

The Wealth and Poverty of Nations: True PPPs for 141 Countries

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I set out a new method for estimating true (Konüs) PPPs and apply it to measuring the standard of living across the world. Household consumption per head deflated by these PPPs answers the question: by how much must the average expenditure per head of poor country A be increased to enable the typical inhabitant of A to enjoy the same welfare (utility) level as the typical inhabitant of rich country B? Conventional multilateral PPPs for household consumption, such as the ones published by the World Bank, are not based explicitly on economic theory. So it is not clear that they can answer the question above, particularly if consumer demand is not homothetic. And there is overwhelming empirical evidence against homotheticity. The estimates of the standard of living in this paper are based on the economic theory of consumer demand. The main tool is the expenditure function. It turns out that it is not necessary to estimate all the parameters of the expenditure function but only the relatively small number which measure the consumer's response to income changes. This makes the method feasible even when there are large numbers of products. The estimation procedure also allows for the effect on consumer demand of background factors such as climate, demography, culture and religion and also of within-country income inequality. The method is applied to 141 countries included in the World Bank's 2005 International Comparison Program, at the level of 100 products. The results give strong support for non-homotheticity and also for the importance of background factors. The gap between the richest and the poorest countries is wider than when household consumption is deflated by a conventional multilateral index such as the World Bank's PPP for consumption.

Key words: Purchasing power parity (PPP), standard of living, international comparisons, Konüs, index number, welfare, homothetic

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