

### ABIMS: a New Tool to Assess Measurement Inconsistencies in International Migration Bilateral Databases (1990-2017)

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# ABIMS (Aggregated Base of International Migrants Stocks) A New Tool to Assess Inconsistencies in International Migration Bilateral Databases (1990-2017)

# UCLouvain

Cris Beauchemin, Arnaud Bringé, Steaven Lam, Bruno Schoumaker



**Identify the plots** 

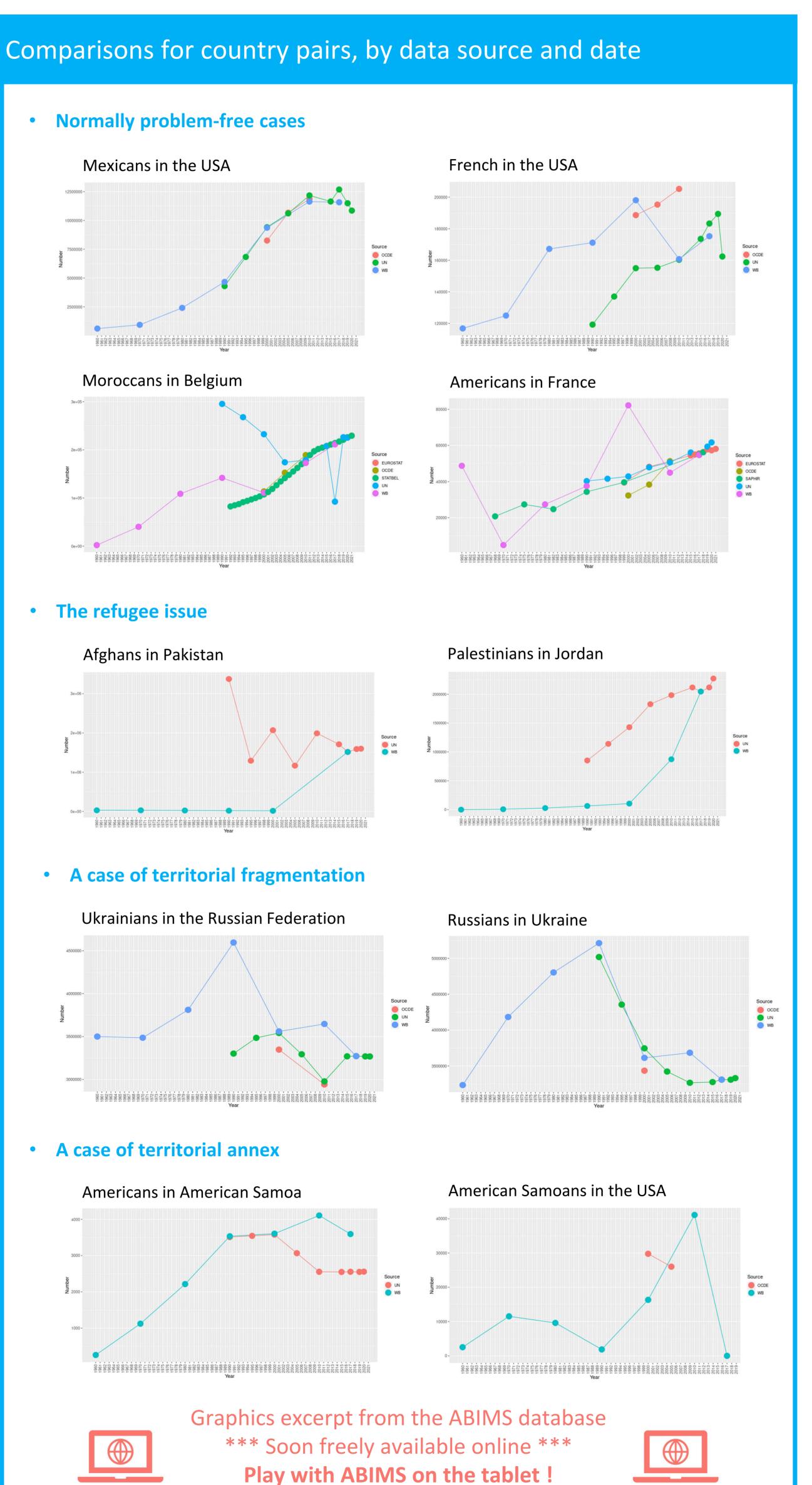
## An investigation on data quality with possible huge implications

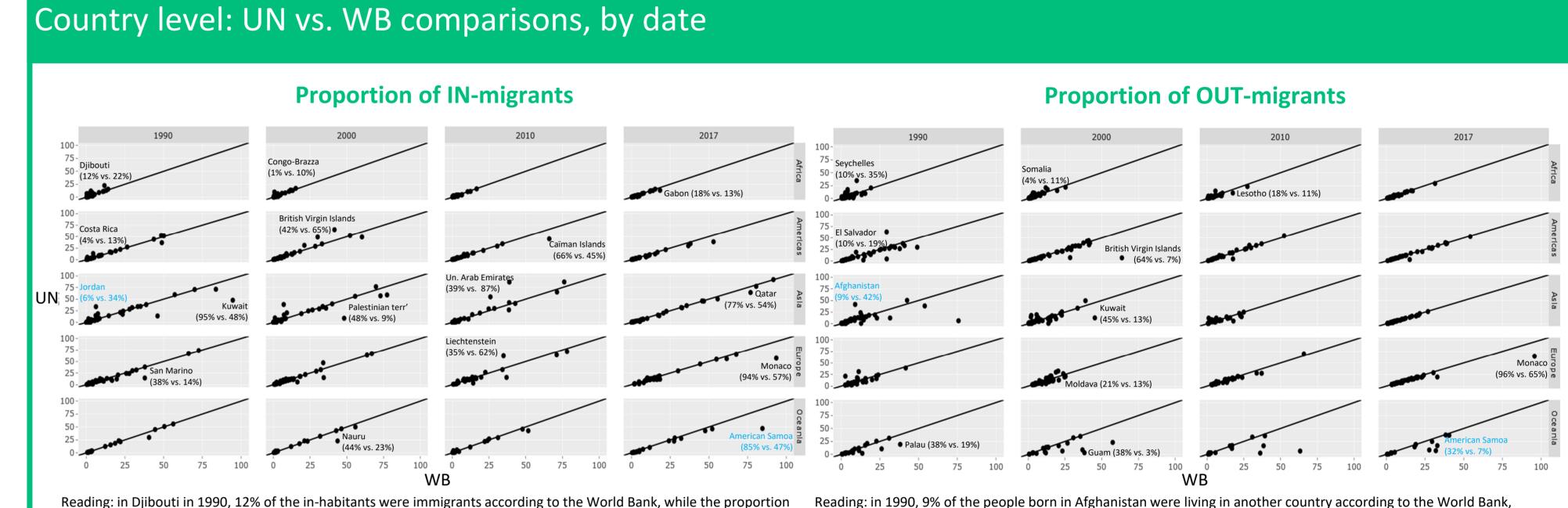
- A revolution in migration measurement: at the turn of the 2000s, the United Nations (UN) and the World Bank (WB) created new worldwild databases providing stocks of international migrants, crossing all possible origin and destination countries:
- World Bank: the « Global Bilateral Migration Database » (1960-2000)
   the « Migration Matrix » database (2010-2017)
- United Nations: the « International migrant stock » database (1990-2020)
- These international migration bilateral databases have become major sources for policy reports and migration studies (analyses of trends, causes and consequences of migration).
- The new ABIMS database brings together these data sources to compare their estimates with each other and with other data from national statistical offices (France and Belgium, so far) and regional organisations (OECD, European Union), that can serve as benchmarks.

# International migration bilateral dabases: commonalities

- The bilateral databases aggregate immigrant stocks for all destination countries by origin, thus providing migrant stocks for all possible origin-destination pairs.
- **Data sources:** mainly censuses, population registers, occasionally surveys.
- **Definition of international migrants:** persons born in a country different from their country of residence (or, failing that, whose nationality is different from that of their country of residence).
- **Territorial recompositions:** stocks re-estimated with a constant definition of territories (e.g.: former USSR).

### Data sources differences World Bank (1960-2000) World Bank (2010-2017) United Nations (1990-2020 "Global Bilateral "International migrant stock "Migration Matrix" 226 countries 213 countries in 2010 232 countries 214 countries in 2013 and (including territorial annexes) 1960, 1970, 1980, **1990, 2010**, 2013, **2017 1990**, 1995, **2000**, 2005, **2010**, 2015, **2017**, 2019, 2020 Excluded Apparently included Included No detailed explanation Interpolation or extrapolation Interpolation or Estimates in t extrapolation from other from other estimates estimates of a data source Yes, based on other data Redistribution ( on the origin of migrants Two residual categories Two residual categories "Other North" and "Other "Other North" and "Other information c South" country of orig Many empty cells (missing | Many empty cells (missing No empty cells Treatment of empty ce justment to the No xed dates of th Apparently following UN Stocks interpolated or bases (196 estimates extrapolated

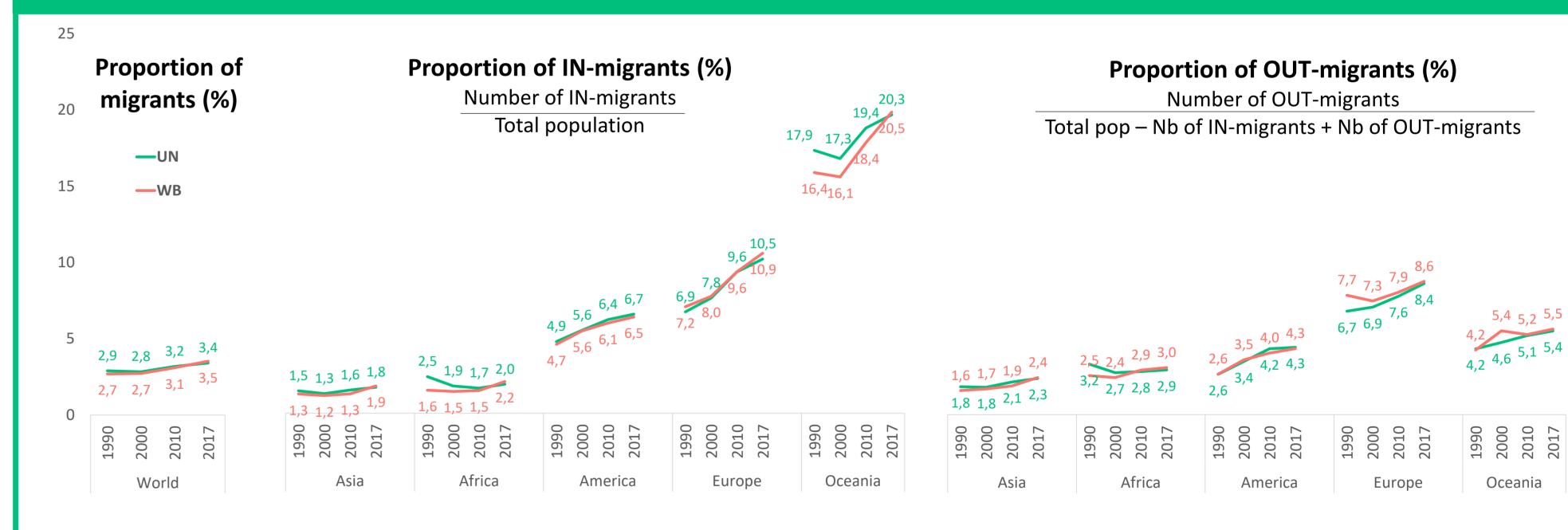




Inconsistencies are more salient...

- before 2017 [explained by design], although unexplained differences remain;
- in territories affected by refugee displacements (e.g. Jordan, Afghanistan) [explained by design];
- in small territories (e.g. Monaco, Arabian Gulf), dependent territories (e.g. American Samoa);
- in OUT-migrants rates.

# Global and regional levels: UN vs. WB comparisons, by date



- Significant gaps especially in 1990, although estimates converge over time
- UN and WB sometimes show different trends (e.g. in and out from Africa), with implications on how regional trends are envisionned
- WB estimates often below UN estimates (refugee effect), although not systematically

### Summary

- Global level: consistent estimates
- Regional level: some opposite trends
- Country level: large gaps concentrated in specific contexts
- Country pairs: erratic and, sometimes, huge gaps
- >>> Large implications for studies and reports using bilateral information

# Next steps

- To better understand the causes of inconsistencies.
   Systematic analysis of the outliers (quantification, factors).
- **To provide a new database without inconsistencies**, using if possible additional original data sources.
- To assess the impact of inconsistencies on studies using data on bilateral stocks (pairs of countries).