Minimum Wages: Statistical Input for Minimum Wage Setting and Monitoring/Analysis

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- ILO Minimum Wage Fixing Convention
- Basic elements and issues in minimum wage (MW) fixing
- Worldwide MW fixing practices
- Criteria used to set/adjust the MW and statistical indicators
- Most common methods to initially set the MW worldwide and data used
- Periodic adjustments to MW: common procedures and data inputs
- Monitoring analyzing MW trends and impact
• In 1970, the International Labour Organization adopted the Minimum Wage Fixing Convention No. 131, as well as a Recommendation (No. 135).

• Ratifying Member States commit to establish a system of minimum wages which “covers all groups of wage earners” against “unduly low wages”.

• It is possible to exclude some groups from coverage, subject to justification. E.g., Youth benefitting from on-the-job training.

• Total ratifications: 51 out of 181 Member States, from all regions.

• Once established, minimum wages have the force of law.

• Most employees should benefit from the protection of the minimum wage although exceptions are possible.

• Employers organizations and workers organizations should be fully consulted (not just informed).

• Minimum wages should be adjusted “from time to time”.
Article 3 states:

“The elements to be taken into consideration in determining the level of minimum wages shall, so far as possible and appropriate in relation to national practice and conditions, include

(a) the needs of workers and their families, taking into account the general level of wages in the country, the cost of living, social security benefits, and the relative living standards of other social groups;

(b) economic factors, including the requirements of economic development, levels of productivity and the desirability of attaining and maintaining a high level of employment.”
Basic elements of minimum wage policy (102 countries) ILO-TRAVAIL database:  http://www.ilo.org/dyn/travail/travmain.home

What does the legislation say?

- **Institutional setting:** National minimum wage versus sectoral minimum wage
- **Degree of consultation of the social partners:** no consultation versus collective bargaining
- **Criteria of adjustment:** social versus economic criteria
- **Frequency of adjustment:** not specified versus once a year
- **Coverage:** everybody is entitled to be paid at least the minimum wage versus sectors (e.g. services) or workers (e.g. domestic, migrants, etc) are excluded
Social partners are consulted in the majority of countries in MW fixing but the degree of consultation varies.

Degree of consultation of the social partners

- 48%: The government decides alone
- 15%: The government consults social partners separately
- 11%: The government consults a bi/tripartite body
- 10%: A three party committee sets minimum wages
- 18%: Setting up through collective bargaining

Source: Eyraud & Saget (2005)
Issues in Minimum Wage Fixing

• **Issues in minimum wage fixing practices:**
  - Minimum wage used as a reference to fix social incomes
    - Social incomes are linked to the level of the MW in many countries
    - Most frequent: between the MW and old-age and disabled pensions
    - Least frequent: between the MW and unemployment benefits or maternity benefits
    - The link explains many governments’ decision not to increase the MW
  - Minimum wage used as a substitute for collective bargaining
    - MW fixing tends to replace (« crowd-out ») collective bargaining on wages
  - Minimum wage used to fight hyper inflation
    - In Mexico, Brazil in the 80s/early 90s: considerably reduced the purchasing power of the minimum wage, without much effect on inflation

Source: Saget
Minimum wage legislation will provide clues on statistical indicators to select

- Minimum wage legislation will define the criteria, scope of coverage, and any particular wage rates for defining or adjusting the MW.
  - These elements will serve as tips regarding:
    - statistical indicators which will be used
    - sources of data which should be used
    - lack of data, quality of data issues
    - resources and time frame (modeling impact of MW change vs. more basic solutions)
Statistical indicators which could be considered as inputs to fix initial levels of minimum wage (1)

**Needs of workers and their families**
- Level of wages
- Social security benefits

**Statistical indicators**
- Mean monthly earnings (or wage rate) of employees by sex and economic activity (inconstant terms)
- Median monthly earnings (or wage rate) of employees by sex and economic activity (in constant terms)
- Share of population covered by basic health care provision, by type of scheme (percent)
- Share of persons above the statutory retirement age (or aged 65 and above) who are recipients of a retirement pension (percent)
- Average old-age pension benefits per month per person above the statutory retirement age (or aged 65 and above) benefitting from an old-age pension (in constant terms)
- Share of unemployed receiving unemployment benefits by type of scheme (percent)
- Average unemployment benefits by type of scheme (in constant terms)
Statistical indicators which could be considered as inputs to fix initial levels of minimum wage (2)

<table>
<thead>
<tr>
<th>Needs of workers and their families</th>
<th>Statistical indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost of living</td>
<td>Cost of living measures</td>
</tr>
<tr>
<td>Relative living standards of different social groups</td>
<td>Consumer prices for selected COICOP categories (related to basic consumer goods)</td>
</tr>
</tbody>
</table>

- Mean monthly income earned by households by decile (in constant terms)
- Mean monthly earnings (or wage rate) of employees by decile (in constant terms)
- Employed persons living in households with income below the nationally-defined poverty line by sex (working poor)
- Characteristics of households below the poverty line:
  1. Average number of employed persons in the household
  2. Average number of members in the household
  3. Number of female-headed households below the poverty line
  4. Average number of days or hours in employment per time unit (month, week, etc)
  5. Monthly per capita consumption expenditure
Statistical indicators which could be considered as inputs to fix initial levels of minimum wage (3)

**Economic factors**

- Economic development
  - Real GDP per capita (level and growth rate)
  - Labour share in GDP
  - Inflation rate (CPI)
  - Education of adult population (adult literacy rate, adult secondary-school graduation rate), by sex
  - Mean monthly poverty incidence by geographical coverage

- Productivity levels
  - Labour productivity (GDP per employed person or GDP per hours worked)

- Employment levels
  - Employment-to-population ratio by sex
  - Employment by economic activity and sex
  - Employment by occupation and sex
  - Unemployment rate by sex and age
The legislation usually provides for both social and economic criteria to be used to adjust the level of the minimum wage.

![Bar graph showing criteria used to adjust the minimum wage (in %)]

Source: Eyraud & Saget (2005)
What are the main methods for initially fixing the minimum wage?

- In many countries, it is difficult to know how the minimum wage (MW) was initially set.
- Often, the result of bargaining between trade unions, employers’ organizations, and government agencies is based on labor market statistics and economic conditions.
- Globally, two main methods for setting the initial rate are:
  - Based on cost of living
  - Based on wage statistics
Method 1: Using cost of living to initially set the MW (1)

- Aims to determine a rate that will cover the basic needs of workers
- Particularly relevant for poorer developing countries with low wages and high poverty rates
- Most straightforward method
- Statistical issues:
  - Need to define the composition of a basket of goods/services that reflect a reference living standard (e.g., minimal quantity and quality standards of food, clothing, health care and shelter)
  - Availability and reliability of statistics on cost of living
  - Data sources: Household income and expenditure surveys (e.g., monthly per capita consumption expenditure), CPI/Cost of Living surveys
Key issue with the method: how to implement it?

- Does one consider a worker the sole wage earner of a household?
- What is an average family size?
- Women’s increasing participation in the labour market challenges the one-wage-earner-per-household idea.
- However, there are growing numbers of single-headed households (working poor associated with these)
- Price of goods/services and standard of living differ between areas of a country: should these be considered? (Effects on internal migration)
Method 2: Using wage statistics to initially set the MW

- Aims to determine a rate based on the lowest and average wage rates
- Less relevant for developing countries characterized by low wage rates that don’t meet basic needs
- Method used by the Netherlands to set the MW in 1968
- Advantage: Simplicity of calculation
- Key statistical issues on measuring wages for this purpose:
  - Geographical coverage (total national or urban only?)
  - Concept of wages used (wage rates or earnings? gross or net?)
  - Usual versus actual wages
  - Wages time unit (monthly, weekly, hourly?)
  - Working time coverage (full-time vs. part-time)
  - Job coverage (all jobs or main job?)
  - Sources of data: Establishment survey; Labour force survey.
- Potential problems:
  - Availability of reliable statistics on wages paid (lowest wages)
  - Wages, especially lowest wages, should truly reflect basic needs of workers and their families
Countries may consider combining Methods 1 & 2

- Where lowest wages do cover basic needs of workers and their families, countries may consider combining Methods 1 & 2

- In this case, reliable, timely statistics on cost of living and wages will be needed as a technical starting point for bargaining.
Inflation/Cost of Living and Needs of workers rank highest among specific criteria selected to set/adjust the Minimum Wage in the Americas region.

### Americas Region: Criteria used to set or adjust the minimum wage by country

<table>
<thead>
<tr>
<th>Country</th>
<th>Capacity of employers to pay</th>
<th>Inflation and/or cost of living</th>
<th>Economic development</th>
<th>Level of employment</th>
<th>Level of wages and incomes</th>
<th>Needs of workers and their families</th>
<th>Productivity</th>
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*Conditions of employment taken into account.

/a Factors considered: inflation data, interests of workers, ability of employers to pay, factors affecting the circumstances of employment and remuneration of various categories of workers.
Example of a (needs based) poverty wage approach

• A.K. Ghose (1997) proposed a MW for India defined to ensure each member of the household of an unskilled casual labourer has a consumption level equivalent to the national poverty line:

\[ MW = \frac{P (1 + ned)}{wemp} \]

where: \( MW \) = minimum wage; \( P \) = poverty line expenditure per person per month; \( ned \) = number of non-earning dependents per worker; \( wemp \) = number of days of wage employment that a casual labourer is likely to find in a month.
Absolute national MW vs. differentiated MW rates

• National MW: would serve as a minimum wage floor of all employees working in the national territory irrespective of sectors, geographic or administrative regions, occupations, sex, age, etc.

• However, provincial governments or other authoritative bodies could be permitted to set a minimum wage floor higher than the national MW if allowed by national legislation.

• Coverage/scope of MW legislation:
  – National/Federal
  – Occupational rates
  – Sectorial rates (agriculture, services, etc)
  – Regional rates (rural, urban, etc.)

• Minimum wage levels for specific categories of workers according to MW legislation:
  – Disabled workers
  – Domestic workers
  – Piece rate workers
  – Trainees/apprentices
  – Youth workers
The majority of countries fix a national minimum wage, while a substantial minority adopt sectorial rates.
Periodic adjustments to the MW: Examples of Methods (1)

- A key problem for many countries today
- Adjustment procedure depends on the type of consultation process in place, criteria applied and statistics used
- Globally, there are four key methods of adjustment (with different levels of decision-making, independence, number of MW categories and rates)
- **Method 1. Example: Netherlands**
  - Adjustments based on estimated wage increases following public and private wage negotiations held during the year (MW indexed to changes in the wage rate)
  - Not necessarily automatic: depends on employment level and unemployment rate
  - Consultations take place between Government officials and the Social Economic Council (not a tripartite body), but Government decides whether to freeze MW or increase it
- **Method 2. Example: France:**
  - Adjustment made following a 2-percent increase in inflation
  - Each July, Government evaluates increases in economic growth for a possible MW adjustment
  - Government consults with National Committee on Collective Agreements (includes Employers’ and Workers’ representatives), but opinion is not binding
  - Any MW increase must ensure purchasing power (PP) of the MW not be less than half the total increase in the **PP of the average hourly wage**
Periodic adjustments to the MW:
Examples (2)

**Method 3. Example: Republic of Korea (similar procedure in UK)**
- Specialized body (Minimum Wage Council) comprised of equal numbers of workers’, employers’ and independent observers prepares a proposal on MW adjustment
- Council supported by a technical secretariat which obtains/analyses *necessary statistics* (cost of living, wage and income levels, and productivity)
- Minister of Labour has the authority to accept/reject the proposal, but may not modify it

**Method 4. Example: Mexico (similar procedure in Costa Rica and Japan)**
- Specialized committee decides on MW increases autonomously
- Committee president chosen by the Head of State; equal number of workers’ and employers’ representatives
- Technical secretariat obtains *necessary statistics* (state of the economy, changes in cost of living, employment and unemployment rates, wage levels) which substantiate the MW adjustment decision
- In Costa Rica: decision on MW for different categories of workers is based on available data and on consultations with workers and employers
- In Japan: MW set in each of the country’s 47 regions. MW increases commonly reflect wage increases in small enterprises.
Less than 40% of countries provide for a regular frequency of adjustment.

Frequency of adjustment provided for in the legislation (in %)

- 61% Annually
- 23% Every two or more years
- 15% Period not stipulated

Source: Eyraud & Saget (2005)
Key Issues in Monitoring and Analysis of MW

- Key issues in monitoring/analyzing the MW, impact on:
  - Average and median wage levels
  - Incidence of poverty
  - Income distribution
  - Employment levels
  - Working time (hours of work)
  - Labour productivity
  - Informal sector (including spillover effects)
Population groups and context indicators to consider in monitoring/analyzing the MW

- **Worker groups potentially affected:**
  - Youth workers
  - Women workers and their households
  - Agricultural workers
  - Piece rate workers
  - Domestic workers
  - Child labour

- **Context indicators to consider:**
  - Consumer price index movements
  - Cost of living changes
  - GDP growth and GDP per capita changes
The minimum wage should be analyzed against CPI changes.

**LATIN AMERICA (18 SELECTED COUNTRIES):**

**INFLATION AND THE REAL MINIMUM WAGE, 2008**

(Accumulated change, December to December)

Source: ILO Labour Overview
Latin America and the Caribbean 2008
Workers can be analyzed by categories of earners according to different MW multiples.

**LATIN AMERICA (16 COUNTRIES):**
Percentage of wage and salaried workers who earn different multiples of the minimum wage in urban areas, 2006

*(percentages)*

**Source:** ILO, based on official information of the countries.

a/ Estimates exclude wage and salaried workers whose earnings were equal to zero; they also exclude wage and salaried workers who did not declare their earnings.

b/ Estimates for Bolivia are for 2005.
MW may be analyzed with changes in income inequality

**BRAZIL: CHANGE IN THE REAL MINIMUM WAGE AND INCOME DISTRIBUTION, 1995-2007 a/**
(Percentages)

Source: ILO, based on DIEESE and IBGE (PNAD survey).

a/ Minimum wage data are for the Municipality of São Paulo.

ILO Labour Overview Latin America and the Caribbean 2008
Relatively similar countries fix the minimum wage at different levels

Ratio of minimum wage to median wage in selected OECD countries, 1995-2005.

Source: OECD (2007)
References


Questions

• What are the basic elements of MW policy in Trinidad and Tobago?
  – Procedure: Who is involved? Who takes final decisions? Which method (1-4) is used to adjust the MW?
  – What criteria are used for establishing and adjusting the MW (needs based and/or economic development factors)? What statistical indicators could be used given the criteria established?
  – Coverage
    • Scope of workers: any excluded categories?
    • Any specific minimum wage rates (by sector, region, occupations, etc)?
    • Any specific MW rates by categories of workers (youth, domestic, piece-rate workers, others)?
  – What is the current level of the MW?
  – When was the last update?
  – Rate of payment: Hourly, daily, weekly, monthly, other?
  – What is the scheduled frequency of adjustment?
  – What are the existing enforcement mechanisms?
  – What are the fines for non-respect of MW legislation?