

Background document - Frequently asked questions

What did the ICP study do?

The International Comparison Program (ICP) collected data on prices of more than 1,000 goods and services in 100 countries and territories. A similar program led by the OECD and Eurostat gathered data from 46 more countries. The price data were used to estimate purchasing power parities (PPPs) benchmarked to the year 2005.

PPPs express the values of national currencies in terms of a common currency. In this report, the common currency is the 2005 US dollar. When applied to the value of GDP or any component of GDP, the resulting dollar values reflect the real value of GDP in each economy, corrected for differences in price levels and unaffected by transitory movements of exchange rates.

The current report provides values for GDP, actual individual consumption by household, collective consumption of governments, gross fixed capital formation, inventory stocks, and net exports. A subsequent ICP report will provide detailed PPPs for components of household consumption.

What are the major findings of this study?

Twelve economies account for more than two-thirds of the world's output. Seven of them are high-income economies (United States, Japan, Germany, the United Kingdom, France, Italy and, Spain), and five are developing or transitional economies (China, India, Russia, Brazil, and Mexico), which account for more than 20 percent of global output and over 27 percent of world expenditures for investment purposes.

China participated in the survey program for the first time ever and India for the first time since 1985. This results in more statistically reliable estimates of the size and price levels of both economies. The previous, less reliable, methods led to an overestimation of their GDPs by 40 percent. China still ranks as the world's second largest economy with around 10 percent of world production and India is the fifth largest with over 4 percent of the world total.

Overall, the 2005 benchmark results show that the size of the world economy measured in PPP terms is smaller than previously estimated. The Asian and African economies (excluding high-income and oil exporting economies) are one-third and one-fifth smaller, respectively. However, Asia still accounts for over 20 percent of the world's output.

Why did PPP-based estimates of China's GDP drop by 40 percent?

This is the first time China participated in the ICP. Previous estimates were extrapolated from a bilateral comparison of 1986 prices between China and the US. The extrapolations failed to take into account the change in structure and increase in prices over time.

Are China's PPPs biased because they only furnished prices for 11 administrative areas?

If the national average prices based on these 11 cities are not fully representative of the rest of China, then there may be some bias. Simulations suggest that the bias for GDP is not likely to be more than five percent.

What do the new data tell us about poverty estimates?

The PPPs just released provide a measure of the overall price level of an economy. They may not fully reflect the expenditure patterns of the poor. Nor do they capture differences in price levels within a country. Additional data and analysis will be necessary before international poverty rates can be estimated using the ICP data.

Why are there differences between a country's exchange rate and its PPP value?

There are many reasons that PPPs and exchange rates may diverge. Exchange rates are determined by the international demand for currencies, which is affected by many factors such as the volume of trade, the flow of investment, speculation by currency traders, and changes in official reserves. PPPs reflect the relative prices of goods and services in the economy, including those not traded on international markets.

When should PPPs be used instead of exchange rates?

PPPs should be used in comparing the size of economies. Because PPPs adjust for differences in price levels between countries, they provide a better measure of economic volumes.

Generally speaking, market exchange rates underestimate the size of developing economies, where price levels tend to be lower than in more advanced economies.

What is meant by “economic volumes” and how do PPPs help to measure them?

The term “volume” refers to real economic values, in contrast to nominal values. Real values are adjusted for price levels so that the same quantities – or volumes – of goods and services can be compared between countries.

Because PPPs provide estimates of the volume of GDP, they are often used for comparisons with quantities measured in physical units. For example, in the Millennium Development Goals, the energy efficiency of economies is monitored by energy use (measured in oil equivalent units) to GDP (measured using PPPs).

Why are things expressed in terms of US dollars when the value of the dollar has fallen so much since 2005?

Because the United States economy is the largest in the world, it is convenient to use the US dollar as the numeraire currency. However, because PPPs are transitive, they can be expressed in terms of any other currency.

How many countries were in the 2005 ICP?

There are 146 countries and territories participating in the ICP. This is a record number. China was included for the first time, and India had not participated since 1985. Africa included 48 countries. Estimates of purchasing power parities have been made for an additional 39 non-participating countries.

Why were not all countries included?

The ICP is a voluntary program. A record number of countries participated in this round, but resource constraints and other reasons prevented some countries from participating. Many have indicated their willingness to participate in the next round.

How do we know every country followed the same procedures?

Much effort went into ensuring countries used the same methodology and consistent data collection procedures. National implementation agencies met on a regular basis with the regional coordinators to ensure consistency. Regional coordinators were brought together by the Global Office on a regular basis.

An ICP Procedures Manual and the ICP Handbook were developed to ensure a common understanding and use of the methodology. A huge effort went into the preparation of specifications for the products to be priced.

Software was developed to ensure that rigid data validation was consistently applied. An editing program identified cases of inconsistent pricing and appropriate adjustments were made.

The estimation methods used are reasonably robust to differences in procedures between countries. The main concern was to avoid the occurrence of systematic differences.

Why do the PPP data differ from the data in the World Development Indicators?

The data in World Development Indicators are based on previous benchmark surveys. For developing countries, where benchmark data existed, they are based on the previous ICP round in 1993 and are quite out of date. For countries with no previous benchmark, data were imputed. So it is not surprising that there will be some changes with the introduction of new and better data. One of the biggest changes is for China which has participated in the ICP for the first time.

How do they differ from what has been in the Penn World Tables?

The Penn World Tables have been based on older benchmark data. There are also differences in methodology that causes notable differences. As a result, they cannot be compared directly to the new ICP data.

Why do the GDP, population, and exchange rate data in the report differ from those published in the *World Development Indicators*?

The data for GDP, population, and exchange rates were provided by national sources. For a few countries they differ from the data published by international agencies such as the World Bank because of differences in vintage or statistical methods. When the ICP results are published in the *World Development Indicators*, they will be made consistent with other indicators in the WDI database.