



university of
 groningen

PPP uses

Robert Inklaar
University of Groningen

Meeting of ICP Regional Coordinating Agencies
May 27–29, 2015 Washington DC

This presentation

- Why are we all doing this?

This presentation

- Academic uses of ICP results
 - Current applications
 - Current research
 - Future challenges

Come a long way

- Comprehensive country coverage
 - Covering 98% of world population
- Two high-quality global benchmark comparisons

“Given the diversity of estimates and various sources of uncertainty, including gaps and errors in the underlying data, we conclude there is insufficient evidence to determine the direction of change in global interpersonal inequality in recent decades. ”

– Anand and Segal (2008) in “What Do We Know about Global Income Inequality?”

“The new [ICP 2005] PPPs imply that the cost of living in poor countries is higher than was thought, implying greater poverty at any given poverty line. ”

- Chen and Ravallion (2010), “The developing world is poorer than we thought but no less successful in the fight against poverty”

Penn World Table

- Founded by Kravis, Summers & Heston, ICP initiators
- Most popular (academic) source of data on ‘real’ (PPP-converted) GDP
- Since Summer 2013, PWT version 8
 - Developed by Rob Feenstra (UC Davis), Marcel Timmer and myself (U. of Groningen)
- Widely used: 150k unique visitors, ±250 academic citations

PWT & ICP

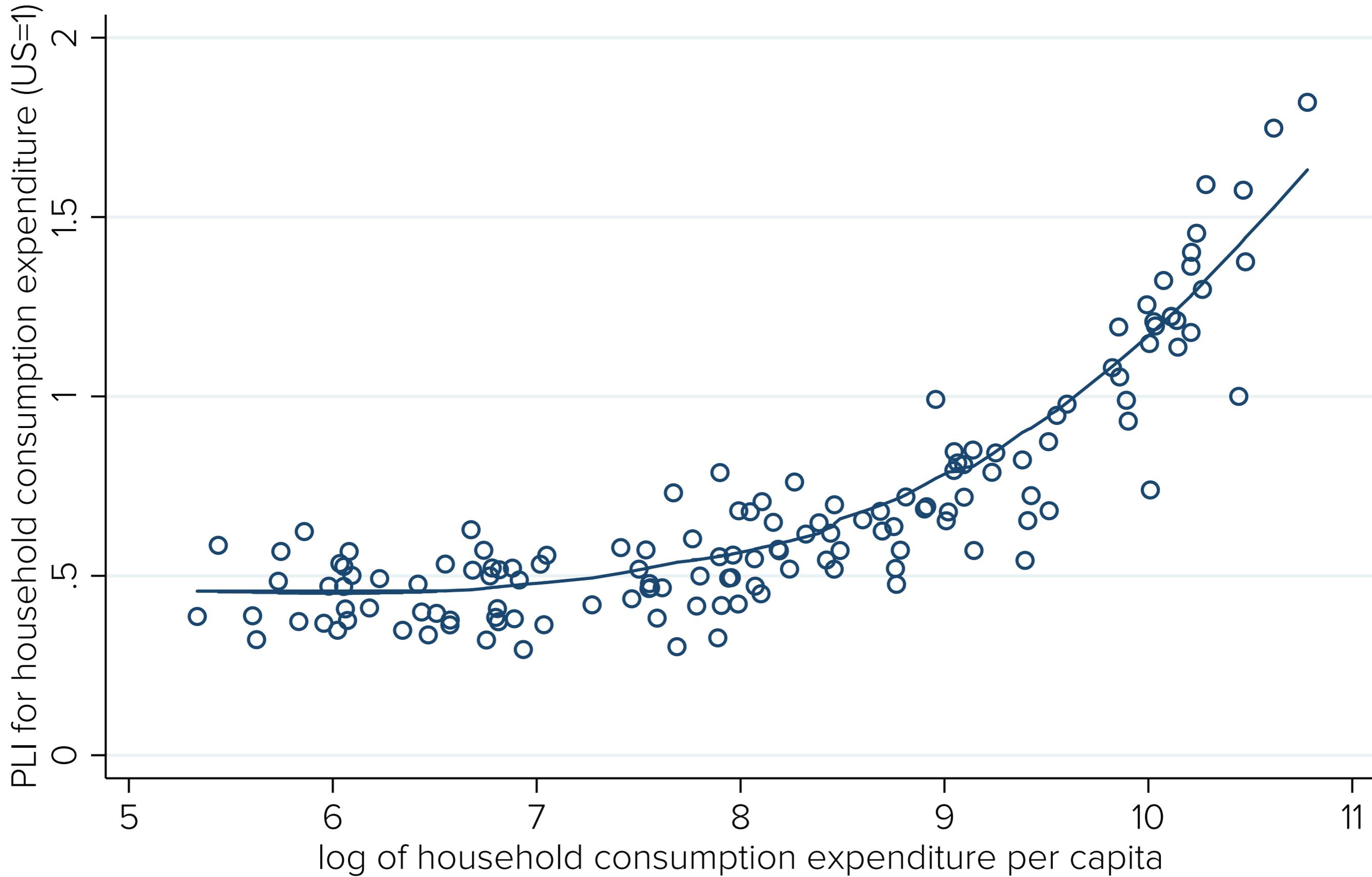
- PWT is a time series, covering 1950-2011
- From version 8: incorporating all ICP benchmarks & OECD/Eurostat benchmarks
 - Constrain real GDP to benchmarks, interpolate in between, extrapolate otherwise
 - Different pattern in ‘real GDP’ change and GDP growth
- Some methodological differences (regional fixity, top-level GK vs. GEKS)

PWT beyond ICP

- Not just domestic absorption, but also export & import PPPs
- Not just output, but also inputs; notably capital inputs
 - Relies on investment PPPs
- Also measures of productivity

Current questions

PLI across countries



Source: ICP 2011

ICP & prices

- Richer countries typically have higher PLIs
 - But not everywhere or all the time
- Look at BH-level PLIs: goods vs. services, distinguish domestic & foreign content, consider broader explanations (e.g. role of income inequality)

ICP & productivity

- Aggregate productivity is nice, but what about sectoral and industry sources?
 - How large are sectoral vs. aggregate productivity differences?
 - Which sectors contribute to global productivity convergence?
- Match basic headings to industry output

ICP & poverty

- World Bank: global poverty is the number of poor by the standards of the poorest countries
 - Using PPP-converted poverty lines
 - ICP 2005: \$1.25
 - ICP 2011: \$1.75–\$2.00
- But why not use GCL prices directly to form national subsistence poverty lines?

Future challenges

ICP & BPP

- BPP: MIT's Billion Prices Project
 - More generally: high frequency, highly detailed price data from (online) sources
 - Better coverage in high-income countries and consumer goods
- New host of questions, e.g. market power of retailers, interaction of prices and exchange rates, influence of sales

Looking ahead

- Growing use of more detailed information
 - Basic heading-level and below
- Growing demand for higher frequency and finer detail
 - Embrace lower-cost alternatives and focus on traditional ICP strengths