

Estimates of the Global Distribution of Wealth

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Abstract

This technical note explains the procedure used to estimate the global wealth distribution in section 4.1 of the *World Inequality Report 2018*. Readers interested in these results should read that section of the *World Inequality Report 2018* first.

WID.world data

Our estimates of the “global” wealth distribution are based on three regions: China, the United States and Europe. Data for China come from *Capital Accumulation, Private Property and Rising Inequality in China, 1978-2015* by Piketty, Yang and Zucman (2017). Data for the United States come from *Wealth Inequality in the United States since 1913: Evidence from Capitalized Income Tax Data* by Saez and Zucman (2016). We convert between currencies using market exchange rates.

The distribution for Europe is extrapolated from three countries:

- France using *Accounting for Wealth Inequality Dynamics: Methods, Estimates and Simulations for France (1800-2014)* by Garbinti, Goupille-Lebret and Piketty (2016).
- Great-Britain using *Top Wealth Shares in the UK over more than a century* by Facundo Alvaredo, Antony Atkinson and Salvatore Morelli (2016). We only have the the top 10% of the distribution, so we use the French distribution to impute the bottom 90%. Levels of UK wealth are increased by factors that reflect the difference between total wealth and the wealth captured by the authors in their data (see file “UK_totals_comparison.xlsx”).
- Spain using *Housing Bubbles, Offshore Assets and Wealth Inequality in Spain* by Clara Martínez-Toledano Toledano (2017).

The distribution of these countries is combined with the following proportions: 60% United Kingdom, 20% France and 20% Spain. This represents a downweighting of France and Spain because both countries have had somewhat atypical evolutions of their wealth distribution: France because stock prices around 2000 have led to a severe short term increase in wealth concentration at the top, and Spain because of its housing bubble. However, this choice has a limited impact on the overall trend in wealth concentration because the results of the complete aggregation are dominated by the evolution of wealth in China and the United States.

These three distributions are combined (as a mixture model) and the resulting distribution is calculated exactly as it would by the Gpinter online tool (wid.world/gpinter) using the “merge” option.

The distributions of China, Europe and the United States are again combined as a mixture model with relative populations estimated from the UN World Population Prospects.

All the estimates of net national income and inflation come from WID.world, occasionally completed by the IMF's World Economic Outlook in the very recent years. Estimates of wealth in the very recent years are extrapolated from the last available year assuming a constant wealth/income ratio.

Forbes data

We use Forbes data limited to the region composed of China, Europe and the United States to make comparisons that are consistent with our estimates of the complete distribution.

Computer codes

To reproduce the figures in the report, run the R files "import-spain.R" and "wealth-evolution-cn-eu-us.R". All the necessary data for the codes to run in the same folder.