IMPACT OF MINIMUM WAGES ON WAGES, EMPLOYMENT, POVERTY AND INEQUALITY

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Outline of the Presentation

• Minimum wage effects on employment and wages
• Potential of minimum wages in reducing poverty and inequality
• Some conclusions and recommendations
Effects of minimum wages on employment

- Mixed effects in China for the period 2000 to 2005 – negative effects in one region and positive effects in two regions (Ni, Wang and Yao, 2011)

- Net increase in employment in Indonesia, increase in informal sector employment compared to formal sector (Chun and Khor, 2010; Comola and de Mello, 2009)

- No employment effects in the number of jobs or hours worked in Brazil for the period 1982 to 2004 (Lemos, 2007)

- Effects varied by the size of the enterprise, larger firms actually showed positive employment effects compared to smaller firms in Indonesia (Rama, 2001).

- No impact on Mexico’s employment in 1990, but it had a negative impact on employment in Colombia (Bell, 1997)

- There is actually no consensus within the literature on the employment effects, even according to recent meta studies.
## Effects of minimum wages on employment

Impact of minimum wages on employment, 2005 to 2010

<table>
<thead>
<tr>
<th>Countries</th>
<th>Employment effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brazil</td>
<td>1.720 (2.02)</td>
</tr>
<tr>
<td>India</td>
<td>-0.620 (0.58)</td>
</tr>
</tbody>
</table>

Note: Standard errors are in parentheses, * p < 0.05

Effects of minimum wages on inequality

Wage inequality indices, change in inequality between mid-2000s and late 2000s

<table>
<thead>
<tr>
<th>Countries</th>
<th>P50/P10</th>
<th>P90/P50</th>
<th>P75/P25</th>
<th>Gini</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brazil</td>
<td>0.15</td>
<td>-0.37</td>
<td>-0.48</td>
<td>-0.02</td>
</tr>
<tr>
<td>India</td>
<td>-0.13</td>
<td>0.25</td>
<td>-0.07</td>
<td>-0.01</td>
</tr>
</tbody>
</table>

Effects of minimum wages on wage quantiles

Methodology: Use the following mincerian equation in a Quantile regression approach

\[ \text{Quant}_\theta(ln(w_i) \mid X_i) = \beta^\theta_0 + \beta^\theta_1 X_i + \beta^\theta_2 (MW\text{indicator}_i) \]

where \( ln(w_i) \) indicates the log of hourly real wages. The \( \beta^\theta_j \)'s are the coefficients of the wage regression at \( \theta \)th conditional quantile of \( ln(w) \) given all explanatory variables.

\[ MW\text{indicator}(\text{Effective Minimum wages}) = \ln\left(\frac{\text{Minimum wages}}{\text{Median of wages}}\right) \]

• Vector of personal characteristics, \( X_i \), comprises of age, gender, ethnic groups, education levels, marital status, regions (rural or urban), industry dummies, sector (formal or informal)
Effects of minimum wage on wage distribution: All wage workers covered by minimum wages

(a) Brazil: 2005, 2009

(b) India: 2004-5, 2009-10

Effects of minimum wage on quantiles: Informal workers covered by minimum wages

(a) Brazil: 2005, 2009

(b) India: 2004-5, 2009-10

Effects of minimum wage on wage quantiles: India, All workers irrespective of the coverage

Simulation exercises

Potential of minimum wages in reducing poverty and inequality
## Potential of a binding minimum wage to reduce inequality, India: Simulation exercise for 2004-5

<table>
<thead>
<tr>
<th>Wage inequality by sector</th>
<th></th>
<th>Adjusting for minimum wage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sector</strong></td>
<td><strong>Actual wage</strong></td>
<td><strong>Minimum wage</strong></td>
</tr>
<tr>
<td>Rural</td>
<td>0.480</td>
<td>0.332</td>
</tr>
<tr>
<td>Urban</td>
<td>0.495</td>
<td>0.431</td>
</tr>
<tr>
<td>All</td>
<td>0.506</td>
<td>0.397</td>
</tr>
</tbody>
</table>

<table>
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<tr>
<th>Wage inequality by Industry groups</th>
<th></th>
<th>Adjusting for minimum wage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Industry groups</strong></td>
<td><strong>Actual wage</strong></td>
<td><strong>Minimum wage</strong></td>
</tr>
<tr>
<td>Agriculture</td>
<td>0.330</td>
<td>0.120</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>0.456</td>
<td>0.359</td>
</tr>
<tr>
<td>Construction</td>
<td>0.299</td>
<td>0.221</td>
</tr>
<tr>
<td>Low productive services sector</td>
<td>0.413</td>
<td>0.248</td>
</tr>
<tr>
<td>High productive service sector</td>
<td>0.397</td>
<td>0.377</td>
</tr>
</tbody>
</table>

Potential of a binding minimum wage to reduce poverty, India: Simulation exercise for 2004-5

The Probit model with P (Below Poverty line = 1)

- For salaried workers not receiving minimum wages, and controlling for other variables, increases the probability of being poor by 9 - 10%

- For casual workers not receiving minimum wages, and controlling for other variables, increases the probability of being poor by 7 - 8%

Conclusions

- Despite imperfect compliance minimum wages has an impact on lower quantiles of the wage distribution
  - If set at the right level then it helps in reducing inequality by lifting those at lower quantiles and also depressing wages at the higher end (Brazil, 2005)
  - Better enforcement could also help in increasing the impacts (India, 2009-10)

- Minimum wages do not lead to disemployment effects in developing countries (Rani et al, 2013) but leads to non-compliance in the informal sector
Recommendations

- Minimum wages can make a positive contribution to social justice – reducing poverty and inequality
  - If all wage workers are covered
  - If set at the right level, in consultation with social partners
  - If the system is not too complex
- Plea for a binding State level minimum wage for all workers irrespective of whether they are covered in the schedules of employment
- Compliance continues to remain a major challenge, which requires a coherent enforcement strategy
  - Provision of information, and improving awareness among both employers and workers
  - Effective labour inspection
  - Sanctions in case of violations
  - Involvement of social partners and civil society (NGOs) to ensure that the implementation machinery is effective