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# Revisiting Decent Work in India: What Determines Employment Quality?

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## ABSTRACT

*India has witnessed robust economic growth and structural transformation over the past two decades. Nevertheless, the quality of employment remains a pressing concern. In this context, this paper examines employment quality in India across rural-urban locations using key dimensions from the International Labour Organization's Decent Work framework: employment opportunities, stability and security and social security. This paper also seeks to identify the probable factors that could influence employment quality. The analysis is based on two types of datasets published by the Government of India: (i) disaggregated individual/unit-level data for the year 2009–10, and (ii) aggregated data for the years 2018–19 and 2023–24. The main findings of the paper is that the individual-level factors, such as age, gender, social identities, etc., are significant in explaining the variations in the quality of employment at the micro-level. Intriguingly, at the macro-level, aspects such as increase in overall economic activities, growth in organised sector activity, better governance, and flexible business regulatory environment either have no significant role or negatively influence employment quality.*

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## I. INTRODUCTION

India's impressive economic growth trajectory and structural transformation over the past two decades have not translated into commensurate improvements in employment outcomes. While the economy has expanded consistently, employment growth has remained relatively modest, and a large share of new employment continues to be precarious, informal, and lack work-related securities. This phenomenon, often referred to as 'jobless growth,' has drawn considerable scholarly and policy attention (Basole et al., 2018; Kannan and Raveendran, 2012; Tejani, 2016). In recent years, although there have been modest improvements in employment, there has been an increase in self-employment, unpaid family labour and gig workers, indicating a deterioration in the condition of workers. (IHD and ILO, 2024)

In recent years, the quality of employment has become a central concern in discussions about labour market outcomes. The International Labour Organization's (ILO) Decent Work framework broadly covers the qualitative aspects of work/labour. It is built around four strategic pillars: rights at work, employment and income opportunities, social protection and social security, and social dialogue and tripartism (ILO, 2012). This framework is particularly relevant for a country like India, where high levels of informality, social and regional inequalities, and the rapid expansion of platform-based gig work pose significant challenges to securing decent employment.

While several studies have examined specific aspects of India's labour market, such as informality, wage disparities, or gender-based differences in access to work, there remains a lack of systematic, time-comparative analyses of employment quality across multiple dimensions (Belser and Rani, 2011; Bhalla, 2008; Bhaumik, 2013; IHD, 2014; Kantor et al., 2006; NCEUS, 2009; Papola, 2012; Papola and Sahu, 2012; Rao, 2011; Sakthivel and Joddar, 2006; Unni and Raveendran, 2007). While much of the literature highlights poor employment outcomes, relatively few studies investigate the underlying individual and structural level factors associated with these patterns.

This paper seeks to understand employment quality in India through a two-pronged analytical strategy. First, it examines broad trends in employment quality using the crucial indicators of decent work, across 2009-10, 2018-19, and 2023-24. Next, we wish to identify the probable determinants that could influence employment quality, considering both individual-level characteristics and state-level development attributes.

By adopting this descriptive and exploratory approach, the paper aims to address critical gaps in the literature. It offers insights into how employment quality has evolved over time and across rural-urban locations, and which factors are most strongly associated with improved or deteriorated work conditions. In doing so, it also highlights emerging concerns, such as the informalization of formal jobs and the growth of platform-mediated work, which pose new challenges for employment security, legal recognition, and social protection.

The paper is organized as follows: Section 2 outlines the conceptual and methodological framework, drawing on the ILO's Decent Work agenda. The next two sections provide a descriptive analysis of employment quality trends and discussion of these findings. Section 5 explores the probable determinants of employment quality through confirmatory analysis. Finally, the last section presents the conclusion along with policy implications.

## II. METHODOLOGY

As mentioned above, this study adopts a multidimensional approach to assess the quality of employment in India, drawing upon the Decent Work framework proposed by the International Labour Organization (ILO). Three crucial dimensions of decent work are used for our analysis-'employment opportunity', 'stability and security of work' and coverage of 'social security'. These dimensions are also closely related to global development agendas. In particular, they correspond to Sustainable Development Goal (SDG) 8, which promotes sustained, inclusive, and decent work for all, as well as SDG 1, which focuses on expanding social protection.

For each of these dimensions, appropriate indicators have been selected based on ILO guidelines and the availability of relevant data in the Indian context. Proxy variables were constructed accordingly. Table 1 outlines the key dimensions of employment quality, the indicators adopted, and the variables used in the analysis.

Table 1: Key dimensions and variables used in the study

| Sl. No. | Dimension (ILO) | Indicator (ILO) | Category | Variable used in analysis |
|---|---|---|---|---|
| 1 | Employment Opportunities | Employment-to-population ratio | Workforce participation | Workforce Participation Rate (WPR) |
| | | Unemployment rate | Unemployment | Unemployment Rate (UR) |
| | | Employment by status | Type of employment (self-employed, casual, regular) | Share (%) of self-employed, casual, and regular salaried/wage workers among all employed persons |
| 2 | Stability and Security of Work | Precarious employment | Job contract | Share (%) of regular salaried/wage workers with written job contracts out of total regular workers |
| 3 | Social Security | Coverage by pension and social protection schemes | Social security entitlements | Share (%) of regular salaried/wage workers eligible for social security benefits (e.g. PF, pension, gratuity, maternity benefits) out of total regular workers |

Source: ILO (2012) table no-A: 16-17.

Employment opportunity is captured through the workforce participation rate (WPR), unemployment rate (UR), and distribution of employment status (self-employed, casual, and regular wage/salaried). Stability and security is proxied by the presence of written job contracts among regular wage/salaried workers. Social security coverage is assessed by examining the share of regular wage/salaried workers eligible for benefits such as provident fund, pension, gratuity, maternity entitlements, etc.

The study is based on the data published by National Sample Survey Office (NSSO), Government of India for three years 2009-10, 2018-19, and 2023-24. At first, we examine the quality of employment and its trends over time. Next, we try to find out the probable determinants that could influence employment quality. For this purpose, we rely on unit-level (individual-level) data from 2009-10. This period was selected as it reflects a phase of relatively high economic growth, providing a useful benchmark for understanding structural drivers of employment quality without short-term external shocks. In contrast, data from 2018-19 and 2023-24 reflect labour market outcomes under conditions of economic slowdown and pandemic-related disruptions, and are used primarily for trend comparison and descriptive interpretation.

To examine the probable determinants of employment quality, the individual-level data of 2009-10, for fifteen major states within the working-age group 15-64 years have been used. The total number of working-age persons in our sample is 2,76,002 (1,71,002 in rural and 1,05,020 in urban areas). We have used the usual status data for all. The binomial and multinomial logistic regressions are applied to find out the probable determinants of the extent and variations of quality of employment (given in detail in section V). To find out the probable determinants of employment quality, different secondary sources has been used, such as the Annual Survey of Industries (ASI) by the Central Statistics Office (CSO), Planning Commission/NITI Aayog reports, the Population Census, and Governance quality indices from the Public Affairs Centre.

## III. DESCRIPTIVE TRENDS IN EMPLOYMENT QUALITY

A. Employment opportunities: Employment opportunities in India have undergone significant shifts over the past decade and a half, shaped by broader economic transitions,

policy reforms, and demographic pressures. Almost about half of the population (15 years and above) were working in India in 2009-10 (refer to Table 2). Although the participation rate had declined in 2018-19, it shows a clear upward trend in the most recent period. This recovery is more pronounced in rural areas, indicating a post-pandemic resurgence in labour market activity in rural areas.

Unemployment trends further reflect these labour market dynamics. With a sharp rise in 2018-19, the rates declined in 2023-24, particularly in rural areas (see Table 3). However, this could be largely distress-driven, as Covid-19 pandemic led to huge reverse migration pushing the workers into low-paid informal activities.

Moreover, this pattern is evident from the composition of employment. The workforce remains overwhelmingly dominated by self-employment (see Table 4). In rural areas, the share of self-employed workers has increased over time, reflecting either entrepreneurial activity or an increase in informal and low-productivity work. Urban areas, though initially showing a decline, also saw a rise in self-employment in the most recent year, an indication of the growing precarity even in non-agricultural labour markets. Meanwhile, the share of regular wage and salaried workers – often seen as the most secure and desirable form of employment – has shown only modest gains over time and has slightly declined in the latest period. This trend is particularly concerning in rural areas, where the scope of regular jobs is very limited. In contrast, casual labour has declined, especially in rural regions. While this appears positive, the simultaneous rise in self-employment suggests a potential substitution rather than a structural improvement in job quality.

[1] Assam, Gujarat, Haryana, Kerala, Karnataka, Maharashtra, Orissa, Punjab, Rajasthan, Tamil Nadu, West Bengal, Andhra Pradesh (including Telangana), Bihar (including Jharkhand), Madhya Pradesh (Chattisgarh) and Uttar Pradesh (Uttarakhand).

[2] The activity status (principal + subsidiary) on which a person spent a relatively long time during the 365 days preceding the date of the survey is considered as usual principal activity, and those who were engaged not less than 30 days during the reference year is considered as the usual subsidiary activity (NSSO 2011).

Table 2: Workforce participation rate in India

| | | 2009-10 | 2018-19 | 2023-24 |
|---|---|---|---|---|
| Locations (15 years & above) | Rural | 59.5 | 48.9 | 62.1 |
| | Urban | 47.2 | 43.9 | 49.4 |
| | Total | 54.7 | 47.3 | 58.2 |

Source: NSSO (2011, p. 122-126), (NSO 2020, p. 50), NSSO (2024, p. 10)

Table 3: Unemployment rate in India

| | | 2009-10 | 2018-19 | 2023-24 |
|---|---|---|---|---|
| Locations | Rural | 1.6 | 5 | 2.5 |
| | Urban | 3.4 | 7.7 | 5.1 |
| | Total | | 5.8 | 3.2 |

Source: NSSO (2011, p.166-167), NSSO (2024, p.viii)

Table 4: Percentage of workers in usual status (ps+ss) by employment category in India

| | | 2009-10 | 2018-19 | 2023-24 |
|---|---|---|---|---|
| Rural | Self-employed | 54.2 | 58 | 64.7 |
| | Regular wage/salaried | 7.3 | 13.4 | 12.7 |
| | Casual workers | 38.6 | 28.6 | 22.5 |
| Urban | Self-employed | 41.1 | 37.8 | 40.4 |
| | Regular wage/salaried | 41.4 | 48.7 | 47.5 |
| | Casual workers | 17.5 | 13.5 | 12.1 |
| Total | Self-employed | | 52.1 | 58.4 |
| | Regular wage/salaried | | 23.8 | 21.7 |
| | Casual workers | | 24.1 | 19.8 |

Source: NSSO (2011, p.129-131), NSO (2020, p.53), NSSO (2024, p.13)

B. Stability & security of work: Job stability remains a key concern in India's labour market, even among regular wage and salaried workers who are typically seen as having better employment conditions (refer to Table 5). Although the share of regular workers having written contracts has increased modestly over time, a large share of workers are deprived of job contracts.

C. Social security: The limited coverage of social security benefits further highlights the poor quality of employment in the country. About half of the regular non-farm workers still lack access to benefits such as provident fund, pension, or health insurance (see Table 5). What is more concerning is the decline in social security coverage in 2023-24 compared to 2018-19, despite policy emphasis on expanding welfare provisions. This suggests a disconnect between employment growth and improvements in job quality.

Although workforce participation rates were higher in rural than urban areas, the majority of workers in rural areas were self-employed or

engaged in casual work compared to their urban counterparts. Moreover, the disparity between rural and urban regular workers is widening with respect to both written work agreements and access to social security benefits.

Table 5: Percentage of regular workers with written job agreements/contracts and coverage of social security in the non-farm sector in India

| Locations | Indicators | Written job contracts | | | Social Security Benefits | | |
|---|---|---|---|---|---|---|---|
| | | 2009-10 | 2018-19 | 2023-24 | 2009-10 | 2018-19 | 2023-24 |
| | Rural | 39.6 | 32.2 | 38.9 | 42.7 | 44.1 | 41.2 |
| | Urban | 35 | 29.5 | 44.3 | 47.1 | 50.6 | 50.6 |
| | Total | 36.5 | 30.5 | 42 | 45.6 | 48.1 | 46.6 |

Source: NSSO (2012, p. 70), NSO (2020, p. 58), NSSO (2024, p.17)

## IV. DISCUSSION

In this section, we try to provide some explanations in support of the above findings. In doing so, we aim to identify some probable factors that may affect the quality of employment in India. Further, these factors will be taken up as explanatory variables in explaining the variation in quality of employment in India in the next section, where we go for regression analysis.

The earlier findings reveal that although workforce participation has improved in recent years, particularly in rural areas, the overall quality of employment remains poor. A majority of workers continue to be engaged in self-employment or casual labour. Most disturbingly, even among regular wage and salaried workers, access to job contracts and social security remains limited. What is more concerning is that improvements in employment quantity are not matched by similar progress in employment stability or protection.

One of the fundamental reasons for poor employment quality in India is the lack of scope for formal employment (be it in the formal sector or informal sector). This is because, even in the formal sector, the overwhelming majority of the workers remain dependent on casual work. Only a small fraction of the labour force is engaged as regular workers with access to work-related securities. The remaining large segment of the labour force that the formal sector could not absorb is pushed to the informal sector (both agricultural and non-agricultural). Within the informal sector, there is a huge section involved in self-employment-based activities, i.e. own account enterprises which tend to operate at low levels of productivity and earnings. The high incidence of self-employment and the decline in casual work may suggest a shift in employment type, but not necessarily an improvement in job quality. In many cases, self-employment acts as a fallback option in the absence of formal wage employment. These jobs often do not offer written contracts, social security, or legal protections, further contributing to the precarity of the workforce.

The poor working conditions in rural areas is mainly because the rural labour force is largely dependent on the under-remunerative agricultural activities for its livelihood (due to the low entry barrier), where the scope for quality employment is absent. The increase in employment in rural areas in recent years after Covid-19 pandemic is largely distress-driven, that they had no other option than to work any type of work (low income) for their livelihood.

The limited access to written job contracts and social security benefits, even among regular wage workers, suggests that informality has become deeply embedded in the structure of employment across both rural and urban areas. This informalization is not restricted to marginal sectors but is increasingly visible in segments traditionally considered part of the formal economy.

From a policy perspective, these patterns must also be seen in the context of India's shift towards a more liberalised and business-oriented regulatory environment. The mainstream argument is that to promote efficiency in production and distribution, there should not be much of restrictions on the mobility of factors of production. To make the factors of production mobile, entry and exit barriers should be minimised and "Ease of doing business' should be promoted. Thus, this mainstream argument proposes that as the markets are liberalised and capital is given the freedom to do business as per efficiency norms, not only growth will be ensured, but also there will be social welfare. However, critics argue that as the capitalists are given the freedom to do business, they have an inherent tendency to informalise some parts of their production chain to reduce their input costs (Chen 2007; Heintz and Pollin 2003). This informalization undermines labour protections, formal job creation, wage improvements, social security expansion, etc.

Thus, from the above discussions, we see that the persistence and spread of informality is one of the primary causes of poor employment quality in India. In addition, government policies, in terms of the business regulatory environment and labour regulations, might also influence employment quality. Hence, we try to find out the probable determinants of employment quality simultaneously using both the micro (such as age, gender, education, social identities, etc.) and macro-level factors (such as economic progress, growth in organised sector activity, quality of governance, better business regulatory environment and labour related compliance).

(Given in detail below in the next section)

[3]Own-account enterprise (OAE): An enterprise is considered self-employed if it is operated without the engagement of any hired workers on a fairly regular basis (NSSO 2011,15).

## V. PROBABLE DETERMINANTS OF QUALITY OF EMPLOYMENT IN INDIA

First, we select three specific proxy variables for the three dimensions and try to find out their probable determinants. We design a dichotomous variable: "an individual is employed or not", as a proxy for "employment opportunity". The is represented by a variable "a worker is having written job contracts or not". "Next, we identify another variable: "a worker is eligible for social security benefits or not" for capturing "social security" coverage. In addition, we also use social dialogue as the fourth dimension of decent work, recognising its critical role in ensuring workers' representation, negotiating power, and voice in labour relations, as emphasised in the ILO's Decent Work framework. So, finally, we take "a worker is a member of a union or not" representing "social dialogue". We introduce a binomial logistic regression model to see the probable effects of the relevant factors on these dichotomous variables.

Furthermore, for a deeper analysis, we take up the most crucial dimension – employment opportunity – and create a trichotomous variable on the nature of employment across the following categories: an individual is – (a) employed in an unorganised/informal sector, (b) employed in an organised/formal sector as an informal worker, (c) employed in an organised/formal sector as a formal worker. A multinomial logistic regression model is used to find out the probable factors explaining an individual's ability/inability to attain one of these three options.

As mentioned above in the methodology section, we use 2009-10 individual level data sets for the confirmatory analysis.

[4]The data on 'social dialogue' is not available in the PLFS data (i.e. for 2018-19 and 2023-24), so it is not included in the descriptive statistics section

[5]Most of the Indian literature uses the terms 'informal sector' and 'unorganised sector' synonymously because following the Indian definitions, there is very little difference between these two terms 'Informal Sector' and' Unorganised Sector'. According to NSSO, the Unorganised Sector includes all unincorporated proprietary and partnership enterprises (i.e. informal sector enterprises) plus enterprises run by co-operative societies, trusts, private and public limited companies(not included as factory under -Annual Survey of Industries as per Factories Act, 1948 of India). So, in this paper, we have used the terms informal sector and unorganised sector, interchangeably.

[6]For the organised sector, we have taken into account the Government/public sector enterprises. Furthermore, coverage of social security benefits among the workers is taken as a criterion to differentiate between the formal and informal workers within the organised sector, such that workers without social security benefits are considered to be informal workers within the formal sector.

The regression models used are given in the boxes below (Box 1 and 2).

Box 1: The binomial logistic regression models

Equation 1:

$$Y_{1i}= \alpha+ \beta_1X_{1i}+ \beta_2X_{2i}+ \beta_3X_{3i}+ \beta_4X_{4i}+ \beta_5X_{5i}+ \beta_6X_{6i}+ \beta_7X_{9i}+ \beta_8D_{1i}+ \beta_9D_{2i}+ \beta_{10}D_{3i}+\beta_{11}D_{12i} + \beta_{12}D_{13i}+ \beta_{13}D_{14i}+ \beta_{14}D_{15i}+ \beta_{15}D_{16i}+ \beta_{16}D_{17i}+\mu_i$$

Equation 2:

$$Y_{2i} = \alpha+ \beta_1X_{1i}+\beta_2X_{2i}+\beta_3X_{3i}+ \beta_4X_{4i}+ \beta_5X_{5i}+ \beta_6X_{7i}+ \beta_7X_{9i}+\beta_8D_{1i}+ \beta_9D_{2i}+ \beta_{10}D_{3i}+ \beta_{11}D_{4i} +\beta_{12}D_{5i}+ \beta_{13}D_{6i}+ \beta_{14}D_{7i}+ \beta_{15}D_{8i}+ \beta_{16}D_{9i}+ \beta_{17}D_{11i}+ \beta_{18}D_{12i}+ \beta_{19}D_{13i}+ \beta_{20}D_{14i}+ \beta_{21}D_{15i} +\beta_{22}D_{16i}+ \beta_{23}D_{17i}+\mu_i$$

Equation 3:

$$Y_{3i} = \alpha+ \beta_1X_{1i}+\beta_2X_{2i}+\beta_3X_{3i}+ \beta_4X_{4i}+ \beta_5X_{5i}+ \beta_6X_{8i}+ \beta_7X_{9i}+\beta_8D_{1i}+ \beta_9D_{2i}+ \beta_{10}D_{3i}+\beta_{11}D_{4i} +\beta_{12}D_{5i}+ \beta_{13}D_{6i}+ \beta_{14}D_{7i}+ \beta_{15}D_{8i}+\beta_{16}D_{10i}+ \beta_{17}D_{11i}+ \beta_{18}D_{12i}+ \beta_{19}D_{13i}+ \beta_{20}D_{14i}+ \beta_{21}D_{15i} +\beta_{22}D_{16i}+ \beta_{23}D_{17i}+\mu_i$$

where i=1,2,3.....n

Box 2: The multinomial logistic regression model

Equation 4:

$$Y_{4i} = \alpha + \beta_1 X_{1i} + \beta_2 X_{2i} + \beta_3 X_{3i} + \beta_4 X_{4i} + \beta_5 X_{5i} + \beta_6 X_{6i} + \beta_7 X_{9i} + \beta_8 D_{1i} + \beta_9 D_{2i} + \beta_{10} D_{3i} + \beta_{11} D_{12i} + \beta_{12} D_{13i} + \beta_{13} D_{14i} + \beta_{14} D_{15i} + \beta_{15} D_{16i} + \beta_{16} D_{17i} + \mu_{ii}$$

where i=1,2,3.....n

The details of the variables (both quantitative and qualitative), the explanation for considering these variables and the expected sign of the regression coefficients are given below in Table 6. The mean and standard deviation of the quantitative variables are presented in Table 1A

Table 6: Details of the variables, explanations for considering these variables and expected signs of the regression coefficients[1]

| Block no | Sl no | Variable name | Details of variables | Explanation for considering the variables | Expected signs |
|---|---|---|---|---|---|
| 1 | | | Regressands | | |
| | 1 | $Y_{1i}$ | An $i^{th}$ individual is employed or not | as mentioned before at the beginning of this section (first paragraph) | NA |
| | 2 | $Y_{2i}$ | An $i^{th}$ worker is eligible for social security benefits or not | | |
| | 3 | $Y_{3i}$ | An $i^{th}$ worker is a member of a union or not | | |
| | 4 | $Y_{4i}$ | An $i^{th}$ individual is employed in the informal sector, or, employed in the formal sector as an informal worker, or employed in the formal sector as a formal worker | | |
| 2 | | | Regressors | | |
| | | | Individual-level quantitative variables | | |
| | 5 | $X_{1i}$ | Age of the $i^{th}$ individual in years | with an increase in age, an individual is supposed to gain experience, which may improve employment quality | + |
| | 6 | $X_{2i}$ | Level of education of the $i^{th}$ individual in years | education is a means to self-development; as the educational level of an individual rises, opportunities for quality employment may also increase | + |
| 3 | | | macro-level quantitative variables (at the sub-national state level) | | |
| | 7 | $X_{3i}$ | Net State(sub-national) domestic Product (NSDP) per capita (in rupees)- a proxy for macroeconomic activities | a proxy for the general strength of the macroeconomy needed to generate quality jobs | + |

[7] Following literature (Jonasson, 2012; Moktan and Chakrabarti, 2024), and our above analysis.

| | | | | | |
|---|---|---|---|---|---|
| | 8 | $X_{4i}$ | Gross Value Added (GVA) of the organised sector (manufacturing and service) (in rupees) as a share of NSDP (in rupees)- a proxy for organised sector activities | share of organised sector in the macroeconomy needed for a quality job in the formal sector | + |
| | 9 | $X_{5i}$ | Public Affairs Index[2] | better governance in terms of social and physical infrastructure, and a free and fair socio-economic environment, could induce employment quality through both demand and supply side support | + |
| | 10 | $X_{6i}$ | Workforce participation rate | overall employment opportunity at the state level should influence the individual level as well | + |
| | 11 | $X_{7i}$ | Share of workers eligible for social security benefits | the general condition of social security benefits at the state level should have a bearing at the individual level as well | + |
| | 12 | $X_{8i}$ | Share of workers having unions/associations in their activity | existence of unions/associations at the state level may give greater scope to an individual to join a union | + |
| | 13 | $X_{9i}$ | Population size | size of the population, especially beyond a maximum threshold level, may lead to congestion and hence a drag on the quality of employment | - |
| | Individual-level qualitative variables | | | | |
| 4 | 14 | $D_{1i}$ | Dummy for gender of $i^{th}$ individual: if male=1,otherwise (i.e. female) =0 | males compared to females can have better employment opportunities given the social and economic environment | + |
| | 15 | $D_{2i}$ | Dummy for vocational training of $i^{th}$ individual (e.g. carpentry, sewing, fitter etc.): if trained=1,otherwise=0 | Although employment opportunities might be higher for individuals with such training in comparison to non-trained individuals, these types of skills usually give rise to informal employment, resulting in poor employment quality | - |

[8]Public affairs index is developed by Public Affairs Centre, Bangalore, India (2017, 28) to measure the quality of Governance of Indian states, by taking ten broad themes, such as essential infrastructure, support to human development, social protection, support to women and children, crime, law and order, delivery of justice, natural environment, transparency and accountability of the Government, fiscal management and economic freedom. Based on these ten broad themes, scores are given to each state.(see Table 2A)

| | | | | | |
|---|---|---|---|---|---|
| | 16 | $D_{3i}$ | Dummy for technical education of $i^{th}$ individual (e.g. technical degree in agriculture, engineering etc.):<br><br>If technically educated=1, otherwise=0 | individuals with technical education may get better employment opportunities than others | + |
| | 17 | $D_{4i}$ | Dummy for establishment size where $i^{th}$ individual is working:<br>if enterprise is running with more than 10 workers=1,otherwise=0 | Workers in big-size establishments may have better employment conditions, particularly in terms of the strength of their voice. | + |
| | 18 | $D_{5i}$ | Type I dummy for enterprise where $i^{th}$ individual is working:<br>if working in government/public sector=1,otherwise (i.e. proprietary, partnership, employer household, co-operative societies/ trusts/non-profit institutions, public/private limited company)=0; | individuals working in the government/public sector, public/private limited companies can have quality employment than others | + |
| | 19 | $D_{6i}$ | Type II dummy for enterprise where $i^{th}$ individual is working:<br>if working in public/private limited company =1,otherwise=0 | | |
| | 20 | $D_{7i}$ | Type I dummy for the sector in rural areas where $i^{th}$ individual is working (*for regression equations 3 and 5*):<br>if working in secondary and tertiary sector=1,otherwise=0 | workers in the secondary and tertiary sector can have better quality employment than those engaged in the primary sector which is mainly dominated by agriculture | + |
| | 21 | $D_{8i}$ | Type II dummy for sector in urban areas, where $i^{th}$ individual is working (*for regression equations 4 and 6*):<br>if in tertiary sector=1,otherwise (in secondary sector)=0 | the service sector is the largest and fastest growing sector in India and has the highest labour productivity[3], which may have a bearing on the quality of employment compared to other sectors | + |
| | 22 | $D_{9i}$ | Type I dummy for category of work of $i^{th}$ individual(*for regression equations 3-4*):<br>regular salaried/wage workers=1, otherwise (casual workers)=0 | regular workers have more privileges than casual workers in terms of work-related securities, such as social security benefits, stability of work etc. | + |
| | 23 | $D_{10i}$ | Type II dummy for category of work of $i^{th}$ individual (*for regression equations 5-6*):<br>regular salaried/wage workers and self-employed=1,otherwise=0 | quality of employment in terms of unionization may be higher among<br>regular workers and self-employed than casual workers | + |

[9]Mukherjee (2013, 3-5)

| | | | | | |
|---|---|---|---|---|---|
| | 24 | $D_{11i}$ | Dummy for work status of $i^{th}$ individual: full-time=1,otherwise=0 | full-time workers can have better employment quality than part-time | + |
| | 25 | $D_{12i}$ | Dummy for social-group of $i^{th}$ individual: if Upper caste=1, SCs,STs and OBCs=0 | Upper caste in comparison to the marginalised can have better employment opportunity given the social and economic environment | + |
| | 26 | $D_{13i}$ | Dummy for religion of $i^{th}$ individual: if hindus=1,otherwise=0 | hindus in comparison to other religions may have better employment opportunity given the social environment | + |
| | macro-level qualitative variables (at the sub-national state-level) | | | | |
| 5 | 27 | $D_{14i}$ | Type I dummy for overall business regulatory environment[4]: if business regulatory environment is good=1, otherwise (i.e. medium and inferior)=0 | this may improve quality of employment through demand and supply side inducements, as a better regulatory environment is supposed to induce formal business | + |
| | 28 | $D_{15i}$ | Type II dummy for the overall business regulatory environment: if business regulatory environment is medium=1, otherwise (good and inferior)=0 | | |
| | 29 | $D_{16i}$ | Type I dummy for labour law related compliance[5]: if labour law related compliance is good=1, otherwise (i.e. medium and inferior)=0 | obviously, for work-site protections and social security benefits for the workers too, maintenance of labour law is extremely essential | + |
| | 30 | $D_{17i}$ | Type II dummy for labour law related compliance: if labour law related compliance is medium=1, otherwise (i.e. good and inferior)=0 | | |

[10]The business regulatory environment for manufacturing units has been assessed at the sub-national state-level by the Planning commission, Government of India (2014,7), taking six parameters - (i) finance & tax related compliances, (ii) labour law related compliances, (iii) infrastructure & utility related approvals, (iv) land & building related approvals, (v) environmental clearances and (vi) other business regulatory compliances. (see Table 2A)

[11]As mentioned in footnote 10, the labour law related compliance is one of the parameters taken to access the business regulatory environment for manufacturing units by the Planning Commission, Government of India (2014, 34), which covers the following: (a) time taken and effectiveness of the process for initial registration by manufacturing units under Factories Act for obtaining factory license and subsequent renewal; (b) time taken and effectiveness of the process for compliance related to other Labour Laws like Contract Labour (Regulation & Abolition) Act, Payment of Wages Act, etc. applicable in respective states.

A. Binomial logistic regression results: The regression results (1 to 6) given in Table 7 show that the individual-level factors, which are supposed to influence the quality of employment in India, are mostly in line with our expectations. However, contrary to our expectations, the level of education has a negative impact on employment opportunities, though it has a significant positive influence on social security and social dialogue. The underlying reason could be the dominance of low-quality employment, mostly in the agriculture and informal sector (as mentioned above). So, majorly individuals with little or no education are employed, while those with a higher level of education may prefer to remain unemployed or even withdraw from the labour market (especially women), than being engaged in inferior non-remunerative works with low work-related securities.This result is in support of the literature (Bairagya 2018).

As far as the macro-level factors are concerned, the results seem to be disturbing:

- The increase in the overall macroeconomic activities, has a significant negative influence on the employment opportunity, while having no significant impact on stability and security of work (in both rural-urban areas), social security (in both areas) and social dialogue (in urban areas).
- Although the expansion of the organised sector has a significant positive influence on employment opportunity (in both rural-urban areas), stability and security of work (in urban areas) and social dialogue (in rural areas), it either has no significant impact or even negatively influences social security (in urban areas).
- Besides, quality of governance either has no significant role or negatively influences employment opportunities (in urban areas), stability and security of work, social security and social dialogue (in general).
- The overall business regulatory environment either has no significant role or negatively influences employment opportunities (in urban areas), social security and social dialogue (in general).
- Furthermore, better labour law related compliance also has a significant negative impact on stability and security of work, social security and social dialogue (in urban areas), though it positively influences employment opportunities.

These results (a to d) on macro-level factors might suggest that:

- Economic growth alone is not sufficient to improve the quality of employment. Separate institutional intervention is essential to ensure employment quality.
- Expansion of the organised sector spreads informality – different types of contractual jobs – more than the spread of formal jobs. Hence, the expansion of the organised sector adversely affects the overall standard of social security.
- The government policies perhaps are favouring the big corporate houses, presumably for enhancing economic growth (as mentioned above). Capitalists driven by accumulation motive use capital-intensive technologies and are in favour of labour flexibility. Consequently, this reduces demand for labour, adversely affects the overall work environment and also weakens the voice of workers, leading to a lack of quality of employment.

Table 7: The binary logistic regression estimates

| Dependent Variables | Employment opportunity ($Y_{2i}$) | | Stability and security ($Y_{3i}$) | | Social Security ($Y_{4i}$) | | Social dialogue ($Y_{5i}$) | |
|---|---|---|---|---|---|---|---|---|
| | Reg. 1 | Reg. 2 | Reg. 3 | Reg. 4 | Reg. 5 | Reg. 6 | Reg. 7 | Reg. 8 |
| | Rural | Urban | Rural | Urban | Rural | Urban | Rural | Urban |
| No of observations | 96823 | 52887 | 21217 | 23789 | 21195 | 23149 | 10054 | 12528 |
| Pseudo R2 | 0.27 | 0.23 | 0.47 | 0.37 | 0.58 | 0.58 | 0.11 | 0.09 |
| Independent variables | | | | | | | | |
| age ($X_{1i}$) | 0.16*** | 0.16*** | 0.02*** | 0.02*** | 0.07*** | 0.05*** | 0.02*** | 0.03*** |
| gender ($D_{1i}$) | 0.63*** | 0.88*** | -0.54*** | -0.10** | 0.36*** | 0.11 | 0.66*** | 0.60*** |
| levels of education($X_{2i}$) | -0.332*** | -0.24*** | 0 .14*** | 0 .14*** | 0.19*** | 0.22*** | 0.05*** | 0.07*** |
| vocational training ($D_{2i}$) | 0.07 | 0.18*** | -0.12 | -0.14** | -0.15* | -0.14** | -0.09 | 0.05 |
| technical education ($D_{3i}$) | -0.79*** | -0.17** | 0 .07 | 0 .28*** | 0.135 | 0.53*** | 0.04 | 0.01 |
| establishment size ($D_{4i}$) | | | 0.48*** | 0.47*** | 1.03*** | 1.28*** | 0.14** | 0.17** |
| type I enterprise ($D_{5i}$) | | | 2.27*** | 1.95*** | 2.35*** | 3.01*** | 0.93*** | 0.63*** |
| type II enterprise ($D_{6i}$) | | | 1.15*** | 1.08*** | 1.01*** | 1.16*** | 0.08 | 0.29*** |
| type I sector ($D_{7i}$) | | | -0.64*** | | 0.42** | | -0.01 | |
| type II sector ($D_{8i}$) | | | | -0.28** | | -0.05 | | -0.28*** |
| type I category of work ($D_{9i}$) | | | 2.07*** | 1.82** | 2.43*** | 2.43*** | | |
| type II category of work ($D_{10i}$) | | | | | | | 0.69*** | 0.39*** |
| work status ($D_{11i}$) | | | 0.25 | 0.55*** | 0.97** | 1.79*** | 0.56** | 0.73** |
| social-group ($D_{12i}$) | -0.12** | 0.44 | 0.06 | 0.01 | -0.01 | 0.16** | 0.18*** | 0.13** |
| religion ($D_{13i}$) | 0.27*** | 0.003 | 0 .090 | 0.19*** | 0.23*** | 0.08 | 0.17** | 0.14** |
| NSDP_per capita($X_{3i}$) | -0.000 04*** | -0.000 01*** | -5.95 | -4.50 | 3.17 | 3.59 | .00002 *** | 2.93 |
| GVA in organised sector/NSDP ($X_{4i}$) | 11.26*** | 5.40*** | -0.209 | 3.56*** | -1.54 | -2.49** | 4.85** | 0.01 |
| public affairs index ($X_{5i}$) | 4.28*** | 1.75 | -2.53*** | -2.65*** | 1.12 | 0.945 | -8.17*** | -1.61 |
| type I overall business regulatory environment ($D_{14i}$) | 0.66*** | 0.15 | 0.67*** | 0.43*** | -0.36** | -0.07 | -0.65*** | -0.30*** |
| type II overall business regulatory environment ($D_{15i}$) | 0.72*** | 0.14 | 0 .83*** | 0 .61*** | -0.37*** | 0.05 | -0.73*** | -0.29** |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **type I labour law related compliance ($D_{16i}$)** | 0.25*** | 0.22*** | -0.37*** | -0.33*** | -0.06 | -0.15** | 0.45*** | -0.04 |
| **type II labour law related compliance ($D_{17i}$)** | -1.15*** | -0.54*** | -0.79*** | -0.331*** | 0.03 | 0.17 | 1.13*** | 0.85*** |
| **workforce participation rate ($X_{6i}$)** | 0.06*** | 0.07*** | | | | | | |
| **stability and security ($X_{7i}$)** | | | 0.02*** | 0.01** | | | | |
| **social security benefits ($X_{8i}$)** | | | | | 0.02*** | 0.03 | | |
| **unions/associations in activity($X_{9i}$)** | | | | | | | 0.03*** | 0.004 |
| **Population size($X_{10i}$)** | -2.31*** | 2.30*** | 1.81** | -2.81*** | -1.74 | -2.97 | -2.32 | 2.14 |
| **constant** | -11.49*** | -7.80*** | -1.97* | -9.05*** | -9.54*** | -8.93** | -3.48** | -1.85 |

Note: *, ** and *** imply significance at 1, 5 and 10 per cent levels, respectively

B. Multinomial logistic regression results: Table 8, presenting our regressions (7 to 8), illustrates almost similar results to that of binomial logistic estimates for both individual and macro-level factors. As such, most of the individual-level factors that affect the quality of employment are in line with our expectations. However, exceptionally, females than males, and the marginalised than the other categories, are more likely to be employed in the organised sector – both as a formal and informal workers – than being employed in the unorganised sector. As far as males being engaged mainly in the unorganised sector is concerned, this could be because, traditionally, they are considered as the main income provider of the family, so they might have no other options than to join the unorganised sector if not employed in the organised sector. While females, in the absence of quality jobs, might opt out of labour market participation and engage in domestic economies (Naidu and Ossome, 2018). Additionally, educated SC-STs might be getting employment opportunities in the organised sector due to the existing reservation (quota) policy in India.

C. On the other hand, macro-level factors show different results than our expectations (as in the case of binomial logit regressions). Most disturbingly, the results indicate that with improvement in 'economic activities', 'good governance', 'better business regulatory environment' and 'labour law related compliance', employment in the organised sector, particularly formal employment, is likely to be affected adversely, in comparison to employment in the unorganised sector.

[12] Support for our explanation could also be found in Naidu and Ossome (2018).

[13] Our empirical results based on unit-level data are also supported by the following anecdotal evidence on Indian states: the economically developed states such as Gujarat, Tamil Nadu etc., which also ranks higher in terms of quality of governance and better regulatory environment (Table 2A), have a low quality of employment both in terms of coverage of social security and scope for social dialogue. More strikingly, this is true for the regular workers who are assumed to be the most privileged.

Table 8: The multinomial logistic regression estimates (reference category: "individual is employed in the unorganised sector")

| Dependent Variable | Employment opportunity ($Y_{4i}$) | | | |
|---|---|---|---|---|
| | Rural | | Urban | |
| No of observations | 25117 | | 27881 | |
| Pseudo R square | .299 | | .276 | |
| | Reg. 7a | Reg. 7b | Reg.8a | Reg. 8b |
| *Dependent variables*<br><br>*Independent variables* | *informal worker in organised sector* | *formal worker in organised sector* | *informal worker in organised sector* | *formal worker in organised sector* |
| age ($X_{1i}$) | 0.03*** | 0.11*** | 0.02*** | 0.11*** |
| gender ($D_{1i}$) | -1.88*** | -0.79*** | -0.82*** | -0.37*** |
| levels of education ($X_{2i}$) | 0.19*** | 0.54*** | 0.09*** | 0.39*** |
| vocational training ($D_{2i}$) | -0.51*** | -0.57*** | -0.37*** | -0.34*** |
| technical education ($D_{3i}$) | 0.33** | 0.31*** | 0.08 | 0.09 |
| Social-group ($D_{12i}$) | -0.16** | -0.09** | -0.31*** | -0.38*** |
| religion ($D_{13i}$) | 0.14* | 0.23*** | 0.17 | 0.16*** |
| NSDP_per capita($X_{3i}$) | -0.00004*** | -0.00001*** | -0.00003*** | -0.00001*** |
| GVA in organised sector/NSDP ($X_{4i}$) | 11.83*** | 9.85*** | 12.23*** | 8.91*** |
| public affairs index ($X_{5i}$) | 1.49 | -4.07*** | -2.84 | -3.06*** |
| type I overall business regulatory environment ($D_{14i}$) | 0.35*** | -0.08 | 0.16 | -0.24*** |
| type II overall business regulatory environment ($D_{15i}$) | 0.11 | 0.05 | 0.16 | 0.03 |
| type I labour law related compliance ($D_{16i}$) | -0.09 | 0.01 | -0.26*** | 0.16** |
| type II labour law related compliance ($D_{17i}$) | -0.20 | 0.08 | -0.46*** | 0.22** |
| workforce participation rate ($X_{6i}$) | 0.01 | 0.04*** | -0.02 | -0.04*** |
| population ($X_{9i}$) | -1.65* | -4.49*** | -4.88*** | -5.14*** |
| constant | -12.5*** | -16.32*** | -9.97*** | -11.66** |

Note: *, ** and *** imply significance at 1, 5 and 10 per cent levels, respectively.

## VI. CONCLUSION

The main concern of the article has been to recognize and explain why quality of employment in India is poor, despite a consistently high rate of economic growth. In this context, this paper analyses quality of employment in India and over time trends across rural-urban areas, using crucial dimensions as proposed by ILO. Most importantly, this study examines the probable determinants – considering simultaneously both micro and macro level factors – that could explain the lack of quality of employment.

The findings suggest that although the workforce participation has improved in recent years, particularly in rural areas, the overall quality of employment remains a matter of concern. The majority of the workers are concentrated in self-employment and informal activities, often without written contracts or access to social security. Moreover, the conditions of a large segment of regular salaried/wage workers (i.e. the most privileged category) is awful. The majority of them are engaged in those jobs without written job contracts and social security coverage.

Furthermore, the confirmatory analysis suggests that although the individual level factors play a positive role on employment quality, the macro-level aspects such as 'economic progress', 'good governance', and 'better business regulatory

environment', are perhaps not contributing in any substantial way to the quality of employment. By and large, our study indicates that economic growth is not sufficient for improvement in the quality of employment. Indeed, the pattern of economic growth in India undermines the quality of employment. To address these challenges, future policy must shift its emphasis from merely increasing employment numbers to enhancing the quality of jobs. This requires strengthening social protection systems, expanding coverage to informal and gig workers. Additionally, improving labour regulation and enforcement mechanisms through digital tools, audits, and transparency alongside integrating social dialogue and worker representation is essential. Skill development programmes must be better aligned with the quality and formalisation of work, especially in emerging sectors. Ultimately, a more integrated and inclusive policy framework is needed, one that embeds employment quality within the broader agenda of inclusive and sustainable development.

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## APPENDIX

Table 1A: Mean and Standard deviation values of the quantitative variables

| Variables | Observation | Mean | Std-deviation | Min. | Max. |
|---|---|---|---|---|---|
| Age of individuals in years ($X_{1i}$) | 276022 | 34.57133 | 13.17169 | 15 | 64 |
| Levels of education of individuals in years ($X_{2i}$) | 275987 | 6.213351 | 3.55032 | 1 | 13 |
| NSDP per capita (in Rupees) ($X_{3i}$) | 276022 | 32428.3 | 13804.31 | 9820.18 | 53950.05 |
| GVA of organised sector as a share of NSDP ( in Rupees) ($X_{4i}$) | 276022 | 0.8127428 | 0.0309052 | 0.74 | 0.86 |
| Public affairs index ($X_{5i}$) | 276022 | 0.474028 | 0.0498853 | 0.355 | 0.551 |
| Workforce participation rate (in %) ($X_{6i}$) | 276022 | 38.20235 | 4.847741 | 26.75 | 44.25 |
| Workers eligible for social security benefits (in %) ($X_{7i}$) | 276022 | 25.6924 | 6.856763 | 16.6 | 43.9 |
| Workers having unions in their activity (in %) ($X_{8i}$) | 276022 | 22.14417 | 11.0752 | 11.7 | 59.2 |
| Population of states ($X_{9i}$) | 276022 | 8.45E+07 | 5.16E+07 | 1.01E+07 | 2.00E+08 |

Source: Calculated based on NSSO report, ASI report, RBI website, population census & Public affairs centre report

Note: NSDP: Net state Domestic Product; GVA: Gross value added (manufacturing and service sector)

Table 2A: Public affairs index scores, Ranking based on business regulatory environment and percentage of regular workers having social security benefits and unions in their activity status

| Sl no | States | public affairs index | regulatory environment ranking | social security benefits | | unions in activity status | |
|---|---|---|---|---|---|---|---|
| | | | | rural regular workers | urban regular workers | rural regular workers | urban regular workers |
| 1 | Gujarat | 0.536 | 1 | 38.5 | 40 | 45.1 | 36.6 |
| 2 | Haryana | 0.464 | 1 | 41.2 | 34.1 | 35.4 | 33.1 |
| 3 | Maharashtra | 0.512 | 2 | 56.1 | 47.8 | 45.7 | 33.8 |
| 4 | Punjab | 0.497 | 2 | 34.7 | 41.2 | 29.1 | 36.5 |
| 5 | Tamil Nadu | 0.543 | 1 | 38.5 | 44 | 45.3 | 39.2 |
| 6 | Andhra Pradesh | 0.467 | 1 | 28.5 | 39.2 | 33.4 | 34.8 |
| 7 | Karnataka | 0.531 | 2 | 36.4 | 47.2 | 30.1 | 31.3 |
| 8 | Kerala | 0.551 | 1 | 42.5 | 55.5 | 58.7 | 56.3 |
| 9 | West Bengal | 0.459 | 2 | 23.9 | 54.4 | 45.5 | 51.3 |
| 10 | Assam | 0.438 | 3 | 69.9 | 81.6 | 78.6 | 85.2 |
| 11 | Bihar | 0.355 | 2 | 46.8 | 59 | 59.5 | 56.3 |
| 12 | Madhya Pradesh | 0.457 | 1 | 54.2 | 55.6 | 41.3 | 48.8 |
| 13 | Orissa | 0.431 | 1 | 60.1 | 64.6 | 63.5 | 66.6 |
| 14 | Rajasthan | 0.473 | 1 | 36.5 | 44.6 | 39.3 | 41.5 |
| 15 | Uttar Pradesh | 0.441 | 2 | 41.3 | 51.8 | 39.9 | 43.6 |
| | India | | | 42.7 | 47.1 | 45.2 | 40.5 |

Source: Public affairs centre report (2017), Planning Commission report (2014), NSSO report (2011)