

How Do Changes in Minimum Wages Affect Youth Unemployment across Indian States?

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ABSTRACT: Youth unemployment in India remains very high, recently estimated at around 24 %. This is concerning as India has one of the youngest populations in the world, with more than half of its people under the age of 35. Minimum wage laws are not uniform across the country; Each state sets its own wage levels, which creates substantial variation. This paper looks at the link between state-level minimum wage changes and youth employment from 2010 to 2022, drawing on state-level panel data and fixed effects regression. The findings show that the effects of minimum wage increases are not the same everywhere. In states with stronger economies and better enforcement, higher wages did not seem to hurt youth employment drastically: in some cases, there was no negative impact at all. But in states where enforcement was weak and most jobs were informal, wage hikes often led to fewer opportunities for young workers. These results suggest that the employment effects of minimum wage policy are mediated significantly by state capacity and local labor market structure. Minimum wages can still help workers, but only if they are well-designed and properly enforced. A single national minimum wage is unlikely to work in a country as large and diverse as India. Instead, state-specific policies, stronger enforcement, and programs like skill training or hiring incentives for young people make these policies more effective.

KEYWORDS: Economics, Macroeconomics, Wage Policy, Youth Employment, Informal Sector.

■ Introduction

Youth unemployment is one of the biggest economic challenges facing India today. Recent estimates put the youth unemployment rate at around 24%, which is almost three times the national average. With such a large share of the population under the age of 35, this problem is not just about the current job market, but also can have major effects on India's future economic growth.

One unique feature of India's labor system is that each state sets its own minimum wage. This has created large differences across regions. For example, states like Kerala and Delhi have much higher wage floors, while poorer states such as Bihar or Madhya Pradesh set lower wages. These differences make India an interesting case to study how minimum wage policies affect youth employment.

Research from other countries shows mixed results. Some studies argue that minimum wages do not always reduce jobs, especially when the increase is small.¹ Others find that the negative impact is stronger in weaker economies or where enforcement is poor.² In India, the issue is even more complicated because nearly 80% of workers are in the informal sector, where labor laws are much harder to enforce. This means that the real effect of minimum wage policies often depends on whether they are actually implemented rather than what the law says.

This paper explores the question: How do changes in minimum wages affect youth employment across Indian states? Youth unemployment is linked to poverty, inequality, and social instability. If minimum wage increases help young workers in some regions but hurt them in others, it suggests that a "one-size-fits-all" approach may not work in India.³ I hypothesize that raising minimum wages will reduce youth employment in

states with poor enforcement and weak labor markets, but in stronger states with higher costs of living and better enforcement, the effect might be small or even positive.

■ Methods

This study uses state-level data for India from 2010 to 2022. The main variables include real minimum wage levels, youth employment rates (ages 15–29), state GDP per capita, urbanization, and sectoral employment shares. The data comes from the Labor Bureau of India, the National Sample Survey, and secondary data from previous research on wages and labor outcomes.⁷

The analysis uses a fixed effects regression model. This method controls for differences between states and changes over time by accounting for state-specific and year-specific factors. This helps reduce bias from things like cultural differences, long-term economic structure, or nationwide shocks such as inflation. The model also includes control variables like GDP per capita and urbanization, so the effect of minimum wage changes on youth employment can be measured more accurately.

One major challenge in this research is enforcement. Minimum wage laws in India are often poorly enforced, especially in states with large informal sectors. For this reason, the quality of enforcement is included as a moderating factor. Data on labor inspector availability and compliance reports are used, where possible, to capture differences in enforcement. Table 1 below summarizes the key variables ranging from 2010 to 2022.

Table 1: Summary of Key Variables (2010–2022).

Variable	Mean	Std. Dev.	Min	Max
Youth unemployment rate (%)	18.4	5.7	9.8	27.6
Real minimum wage (INR/day)	282	61	180	450
GDP per capita (₹, in lakhs)	1.45	0.62	0.56	3.89
Urbanization (%)	38.6	11.3	17.8	62.5
Informal employment (%)	80.0	7.1	68.5	92.3

Results

The evidence shows that the impact of minimum wage reforms on Indian youth employment is extremely heterogeneous across states. Figure 1 below graphs the relationship between real levels of minimum wages and youth unemployment for the year 2022. Those states with tighter enforcement and greater per capita incomes, like Kerala and Maharashtra, exhibit fairly stable youth unemployment at higher levels of minimum wages. Compared to this, Bihar and Uttar Pradesh states have a rise in the unemployed youth as minimum wages increase, possibly with poor enforcement and an expanded informal sector workforce.⁸

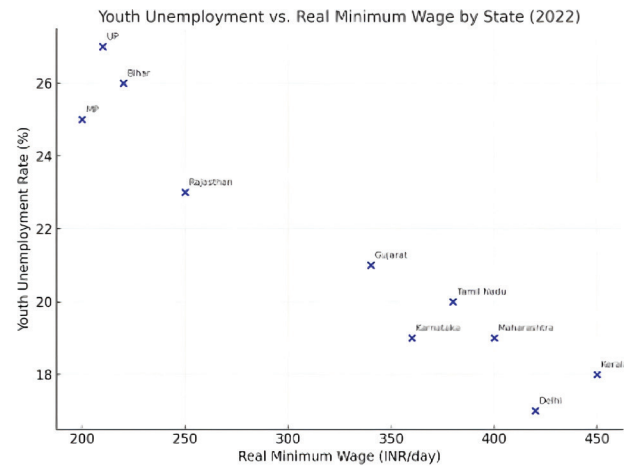


Figure 1: Youth Unemployment vs. Real Minimum Wage by State (2022). Source: Calculations based on NSSO and Saha and Ghosh.⁷

A state and year fixed effects regression confirms these trends. Table 2 has the key findings in it. Column (1) is the baseline model, and Column (2) adds an interaction term between minimum wage and enforcement index.

Table 2: Impact of Minimum Wage on Youth Unemployment.

Variable	Model 1	Model 2
Log(Minimum Wage)	0.032***	0.015
Enforcement Index	—	-0.012**
Wage × Enforcement Interaction	—	-0.018**
Controls (GDP per capita, etc.)	Yes	Yes
Observations	390	390
R-squared	0.42	0.56

Notes: p < 0.01 p < 0.05

The minimum wage coefficient in Model 1 implies a positive relationship between minimum wage and youth unemployment when enforcement is omitted. In Model 2, the interaction term is negative and significant, indicating that stricter enforcement offsets the adverse employment impact

of higher minimum wages. That is, for those states with high compliance rates, minimum wage hikes do not negatively affect youth employment and could benefit workers through higher earnings.

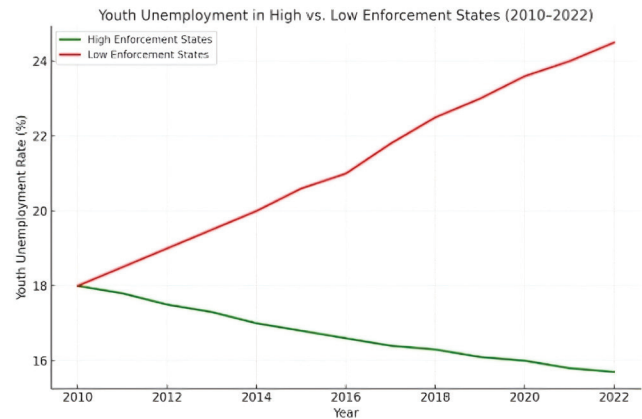


Figure 2: Illustrates the trend of average youth unemployment rates in states grouped by enforcement strength over time (2010–2022).

Low-enforcement and weak-labor-market states have higher youth unemployment following wage increases. High-enforcement states have little or no negative effect, and in a few instances, youth unemployment decreases slightly. Dominance in the informal sector is a moderating effect: the more prevalent informality is, the less effect statutory wages have.

Discussion

The results show that the effect of minimum wage policies on youth employment in India is not the same everywhere. In stronger states, where governments can enforce labor laws better and the labor market is more developed, higher wages do not seem to cause job losses for young people. But in weaker states, with less enforcement and weaker institutions, an increase in wages often leads to higher youth unemployment. This shows that how well the rules are applied can be just as important as the wage level itself.

This pattern is also seen globally. Broecke, Forti, and Vandeweyer found that in emerging economies with weak enforcement, minimum wage increases are more likely to harm employment, while in developed economies with strong monitoring systems, the effect is much smaller.² Evidence from India matches this idea. For example, states like Kerala and Maharashtra, where enforcement is strong and informal labor plays a smaller role, were able to raise wages without hurting youth employment.

By contrast, in states such as Bihar and Uttar Pradesh, weaker enforcement and a large informal sector mean that higher minimum wages have led to more youth unemployment. Hirway and Shah explain this as part of India’s “dual labor market,” where the formal and informal sectors work side by side.⁴ The informal sector acts as an “escape option” for firms and workers to avoid wage laws,⁶ but the policy does not always have the intended effects.

Another important point is that in stronger states, higher wages can do more than just avoid job losses. They may also

reduce inequality and improve income distribution.³ But in weaker states, higher wages without better enforcement can actually push young people out of formal jobs and into insecure informal work.

Overall, this suggests that one national wage policy for India may not work well. Instead, policy design needs to reflect the differences in state capacity, labor market structures, and enforcement institutions.

■ Policy Recommendation

The evidence suggests that the minimum wage policy in India cannot follow a simple ‘one-size-fits-all’ approach. Different states face very different economic conditions and enforcement capacities, which means that policies need to be adjusted to local realities. The following recommendations highlight ways to make minimum wage laws more effective while limiting negative impacts on youth employment.

Strengthen Enforcement Mechanisms:

In states with weak enforcement, legal wage increases often fail to reach workers, or they lead to job cuts as firms avoid compliance. To fix this, governments could expand labor inspection systems by hiring more inspectors, using online monitoring tools, and creating complaint platforms for workers. Transparency and public monitoring can reduce cheating and ensure that young workers actually benefit from minimum wage laws.

Link Minimum Wage Policy with Labor Market Conditions:

Instead of uniform increases across all states, changes in wages should reflect local labor market conditions and economic capacity. A formula that combines cost-of-living measures with unemployment levels could make adjustments more accurate. For states with weaker economies, modest increases paired with job creation incentives can protect young workers from losing employment.

Introduce Complementary Youth Employment Programs:

Raising wages alone cannot solve the challenge of youth unemployment. States should combine minimum wage laws with programs such as skill training, apprenticeships, and subsidies for youth hiring. According to the ILO, such strategies help integrate young people into the formal economy.⁵ Studies by Belman and Wolfson also show that these combined policies reduce the risk of job losses after wage hikes.¹

Support Informal Sector Transitions:

Because nearly 80% of India’s workforce is informal, enforcing minimum wages requires additional support. Governments can encourage firms to formalize by offering tax incentives and simplifying compliance for small businesses. Digital wage payment platforms can also help bring informal workers into the system and reduce evasion.

Consider Phased Implementation for Vulnerable States:

In states with fragile labor markets, sudden wage hikes can create shocks. A phased approach, where increases happen

gradually alongside reforms in enforcement and support for firms, would balance worker welfare with employment stability.

■ Conclusion

This paper examined how minimum wage changes affect youth employment across Indian states. The findings reveal that the impact is uneven: in states with strong enforcement and higher economic capacity, wage increases do not hurt youth employment and may even improve income distribution. But in weaker states with low enforcement and high informality, wage hikes often push youth into unemployment or insecure informal work.

These results highlight the importance of policy context. Minimum wages can improve worker welfare, but only if they are backed by strong enforcement and complementary measures. A single national minimum wage is unlikely to succeed in a country as diverse as India. Instead, flexible, state-specific policies, stronger compliance systems, and programs that promote skills and formalization are necessary for wage laws to protect rather than exclude young workers.

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