UNDERSTANDING THE DRIVERS OF MINIMUM WAGE-SETTING: AN ANALYSIS OF 146 COUNTRIES

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Parallel Session 1.7: A Comprehensive Global View on Minimum Wages
The body of knowledge – minimum wages

- **Literature**
  - Trends >> Minimum wage dynamics over time, taking a reference MW per country
  - Employment effects >> Does an increased MW affects employment negatively? >> mixed findings
  - Kaitz index >> Rations of minimum to median wage
  - Wage-setting institutions and relationship to collective bargaining
  - Compliance with minimum wage rates

- **Lacking**
  - Reconstruction of countries’ MW policies from their minimum wage rates
Three research objectives

- **RO1**
  - Is any database registering the minimum wage rates (fine-grained) for multiple countries?

- **RO2**
  - Which MW policies can be seen as drivers of Minimum Wage setting for:
    - full coverage
    - regional differentiation (purchasing power policies)
    - differentiating for industries/occupations (mimicking collective bargaining)
    - differentiating for specific groups of workers?

- **RO3**
  - Do countries apply one or multiple policy dimension only?
RO1 – MW Databases

- **Databases classifying wage setting processes**
  - ICTWSS database (see presentation Besamusca in this session)
  - EURWORK from EUROFOUND: EU only
  - WageIndicator Labour Law database: global, limited set of variables

- **Databases classifying wage rates**
  - World Bank and OECD database: one rate per year per country
  - WSI Mindestlohn database: one rate per year per country in Europe
  - WageIndicator Minimum Wage Rates Database: multiple rates per month for 140+ countries
History of WageIndicator MW webpages

- **Since 2000**
  - in 2000: start a WageIndicator website with job-related content in NLD
  - from 2004: websites in an increasing number of countries
  - from 2006: website in India published MW rates - frequently visited pages
  - 2006-13: websites in many countries published MW rates

- **2013 and later**
  - 2013-19: tool for collecting MW categories and rates for websites
  - 2015: paycheck.in was the leading website for MW information in India
  - 2018: tool needed an update, leading to revision of MW database
  - 2019_May: database had 14,362 MW categories with rates for 146 countries
Countries in WageIndicator MWDB

- 50 most populated countries
  - all but 7 included in database
- 51th to 100th most populated countries
  - all but 4 included in database
- 101th to 150th most populated countries
  - all but 13 included in database
- 2017 population of the 146 countries
  - reached 7.08 billion, or 93% of world population
- More countries will be included soon
Defining a Minimum Wage category

- **Minimum wage rates for each category**
  - as specified by issuing authorities - government, Ministry, Wage Board

- **Example for India**

<table>
<thead>
<tr>
<th>Description</th>
<th>Unit</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arunachal Pradesh</td>
<td>Cement Industry</td>
<td>Area I</td>
</tr>
<tr>
<td>Arunachal Pradesh</td>
<td>Cement Industry</td>
<td>Area I</td>
</tr>
<tr>
<td>Arunachal Pradesh</td>
<td>Cement Industry</td>
<td>Area I</td>
</tr>
</tbody>
</table>

- **MW categories by country**
  - India has most categories: 7,783 different rates, followed by:
  - Ecuador (2179), Pakistan (1426), Sri Lanka (943), Indonesia (287), USA (189)
MW categories by country

- **WageIndicator MWDB**
  - for 146 countries MWDB has 14,362 MW categories with rates (May 2019)

- **MW categories by country**

<table>
<thead>
<tr>
<th>Classification</th>
<th>No. of countries</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>No MW</td>
<td>11</td>
<td>8%</td>
</tr>
<tr>
<td>One national SMW</td>
<td>62</td>
<td>42%</td>
</tr>
<tr>
<td>1-10 MW categories</td>
<td>45</td>
<td>31%</td>
</tr>
<tr>
<td>11-100 MW categories</td>
<td>17</td>
<td>12%</td>
</tr>
<tr>
<td>&gt; 100 MW categories</td>
<td>11</td>
<td>8%</td>
</tr>
<tr>
<td>Total</td>
<td>146</td>
<td>100%</td>
</tr>
</tbody>
</table>
RO 2: Dimensions in MW policies

- **Four dimensions of MW policies in 135 countries**
  - full versus partial coverage
  - purchasing power policies
  - mimicking collective bargaining
  - addressing specific groups of workers

- **Classification**
  - we classified the categories and the countries to extract the countries’ MW policies in these four dimensions
  - we excluded the 11 countries without Minimum Wage >> 135 countries
The full coverage dimension

- **Countries classified as “full coverage”**
  - countries with one national MW rate, e.g. Azerbaijan
  - countries with multiple MW rates of which one classified as national MW, e.g. Argentina, Australia, USA
  - countries with multiple categories, suggesting full coverage, e.g. Chad ‘Agricultural sector and similar’ and ‘Non-agricultural sector’

- **Results**

<table>
<thead>
<tr>
<th>Full coverage dimension</th>
<th>No. of countries</th>
<th>Column %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full coverage</td>
<td>104</td>
<td>77%</td>
</tr>
<tr>
<td>Partial coverage</td>
<td>31</td>
<td>23%</td>
</tr>
<tr>
<td>Total</td>
<td>135</td>
<td>100%</td>
</tr>
</tbody>
</table>
The purchasing power dimension

• Two PP policies
  1. Countries that follow the CPI index for their uprating policies
  2. Countries that adapt MW to varying cost-of-living in the country
     • We used the adaptation approach, MWDB has no data about PP uprating policies

• Countries classified for this dimension
  • simple dichotomy between ‘urban’ and ‘rural’, e.g. Malawi and Burundi
  • differentiation by province and/or by city, e.g. Japan, China, Indonesia

• Results

<table>
<thead>
<tr>
<th>Purchasing power dimension</th>
<th>No. of countries</th>
<th>Column %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regional breakdown</td>
<td>16</td>
<td>11.9%</td>
</tr>
<tr>
<td>No regional breakdown</td>
<td>119</td>
<td>88.1%</td>
</tr>
<tr>
<td>Total</td>
<td>135</td>
<td>100.0%</td>
</tr>
</tbody>
</table>
Mimicking collective bargaining

• **Countries classified for this dimension**
  - countries with MW categories addressing specific industries or occupations
  - we classify these countries as mimicking collective bargaining

• **Results**

<table>
<thead>
<tr>
<th>Collective bargaining mimicking dimension</th>
<th>No. cntrs</th>
<th>No. cntrs</th>
<th>Column %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breakdown by occupation</td>
<td></td>
<td>22</td>
<td></td>
</tr>
<tr>
<td>Breakdown by industry</td>
<td></td>
<td>38</td>
<td></td>
</tr>
<tr>
<td>Breakdown by industry and occupation</td>
<td></td>
<td>17</td>
<td></td>
</tr>
<tr>
<td>Breakdown by industry or occupation</td>
<td>43</td>
<td></td>
<td>32%</td>
</tr>
<tr>
<td>No breakdown by industry or occupation</td>
<td>92</td>
<td></td>
<td>68%</td>
</tr>
<tr>
<td>Total</td>
<td>135</td>
<td></td>
<td>100%</td>
</tr>
</tbody>
</table>
The special interest groups dimension

- Classifying this dimension
  - MW categories for EPZ, domestic, youth, disabled, skill level, firm size

- Results

<table>
<thead>
<tr>
<th>Topic</th>
<th>No. cntrs</th>
<th>Countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPZ</td>
<td>5</td>
<td>Guatemala, India, Mauritius, Mexico, Panama</td>
</tr>
<tr>
<td>Domestic workers</td>
<td>13</td>
<td>Argentina, Botswana, Haiti, India, Kenya, Lesotho, Namibia, Nepal, South Africa, Spain, Eswatini, Tanzania, Zambia</td>
</tr>
<tr>
<td>Age groups</td>
<td>10</td>
<td>Australia, Sri Lanka, Greece, Ireland, Luxembourg, Malta, Netherlands, New Zealand, United Kingdom, USA</td>
</tr>
<tr>
<td>Disabled workers</td>
<td>2</td>
<td>Austria, Czech Republic</td>
</tr>
<tr>
<td>Skill level</td>
<td>12</td>
<td>Bangladesh, Sri Lanka, Costa Rica, Fiji, India, Kenya, Lesotho, Liberia, Luxembourg, Mauritius, Pakistan, Eswatini</td>
</tr>
<tr>
<td>Firm size</td>
<td>10</td>
<td>Honduras, India, Lesotho, Mozambique, Panama, South Africa, Suriname, Tanzania, USA, Virgin Islands</td>
</tr>
</tbody>
</table>
**RO 3: Relationships between dimensions**

- Correlation coefficients for 135 countries

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Full coverage</th>
<th>Purchasing power</th>
<th>Mimicking bargaining</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchasing power</td>
<td>-0.07</td>
<td>ns</td>
<td></td>
</tr>
<tr>
<td>Mimicking bargaining</td>
<td>-0.50 ***</td>
<td>0.12</td>
<td>ns</td>
</tr>
<tr>
<td>Special groups</td>
<td>-0.30 ***</td>
<td>0.08</td>
<td>0.40 ***</td>
</tr>
</tbody>
</table>

- full coverage relates very negatively to policies of mimicking collective bargaining
- PPP does not significantly relate to any of the other three dimensions
- mimicking bargaining relates positively and significantly to special groups dimension
Conclusion

- **WageIndicator MWDB allows classifying MW categories and rates**
  - in total 14,362 MW categories for 135 countries have been classified

- **Drivers of minimum Wage setting**
  - full coverage dimension (104 of 135 = 77%)
  - purchasing power dimension (12%, specifically large countries)
  - mimicking collective bargaining dimension – industries or occupations (32%)
  - special interest group dimension (27%)

- **Relationship**
  - full coverage is negatively associated with the mimicking bargaining dimension
Thank you for listening

• Questions?
  
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  • k.g.tijdens@uva.nl