ILO Seminar
Better Inputs for Decent-Work Analysis: ILO Statistics and the GTAP Labour Module

Discussant:
Monica D. Castillo
Senior Statistician
ILO Department of Statistics
castillom@ilo.org

First paper: “Labor statistics for the GTAP Database”

Proposes:

- New methodology for splitting labour payments in the GTAP database
- New data repository: ILO
- Data by 5 occupation groups, (roughly)15 industry groups

Scope:

- Employees
- Wages
- Note: self-employment and non-wage employment income are excluded, important esp. in developing counties

Labour data sources: GTAP database

Currently:

- National data sources directly (except Brazil: “ILO”)
- Many data limitations and adjustments, e.g. skills definitions

Proposed:

- ILO Yearbook of Labour Statistics
- Occupational Wages around the World Database (based on ILO October Inquiry (OI))

But: ILO Yearbook and OI discontinued in 2010

- New annual ILO statistical inquiry launched 2011, data published in ILOSTAT (but former OI data not included)

Conceptual, classification and data issues

Concept & classification issues:

- Precision in use of concepts (“job”, “occupation”, “industry”, employment vs. employees etc.)
- Classification manuals (ISCO-88, ISIC-03 now out of date)
- Occupational-industry categories in OI: out of date

Data issues:

- Different years within & across countries (Table 2)
- Different wage concepts & emp. scope across countries
- Wages of part-time workers may be included for some countries
- Different geographic coverage (e.g. total vs. urban only)

Methodology: some comments (1)

Matching "observed" OI data to wage matrices

- Matched data in each cell from few observations (in some cases only 1 obs.)
  - (Note: OI employment data not available to assess the importance of a given wage observation)

- Where multiple wages (OI categories) match to a cell, simple arithmetic average is used (again, no weights available)

- Suggestion: run simulations from microdata for key countries to assess accuracy comparing "observed" with full set of estimates

Methodology: some comments (2)

Imputations for missing data

- Blanks filled with occupational median wages from OI wage categories
  - Problematic for occ. groups with wide variations in wages across industries (e.g. manager categories)
  - Case of Germany: 33/65 initial cells were blank

Weighted constrained minimization approach

- Higher weights given to “observed” data (but again, few observations)
- Constraint ensures final weighted avg. wage for all occ groups equals industry avg. wage - logical approach

Second paper: “Enriching U.S. Labor results in a multi-regional CGE model”

Proposes:

- To enhance U.S. labour market results from the multi-regional CGE model, the GTAP model
  - Expands only U.S. labour data
- Changes primary factor demand assumptions: “lower-skilled jobs substitute more easily with other primary factors than higher-skilled jobs”
  - Based on literature review conducted in 1986
  - Weighted mean annual wages used to define skills – limited approach

Scope:

- Employees, Wages for 22 (SOC) occupation groups, 57detailed industry groups (4-digit NAICS)

Data sources

- **Two U.S. data sources used:**
  - **May 2007 OES survey** of nonfarm establishments for MFG & Services sectors; (employment and wages) + ag. operator wages (imputed)
  - **2007 Census of Agriculture** (employment data for operators & hired labour and "production expenditure for hired labour" only)

Note:

- Survey reference periods differ
- Wages statistics concepts are not comparable
- Both sources include part-time and full-time workers:
  - Introduces downward bias in average wages, since annual wages are used

Issues with data selected from OES survey (mostly MFG & Services sectors)

Only use annual wages, thus likely excludes (some) data of employees with hourly wages

- Excludes (some) low-wage, more vulnerable workers
  - What % are excluded?

- Introduces upward bias in average wages

Issues regarding agricultural data

Agricultural employment

- Annual person equivalents used in ag sector (to adjust for seasonal work); not done with OES emp. data
- When on-farm time not specified: assumes 365 days/2

Agricultural wages

- Agricultural operators: wages imputed using OES data for "support activities for crop/animal production" – but: different skill sets
  - Why not use CPS earnings data directly for these workers?

Principles and framework for measuring decent work – launched in 2008

- **Purpose:** to (i) assist constituents to assess progress towards decent work and (ii) offer comparable information for analysis and policy development.

- **NO ranking of countries & NO composite index**

- **Covers all four dimensions of Decent Work:** (i) International labour standards and fundamental principles and rights at work (ii) Employment creation (iii) Social Protection (iv) Social Dialogue and tripartism

- **Information is derived from various sources:** household and establishment surveys, administrative records, qualitative legal framework information, among others

- **New framework:**
  - Groups statistical/legal framework indicators under 11 substantive elements
  - Layered approach to indicators (main, additional, future, context) & by sex
  - Dynamic, international model that can adapt to national circumstances

Structure of Decent Work Measurement Framework

Grouping of indicators under **10 substantive elements** of the Decent Work Agenda:

1. *Employment opportunities (1 + 2)*
2. *Adequate earnings and productive work (1 + 3)*
3. *Decent hours (1 + 3)*
4. *Combining work, family and personal life (1 + 3)*
5. *Work that should be abolished (1 + 3)*
6. *Stability and security of work (1, 2 + 3)*
7. *Equal opportunity and treatment in employment (1, 2 + 3)*
8. *Safe work environment (1 + 3)*
9. *Social security (1 + 3)*
10. *Social dialogue, workers' and employers' representation (1 + 4)*

Plus one area on economic and social context

11. *Economic and social context for decent work*

Note: (1) Rights at work (2) Employment opportunities (3) Social Protection (4) Social Dialogue

New ILO STATISTICS Annual Inquiry Launched in 2011: Data Published in ILOSTAT Database

ILOSTAT Database - Windows Internet Explorer

http://www.ilo.org/ilostat/faces/home/statisticaldata;jsessionid=7Y5RR6ghqZcZ2TxJ6Q8KbQTfGCNdstVZDHBLQfN5hYLGKsJbnvTGI-3945787987_afrLoop=288690626626747

File Edit View Favorites Tools Help

ILOSTAT Database

Français | Español RSS Feed | Media Center | Contact us | Login ILO is a specialized agency of the United Nations

International Labour Organization — Promoting jobs, protecting people

About the ILO | Topics | Regions | Meetings and events | Programmes and projects | Publications | Labour standards | Statistics and databases

ILO Home > Statistics and databases > ILOSTAT Database

ILOSTAT Database

- Browse by country
- Browse by subject
- Browse by breakdown
- Concepts & definitions
- Download

Help

ILOSTAT Database

Welcome to ILOSTAT (BETA VERSION)

This new ILO database of labour statistics provides recent data for over 100 indicators and 165 economies. Annual data prior to 2008 and additional information, such as sources and methods, are still available in LABORSTA and gradually will be migrated to ILOSTAT.

Labour statistics describe the size, structure, characteristics, outputs and contributions of participants in the labour market but also how these change over time. From an economic perspective, statistics are useful to analyse, evaluate and monitor the way the economy is performing and the effectiveness of current and longer term economic policies. From a social perspective, they are useful in the plight for *decent work* — through policies and programmes for job creation, training and retraining schemes, and assistance for vulnerable groups, which may include young people, the aged, women, etc., in finding and securing decent employment.

See also

LABORSTA **Covers official core labour statistics for over 200 countries for 1969 to 2008. This database is not being updated and will eventually be replaced with ILOSTAT.**

List of ILO databases

Coming up

FEBRUARY 2013
Update of short term indicators.

© 1996-2011 International Labour Organization (ILO) | Copyright and permissions | Privacy policy | Disclaimer | Version: 20101303_20-45_20130423:0830

Website: http://www.ilo.org/ilostat