	7.7564
$w_w^{*equal} (\tau_m = \tau_w = 0.37)$	3.9507
$w_m^* - w_m^{*unequal}$	+ 27.6637
$w_m^* - w_m^{*equal}$	+ 31.4694

We present two scenarios in Table 4 above. In the first scenario, women have the opportunity to work part-time but they continue to disproportionately carry the care and household work at home. Women’s opportunity to work part-time considerably reduces the reservation wage for women. It is interesting to note that even when the time burden of care disproportionately falls on women compared to men, a positive reservation wage differential persists, reflecting the fact that women would prefer to work part-time at a lower wage even as they continue to shoulder both employment and care responsibilities at home.

In the second scenario, women have the opportunity to work part-time and equally share the care and household burden with men. In this scenario, the reservation wage for women decreases further, and the positive reservation wage differential increases. These findings suggest that a formal framework of part-time employment with pro-rated wages and benefits have substantial positive implications for female labor force participation in India. In addition, if the care burden is equally shared, the positive wage differential would increase further and more women would seek employment.<sup>4</sup> In this scenario, female LFPR increases by 6 percentage points.

To better illustrate the relationship between reservation wages and actual labor force participation rates, we map the calculated reservation wages to the observed female LFPR in the data, generating a model-fit line. This analysis assumes that part-time job offers follow an exogenous standard normal distribution, as discussed earlier. Using annual job arrival probability values for women over the past four years (excluding the COVID-19 lockdown year), we solve the model to calculate the corresponding reservation wages. These values are then utilized to establish the desired relationship between reservation wages and female labor force participation rates.

Table 5 below summarizes the simulation results.

*Table 5: Model Simulation*

<b>Year</b>	$\lambda_w$	<b>Reservation Wage for Women (Model Calculated)</b>	<b>Female LFPR (%) (Observed Data)</b>
2022	0.0627	7.7564	37
2021	0.0463	7.6421	32.8
2020	0.043	7.5614	32.5
2019	0.045	7.59	30

The model-fit line is shown in Figure 5 below. Incorporating the additional assumption of equalized burden sharing of unpaid care work between genders, where  $\tau_m = \tau_w = 0.37$ , the calculated reservation wage for women is 3.9507 units. This corresponds to a participation rate of

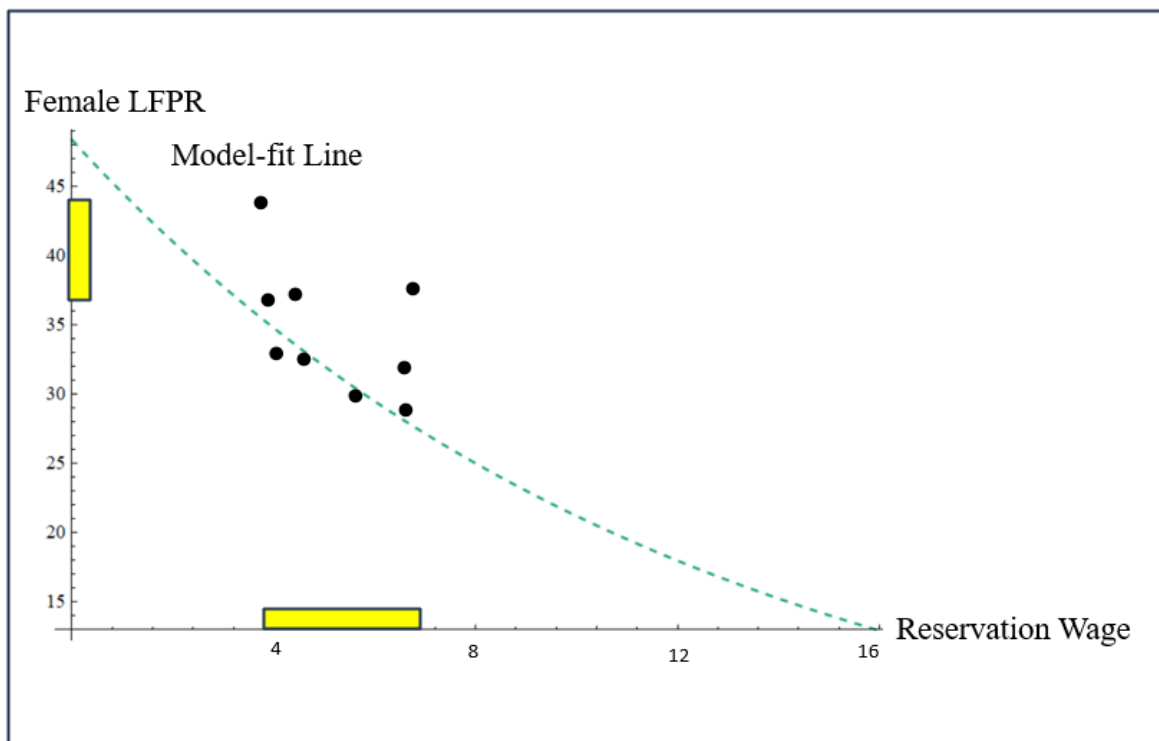
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<sup>4</sup> Note that the quantitative values of the simulated reservation wages of men and women cannot be directly compared with each other as they are derived from different distributions of wage offers.

43% based on the model-fit relationship. This adjustment results in a six-percentage-point improvement in the female labor force participation rate, i.e., raising from the current 37% to 43%.

Part-time employment reduces women’s time constraints, improves career prospects, and boosts labour demand. Structural reforms addressing gender disparities in unpaid care work and formalising part-time employment are crucial for unlocking women’s workforce potential in India. The proposed measures not only improve labour force participation but also foster broader socio-economic benefits, including enhanced economic productivity and gender equality. This study contributes to the ongoing discourse by quantifying these impacts, offering a roadmap for policymakers to bridge persistent gender gaps in India’s labour market.

Figure 5: Model-fit Line



## 5. Conclusion and Policy Recommendation

This paper examines the macroeconomic and labour market implications of gender equality in unpaid care work and the introduction of formal part-time employment measures. Formalising part-time work and combining it with investment in care infrastructure and changes in social attitudes, has the potential to significantly enhance women's participation in India's labour force, yielding broader macroeconomic benefits. Utilizing the McCall-Mortensen framework of a macroeconomic job search model and an associated simulation exercise, the study concludes that fostering a gender-equal labour market—where women are not disproportionately burdened with



home production and unpaid care work and are provided labour market access on equitable terms with men—could result in a marked improvement in female labour force participation. Furthermore, establishment of formal part-time employment frameworks with standardised norms for flexible work hours is expected to increase female labour force participation in the economy. With the additional assumption of equal burden sharing of care work between genders, the model predicts a six-percentage-point improvement in female LFPR compared to the current scenario.

The findings underscore the need for targeted policy interventions on formalising part-time employment. In addition, equal paid parental leave policies can play a pivotal role in balancing caregiving responsibilities between parents, fostering a more equitable distribution of care work. Increased public investment in affordable childcare and eldercare services would enhance access to essential care facilities, alleviating the burden on unpaid caregivers. Additionally, flexible workplace policies, such as remote work options and adjustable schedules, would support workers in managing professional and caregiving responsibilities more effectively. Tax incentives for shared caregiving practices could further encourage a more equitable division of care responsibilities among genders. Not least, social awareness campaigns to break cultural biases against women would also be needed.

## **Declarations**

**Funding:** No external funding was used for this study.

**Conflict of interest:** The authors declare that they have no conflict of interest.

**Disclaimer:** Views are personal.

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