

## Countries with Regional Imputations on WID.world

Lucas Chancel  
Thomas Piketty

November 2020



**WID.WORLD**  
THE SOURCE FOR  
GLOBAL INEQUALITY DATA



# Countries with Regional Imputations on WID.world

## Technical Note

Lucas Chancel and Thomas Piketty<sup>1</sup>

November 2020

For countries that have no distributional data whatsoever, we use regional averages to impute their distributional series in the absence of better estimates. The general formula is the following: when country X has no data, we use countries A, B, C for year T to compute the regional average for g-percentiles thresholds and levels (expressed as fraction of average income) and multiply these values by average national income of country X for year T. These estimates will be updated as soon as we obtain and process better survey, tax or national accounts data. These estimates should be interpreted with extreme care. They nevertheless provide a useful and transparent starting point to compare income levels across the distribution of these countries with those of other countries in the world.

Since these estimates are used in our regional and global aggregation estimates of inequality, we also report them at the individual country level on WID.world for informational and transparency purposes. But we explicitly flag them as imputations, with a specific label and this accompanying precautionary note.

---

<sup>1</sup> Lucas Chancel and Thomas Piketty are co-directors of the World Inequality Lab (lucas.chancel@sciencespo.fr; thomas.piketty@psemail.eu). The authors gratefully acknowledge funding from the European Research Council (ERC Grant 856455) and from the French National Research Agency (EUR Grant ANR-17-EURE-0001).

The list of countries per region that follow this imputation rule are the following:

### **Africa**

Out of the 55 countries of the Africa region, 5 do not have any available survey tabulation and hence distributional data over the period considered: this is the case for Eritrea, Equatorial Guinea, Libya, Somalia, and Western Sahara. For these countries, the distribution of national income is imputed each year using either the average regional distribution or the distribution of a particular neighboring country. More specifically:

- The national income distribution for Eritrea (ER) is extrapolated using Ethiopian inequality
- The national income distribution for Equatorial Guinea (GQ) is extrapolated using average Middle Africa inequality
- The national income distribution for Libya (LY) is extrapolated using average Maghreb inequality
- The national income distribution for Somalia (SO) is extrapolated using average Eastern Africa inequality
- The national income distribution for Western Sahara (EH) is extrapolated using Mauritania inequality

### **Asia**

Out of the 32 countries of the Asia region, 5 countries have no distributional data. These are Afghanistan, Brunei, Cambodia, Macao, North Korea and Papua New Guinea. For these countries, the distribution of national income is imputed each year using the distribution of a particular neighboring country, as follows:

- The national income distribution for Afghanistan is extrapolated using average central Asian inequality
- The national income distribution for Brunei is extrapolated using Malaysian inequality
- The national income distribution for Cambodia is extrapolated using joint inequality of Vietnam and Laos
- The national income distribution for Macau is extrapolated using Chinese inequality
- The national income distribution for North Korea is extrapolated using Chinese and Vietnam inequality
- The national income distribution of Papua New Guinea is extrapolated using Malaysian and Indonesian inequality

### **Eastern Europe**

For the five Eastern European countries with no data - Belarus, Ukraine, Georgia, Armenia, and Azerbaijan - we are currently working on distributional series based on PovcalNet and LIS survey data. In the absence of better estimates so far, we use the regional average of Eastern Europe (AL, BA, BG, CZ, EE, HR, HU, KS, LT, LV, MD, ME, MK, PL, RO, RS, SI, SK) for these countries. These estimates will be updated as soon as the identified data sources are processed.

### **Latin America and the Caribbean**

The regional average of the countries with distributional data are used to fill in the series for all countries for which we have no distributional data (Bahamas, Belize, Cuba, Guatemala, Guyana, Haiti, Jamaica, Nicaragua, Suriname, Trinidad and Tobago, and Venezuela) nor DINA estimates so far for the period (Bolivia, Dominican Republic, Honduras, Panama, Paraguay).

### **Middle East**

Saudi Arabia's inequality level is imputed as the regional average from neighboring Gulf countries (Bahrain, Kuwait, Oman, Qatar, UAE).