



China as the World's "Largest Economy"

Various media have recently reported that China has overtaken the United States to become the world's largest economy (a position the United States had held at least since 1913), based on estimates of purchasing power parity (PPP) measurements and projections made by the International Monetary Fund (IMF). What do these data mean? How should they be interpreted? And what implications, if any, do they have for the United States?

What Are PPPs and Why Are They Used?

The IMF's World Economic Outlook (WEO) provides comparative economic data and makes economic projections for numerous countries several times a year. These include country measurements of gross domestic product (GDP) converted into U.S. dollars using nominal exchange rates. The October 2014 WEO database estimated U.S. and Chinese nominal GDP for 2013 at \$16.8 billion and \$9.5 billion, making them the number one and number two largest economies, respectively. The IMF further projected that 2014 nominal GDP for each at \$17.4 trillion and \$10.4 trillion, respectively. These data would indicate that U.S. GDP is much larger than China's (76.8% higher in 2013). However, many economists contend that using nominal exchange rates to convert foreign currency into U.S. dollars for comparing GDP can be misleading. First, China pegs its currency (the renminbi or RMB) largely to the U.S. dollar and has intervened in currency markets to limit its appreciation, leading some observers to charge that the RMB is undervalued against the dollar, which in turn would affect estimates of China's GDP. Second, nominal exchange rates simply reflect the prices of foreign currencies vis-à-vis the U.S. dollar and such measurements do not take into account differences in the prices for goods and services across countries. To illustrate, one U.S. dollar exchanged for RMB in China would buy more goods and services there than it would in the United States. This is because prices for goods and services in China are generally much lower than they are in the United States.

To factor in these differences, many economists attempt to calculate a PPP exchange rate, based on price surveys that are conducted across countries, to reflect the actual purchasing power of each currency relative to the dollar in real terms. Thus, for example, if China produced one ton of steel, the PPP exchange rate would attempt to reflect the value of that steel in the United States. Although the PPP data have numerous shortcomings and do not reflect quality of life measures (such as clean air, political freedom, health and safety, leisure time, etc.), they are considered by many economists to be a more accurate method to make international comparisons of certain GDP data than the use of nominal exchange rates.

How does the PPP Exchange Rate Calculation Affect the Estimated Size of China's Economy?

The IMF's PPP data are based on price surveys conducted globally by the World Bank, the most current of which was done for 2011. The sharp differential in prices between China and the United States resulted in an estimate of China's 2011 PPP exchange rate with the dollar that was 84.3% greater than the nominal exchange rate, which in turn, raised the estimated value of China's GDP in PPP terms by the same level. The IMF's PPP data raise China's 2013 GDP to \$16.1 trillion (95.3% of the U.S. level) and the projected 2014 level to \$17.6 trillion, which exceeds that of the projected 2014 U.S. level by 1.1%. The IMF further projected that China's 2019 GDP on a PPP basis would be 21.7% greater than the U.S. level.





Source: International Monetary Fund.

Factoring in Per Capita GDP

China's emergence as the world's largest economy in PPP terms should be put into perspective, especially given that China's population is nearly 4.3 times greater than that of the United States. China's GDP on a per capita on a PPP basis, a common measurement for comparing international living standards, is considerably smaller than the U.S. level. The IMF estimates China's 2014 per capita GDP on a PPP basis at \$12,893, equivalent to 24% of the U.S. level (\$54,678). Even with a rapidly growing GDP, Chinese living standards are not likely to approach U.S. levels for several decades. The Economist Intelligence Unit projects that by 2030, China's per capita GDP on a PPP basis will amount to only 39% of U.S. levels.

China's Economy from a Historical Perspective

This would not be the first time that China has been the world's largest economy. According to one study by

economist Agnus Maddison, China was the world's largest economy from at least 1500 to 1870. In 1820, China accounted for an estimated 33% of global GDP on a PPP basis. However, foreign and civil wars, internal strife, weak and ineffective governments, distortive and sometimes disruptive economic policies, and rapid economic growth and productivity in other countries caused China's share of global GDP on a PPP basis to decline significantly over the next subsequent century, falling to 5% by 1978. Once China undertook comprehensive economic reforms, beginning in 1979, its economy began to expand rapidly (annual real GDP growth averaged nearly 10% through 2014), helping to restore it as a major economic power. China's share of global GDP on a PPP basis was estimated by the IMF at 16.5% in 2014 (up from 2.3% in 1980) and is projected to reach 19.3% by 2019. China's real GDP growth has slowed in recent years, but it still averaged about 7.6% from 2012 to 2014. Many economists contend that China's ability to maintain relatively healthy economic growth in the long run will depend on its ability to deepen economic reforms.

Figure 2. Estimates of U.S. and Chinese Per Capita GDP on a PPP Basis: 1980-2013 and Projections through 2019





Source: International Monetary Fund.

China's economic rise is also reflected in a number of other categories where China ranks first in the world, including in total merchandise trade (estimated at \$3.2 trillion in 2014), gross value-added manufacturing (at \$2.6 trillion in 2012), and holdings of foreign exchange reserves (\$4.0 trillion as of June 2014). China is seeking to use its growing economic power to boost its influence globally, including by promoting and funding new multilateral banks, such as the New Development Bank (along with Brazil, Russia, India, and South Africa) to assist developing countries, and the Asian Infrastructure Investment Bank (with an initial 21 members from Asia) to fund regional infrastructure projects. China has also rapidly become one of the world's largest sources of global foreign direct investment (FDI) outflows, which were \$101 billion in 2013-the third largest after the United States and Japan.

Figure 3. Estimates of Chinese and U.S.GDP on a PPP Basis as a percent of Global Total: 1980-2012 and Projections through 2019





Source: International Monetary Fund.

Implications of China Becoming the World's "Largest Economy"

While China's economic rise does not necessarily imply that the United States is in economic decline, or is in a zerosum game, it may imply that the United States is no longer the dominant economic power it once was. China's continued economic rise may lead it to seek a larger role in setting global trade rules and economic policies, which may not always coincide with U.S. goals. Some view China's economic ascendency as a major source of its rising "soft power," the ability to influence other nations, because they admire and/or seek to emulate China's economic system. China's rapidly growing economy and large consumer market have made it an increasingly attractive market for foreign exporters and investors, including those from the United States. China could also become an increasingly important source of FDI flows to the United States.

While the PPP data purport to show that China is the world's largest economy, such data are not an indicator of the quality of that development relative to the United States. For example, while the role of the RMB in global finance and trade is increasing, it is not likely to replace the dollar anytime soon as the world's main reserve currency. In October 2014, the dollar accounted for 43.5% of global payments, compared with 1.6% for the RMB. China's rapid economic growth has been partly fueled by FDI inflows and resulting productivity gains. However, while China has become a major center of manufacturing, especially for foreign firms that use China as the final point of assembly in their global supply chain networks, it has not become a global center for innovation. The World Economic Forum's 2014-2015 Global Competitive Index, which assesses the competitiveness of 144 countries, based on a set of polices institutions, and factors that determine productivity growth. ranked China 28th compared with 3rd for the United States. Also, see CRS Report RL33534, China's Economic Rise: History, Trends, Challenges, and Implications for the United States, by Wayne M. Morrison.

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