Understanding Purchasing Power Parities (PPPs)
Introduction to the seminar
Introduction to PPPs (...by Sir Angus Deaton)
PPP Concepts (...from the PPP eLearning)
History of PPPs and the International Comparison Program (ICP)
HISTORY AND EVOLUTION

Irving Kravis  Alan Heston  Robert Summers

1968
GOING FORWARD: FREQUENT & PERMANENT ICP

3-YEAR ICP CYCLES, RESULTS T+2

PPP Timeseries for 2011-17

Revised 2011 ICP

Y2020

ICP 2017 Cycle

ICP 2020 Cycle

ICP 2023 Cycle

Y2022

Y2025

...Timeseries...
ICP Data Value Chain
01 RESEARCH AGENDA

- Build consistent PPP time series
- Improve PPP reliability and quality
- Address difficult-to-measure areas
- Strengthen alignment between ICP and national statistical programs
- Advocate wider uses and applications of PPPs
- Explore innovations in technology and new data sources
02 Standards & Guidelines

- Ensure quality and comparability of data across countries
- Help design ICP surveys to allow the production of more frequent PPPs
- Strengthen synergies between ICP and CPI surveys
- Make use of national accounts, census and administrative data
- Guide countries to produce sub-national PPPs
03 IDENTIFICATION

- WHAT?
  - Consumer goods and services
  - Housing types
  - Government occupations
  - Investment goods and services
- WHERE?
  - Locations and outlets
- WHEN?
  - Survey schedule and frequency
04 COLLECTION & COMPILATION

- Collect prices for consumer and investment goods and services
- Collect rents for housing types
- Compile compensation of government employees from admin data
- Compile GDP expenditures, exchange rates, and population estimates from existing national statistics
- Collect metadata
05 VALIDATION

- Collaborative and iterative effort between countries and multilateral agencies
- Ensure the quality of prices, rents and compensation data
- Evaluate GDP expenditure data, exchange rates, and population estimates
06 PROCESSING & RESULTS

- Process input data to produce results for reference years [every three years]
- Interpolate between reference years to produce a PPP time series
07 QUALITY ASSURANCE

- Assess quality and relevance of results
- Determine the level of detail to publish
08 DISSEMINATION

- Produce reports and tables of results
- Publish through online channels: database, dashboards, etc.
09 ANALYSIS & VISUALIZATION

- Analyze results
- Visualize findings
- Create country profiles
- Produce topic-specific policy notes
10 USES & APPLICATIONS

Promote:

- Uses of PPPs and related indicators
- Uses of underlying ICP data
- Applications of PPPs (e.g. sub-national PPPs)
Uses of PPPs and ICP data
What % of people around the world live on less than US$1.90/day?

The maternal mortality ratio has halved over the last 25 years in low income countries.

Maternal mortality ratio (modeled estimate, per 100,000 live births)

This modeled indicator uses GDP measured in PPP terms in its calculation.

Source: World Development Indicators • Get the data
CO2 emissions per unit of GDP (PPP) tends to be high in North America and in many parts of Asia.

CO2 emissions (kg per PPP $ of GDP), 2014

Source: World Development Indicators - Get the data
Institutional Uses
Shareholding formulas

Country Uses
Allowances for foreign services officers

St Kitts & Nevis
Future of ICP and PPPs
PPPs ..
... of higher quality
... faster to generate
... with more metadata
... more cost effective
A VIEW INTO THE FUTURE

1968

2018

2068
WEB SCRAPING: Prices from online retailers and other online sources
SCANNER DATA: Data from retailers’ point of sale
World Bank ICP pilot to collect prices, images & metadata for 150+ goods and services in 15 countries

Privately-operated network of local contributors (not trained collectors!) using smart-phone data collection app

Key findings
- Crowdsourcing approach proved feasible
- More timely data = faster collection and validation
- More metadata available to users (e.g. shop locations)