



G<sup>2</sup>LM|LIC Policy Brief No. 41 | May 2021

# The Jobs of the World Database: A New Dataset on Labour Markets of Developing Countries

**Oriana Bandiera** (London School of Economics) **Ahmed Elsayed** (IZA)



The Jobs of the World Database harmonises

several sources of microdata for developing

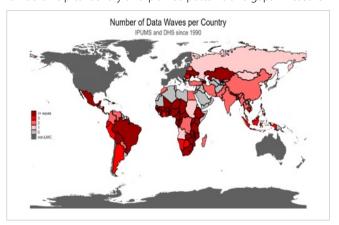
countries and is a great tool for labor market

research!

Follow us on Twitter! Find @glmlic

## Topic at a Glance

Researchers in development economics have made great progress towards understanding the link between gender, jobs and poverty by rigorous evaluation of policies at a very micro level. However, the main challenge facing researchers today is to aggregate this knowledge and to gauge the external validity of each specific evaluation. In its sphere, the Jobs of the World Database tries to account for this lack of resources. The dataset harmonises available micro datasets that contain information on labour market activities and poverty to create a multi-country macro data-set that contains information about labour force participation, occupational choice (sector, casual vs regular, wage vs self-employment) split by gender, age, geographic region (urban vs rural), education levels, and wealth quintiles. This dataset covers the time period 1990-2019 and serves two purposes: (1) It would allow researchers to compare their particular setting to averages in other contexts to get a sense of how widespread patterns are and therefore the extent to which their research can be informative for other settings, and (2) It would help to identify unexplained patterns and gaps in research.



Caption: The Jobs of the World Database 1990-2019 (version 01) harmonising IPUMS and DHS provides coverage of countries representing about 81% of the world's population, and more than 90% of the population in LMICs.

# **New Insights**

The dataset ultimately aims at harmonising three sources of data: (1) Census data: From IPUMS, which contains a large collection of publicly available census microdata, (2) Demographic and health survey (DHS): which collects nationally representative data on fertility, family planning, HIV, etc. But more relevant to this exercise is the fact that most DHS surveys also include a module on employment which records crucial information on work characteristics performed by individuals, and (3) Labor Force Surveys: which have been conducted by approximately 72% of LMICs (100 of the 138) but is only publically-available for a small set of these countries. In the current version of the JWD (Version 01), we completed the harmonisation of IPUMS and DHS. This provides coverage of countries representing about 81% of the world's population, and more than 90 percent of the population in LMICs. Below we discuss a selected number of findings from the dataset. The Youtube video here provides an overview on the harmonisation strategy and the main findings.

#### Labour markets over the economic development path

The database provides valuable information on how labour markets in developing countries are constructed, and the extent to which different labour market indicators change over the development path. Merging the database with information on development, using GDP per capita as a measure of economic development, the dataset not only confirms earlier findings from the literature but also shows interesting new findings. While the level of employment does not change with economic development, this seems to hide several layers of heterogeneity. For example, the data shows that the share of workers employed in the agriculture sector falls while the share of those in manufacturing and services increases with development. In addition, the type of employment changes: at lower levels of development almost nobody has a salaried job whereas in the richest countries in the dataset nearly everybody does. Self-employed work follows the opposite pattern.



#### Splitting the data by wealth quintiles

A major capability of the database is its ability to split averages of the different labour markets by wealth quintiles, drawing information from durable assets' ownership and house characteristics from the two data sources. We used Principal Component Analysis (PCA) to create a consistent measure of wealth density for each country for every available year. We then split this density score into quintiles. This has the advantage of enabling us to understand job characteristics across different levels of socio-economic backgrounds. Merging data with data on GDP per capita shows that transition to salaried jobs goes from the wealthiest to the poorest individuals, that is the wealthiest are the first to get these jobs as they appear. The data also shows that the relationship between employment and wealth changes over the course of development: at lower levels of economic development, the poor are much more likely to be employed while in the richest countries in the dataset the opposite is true. The level of employment for the richest group (the top quintile) is almost unchanged at slightly below 60 percent across all countries regardless of the development path.

#### **Gender differences**

The database would be of particular interest for understanding gender differences in labour market conditions. The data shows that men are more likely to be in the labour force and there seems to be no strong correlation with the level of development. However, the dataset shows that that structural change differs across the two genders: while women tend to leave agriculture to move to services whereas, men are more likely to move to manufacturing. We also see that women are less likely to have a salaried job and the wealth gradient is much steeper for them. The figure shows that richest women (i.e., those at the top wealth quintile) are at the same level of wage employment as the poorest men. The data also contains information about fertility, and preliminary analyses shows that fertility plays a role not only in labour force participation of women but also in the type of jobs women prefer. The data shows that women with children are more likely to prefer self-employment to salaried jobs.

#### Other aspects

The dataset could also be used for studying several other patterns such as education, migration, and fertility. The data shows that higher levels of education (assessed by different indicators such as literacy, years of schooling as well as levels of primary and secondary education) are associated with economic development. The dataset also can be used to address aspects related to migration such as the overall level of migration, migration from rural to urban areas (and vice versa) as well as the age of migration (as a child, a teenager or an adult), etc. Fertility plays a big role in labour market outcomes of women. The data shows that that, across developing

countries, there seems to be a child penalty in wage employment. Women with no children consistently show to have higher shares in wage employment as a share of all workers and this difference does not seem to change with economic development.

## **Policy Recommendations**

The Jobs of the World Database could be an extremely useful tool for policy makers to better understand the labour market characteristics in developing countries. The database has the advantage of being harmonised across a large set of countries enabling comparisons across nations and therefore helping policy makers draw conclusions and predict the path through which labour market characteristics would change with changes in economic development, fertility patterns, etc. The database also could be helpful in understanding gender inequalities in labour market conditions as the starting point towards addressing these inequalities. A major advantage of the data is the possibility to split the labour market characteristics across different characteristics such as wealth quintiles. This would be helpful in identifying the patterns across different groups and therefore better understand the channels.

#### Limitations

Although the data covers the majority of developing countries, not all countries are represented over the same exact years. This limits the ability of the dataset to compare patterns over time for different countries. The current version of the data (version 01) which harmonises IPUMS and DHS lacks information on wages and working hours. In the future versions of the data, labour force surveys will be included and this will improve comparability over time as well as it will ensure that that dataset would contain a larger set of labour market indicators such as wages, working hours, and informality which would enable researchers to study a wider range of labour market outcomes.

G<sup>2</sup>LM|LIC is a joint program by IZA and the UK Foreign, Commonwealth & Development Office (FCDO) – improving worldwide knowledge on labor market issues in low-income countries (LICs) and providing a solid basis for capacity building and development of future labor market policies

c/o IZA – Institute of Labor Economics Schaumburg-Lippe-Straße 5–9 53113 Bonn, Germany

Fax: +49-228-3894-510 Email: glm-review@iza.org



