

Worldwide Bureaucracy Indicators (WWBI)

192 indicators on public sector employment and wages

Gender pay gap is **88%** in the public sector vs. **75%** in the private sector

The public sector is the single **largest** employer in most nations

202 countries from **2000-2018**

Women outnumber men in the public sector in **54** countries

3/4 of all countries experience public sector wage premium

64% of the education and **70%** of the healthcare workers are female in the public sector.

A unique global dataset providing 192 indicators on public sector employment and compensation for 202 countries and territories based on household survey microdata.

The World Bank Bureaucracy Lab seeks to promote the use of evidence and technology in the study of the civil service through the creation of new datasets, diagnostic instruments, and knowledge products to improve World Bank policy advice and operations.

What are the Worldwide Bureaucracy Indicators?

The Worldwide Bureaucracy Indicators (WWBI) are a unique cross-national dataset on public sector employment and wages developed by the World Bank's 'Bureaucracy Lab'. They aim to help researchers, development practitioners, and policymakers gain a better understanding of the personnel dimensions of state capability, the footprint of the public sector within the overall labor market, and the fiscal implications of the public sector wage bill. The indicators, constructed from nationally representative household surveys, present a micro-founded picture of public sector labor markets across the world. The WWBI are based on 53 million unique survey observations and consist of 112,919 estimations across 192 indicators for 202 countries and territories between 2000 and 2018.

A few key indicators

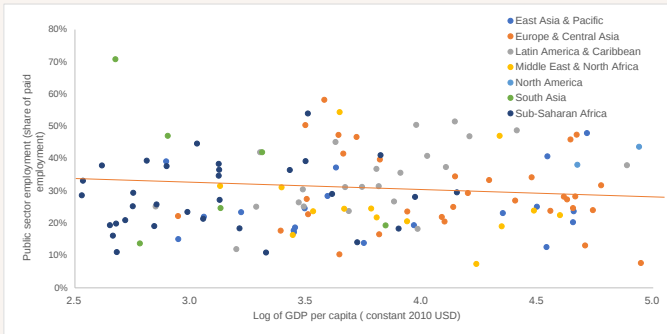
- Size of the public and private sector workforce
- Demographics of public and private sector employment: distributions by gender, age, education, urban-rural, wage quintiles, and industry of employment
- Gender equity in public and private sectors
- Public sector wage premiums
- Distributions of public sector wage premiums by education, occupation, industry, and gender
- Gender pay gaps in the public and private sectors
- Pay compression ratios in public and private sectors (ratio of 90th and 10th percentile wage earners)
- Pay compression ratios in the public and private sector (indexed occupations)
- Presence of social safety nets in the public and private sectors
- The relative size of the public sector wage bill

Version Update

First WWBI dataset was published in 2018 with 87 indicators. This version 2.0 incorporates data from 63 new surveys from 30 countries. It includes data from the International Comparison Program (ICP) on pay ratios in the public sector for major occupations. It also adds data on industrial classification coded into 781 labor-force surveys, allowing for the decomposition of public sector employment and industry compensation trends. Total coverage now stands at 192 indicators over 202 economies between 2000 and 2018.

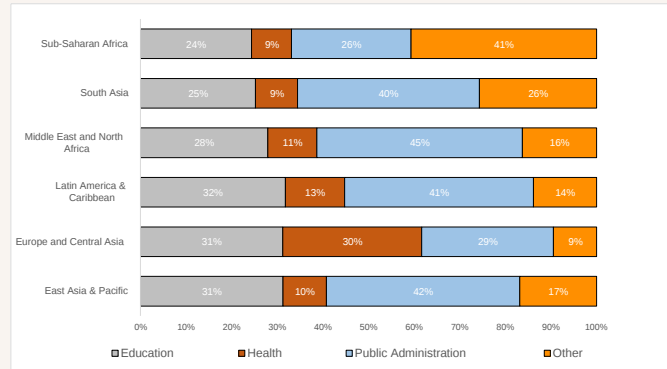
The public sector is the single largest employer in most nations. It is an especially important source of good formal jobs in many developing countries. Overall, the public sector is responsible for 16 percent of total employment, 30 percent of wage employment, and 37 percent of formal sector wage employment. The public sector employment varies by region (Figure 1).

Figure 1: Public sector is a large employer globally



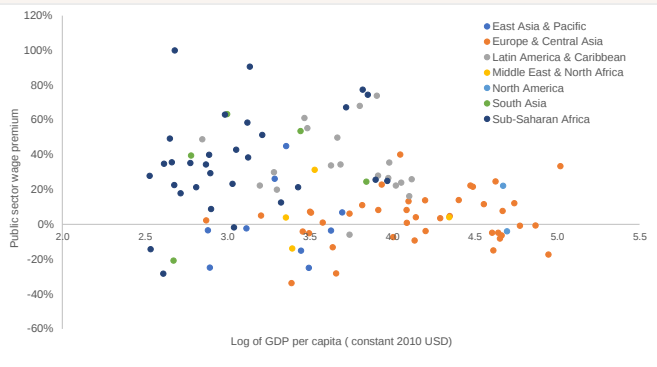
Globally, public administration is the single largest segment of the public sector workforce, followed by education and healthcare (Figure 2). Together these three industries employ nearly 80 percent of all public sector employees. Public administration includes general administration, supervision in social and economic life - defense, justice, police, foreign affairs, and compulsory social security management..

Figure 2: Public administration is the largest segment of the public sector workforce



Public employees in most nations receive a wage premium compared to their counterparts in the private sector that cannot be explained by sex, age, education levels, or location (Figure 3). However, the size of the public sector wage premium is dependent on the level of academic qualification and occupation of employment. While individuals with no or low levels of education or those employed in clerical and elementary occupations enjoy a large wage premium, individuals with tertiary education or those employed as senior officials, professionals, and technicians experience either no wage premium or a wage penalty.

Figure 3: Public sector pays wage premium over similar private sector workers



While the public sector in most countries experiences a wage premium, the pay compression ratio (the ratio of the wage of the 90th and 10th percentile earners) for public sector employees is relatively flatter compared to their respective private sectors (Figure 4). The average wage compression ratio for the public sector across 101 counterparts is 5.3 compared to 6.5 in the private sector.

Figure 4: Public sector employees experience a flatter pay compression ratio

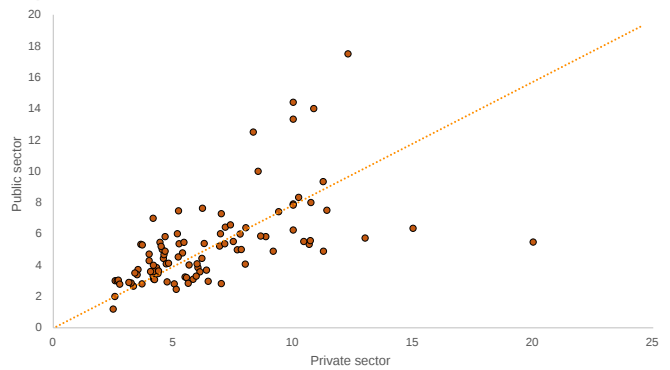
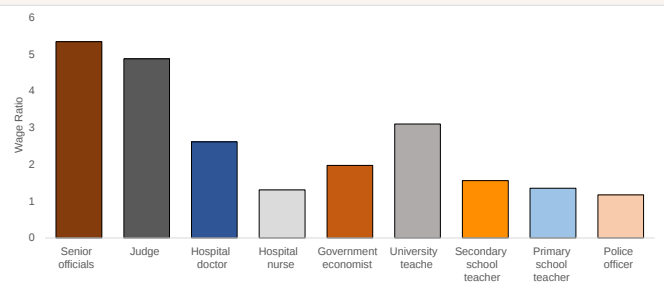


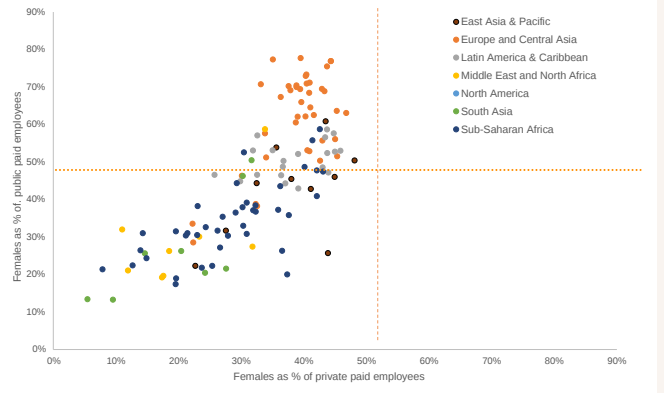
Figure 5 shows the ratio of the wages of the indexed occupations to all clerical occupations (as the benchmark). Globally, senior officials are the highest-paid public sector employees, receiving over five times more than those employed in clerical occupations in the public sector, followed by judges (just under five times). University teachers receive twice more than secondary and primary school teachers globally. On average, the lowest paid public sector employees are police officers and hospital nurses, receiving only marginally higher salaries than individuals employed in clerical occupations.

Figure 5: Within country relative wages



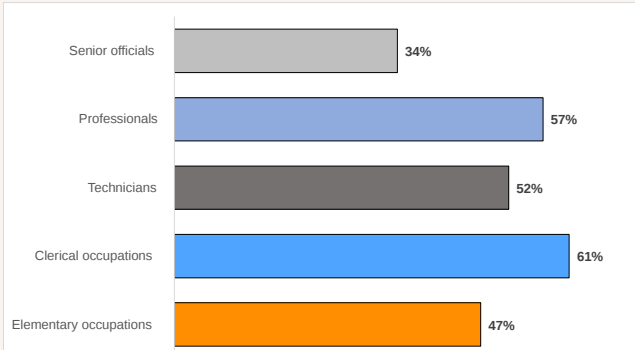
The public sector is an especially important source of jobs for many socioeconomic groups in many developing countries. Globally, the percentage of women working in the public sector (46 percent) is higher than the share of women working in the private sector (33 percent) (Figure 6). In Europe and Central Asia, 62 percent of public paid employees are women, while women constitute only 39 percent of private paid employees.

Figure 6: Public sector employs more women than the private sector



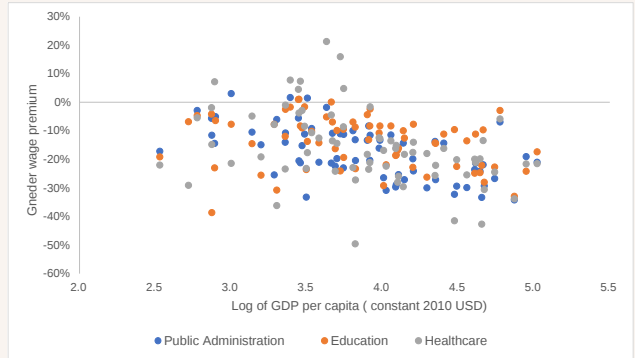
While most public sectors have higher participation by women, their representation is confined to a few industries and occupations. Nearly 64 and 70 percent of the public sector education and healthcare workforce is female, respectively. Figure 7 shows that women occupy just 34 percent of senior official positions in the public sector while representing 61 percent of clerical positions.

Figure 7: Women are underrepresented in senior positions



It is well known that women globally earn significantly less in the private sector than men for doing the same work, with the disparity holding for developed and developing countries. This divergence is relatively smaller in the public sector; females earn 88 percent in the public sector but 75 percent in the private sector than the salary of respective male counterparts. Figure 8 illustrates the gender wage penalty that women experience compared to men in the public sector globally. In 191 of 201 observations for gender wage premiums by industry, women face wage penalty compared to their male counterparts working similar jobs with similar hours. This disparity is after accounting for differences in age, educational qualifications, and location as the public sector wage premium. The average global gender wage penalty is 14 percent for education, 17 percent for healthcare, and 18 percent for public administration industries, respectively.

Figure 8: Women experience a wage penalty in the public sector



Learn more about the Bureaucracy Lab at:
<https://www.worldbank.org/en/research/dime/brief/Bureaucracy-Lab>

Full dataset and associated explanatory note are available at:
<https://datacatalog.worldbank.org/dataset/worldwide-bureaucracy-indicators>

