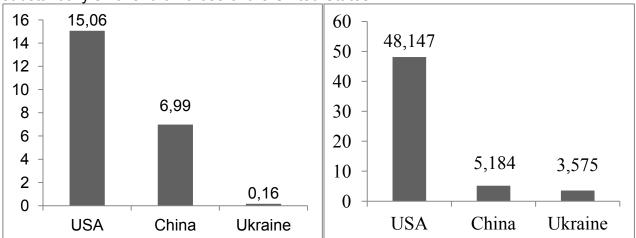
COMPARING THE SIZE OF THE U.S. AND CHINESE ECONOMIES: WILL CHINA OVERTAKE THE UNITED STATES?

Пашкова Ю.І., Голдіна О.М. Науковий керівник: Глущенко О.В., к.е.н. Харківський національний університет імені В.Н.Каразіна

The rise of China from a poor, stagnant country to a major economic power within a time span of only 28 years is often described by analysts as one of the greatest economic success stories in modern times.

Prior to 1979, China maintained a Soviet-style command economy under which the state controlled most aspects of the economy. These policies kept the economy relatively stagnant and living standards quite low. However, beginning in1979, the government began a series of free market reforms and began opening up to the world in terms of trade and investment. These reforms have produced dramatic results. From 1979 to 2005, China's real gross domestic product (GDP) grew at an average annual rate of 9.7%, the size of its economy increased over 11-fold, its real per capita GDP grew over 8-fold, and its world ranking for total trade rose from 27th to 3rd [1]. Simultaneously, the United States has overtaken Great Britain in 1890 and since then has been the largest national economy of the world. However, analysts project that in the near future, China will replace the United States as the world's biggest economy and exporter. In this context, China's economic rise is viewed as America's decline.

Using Purchasing Power Parity to Compare the Economies of the United States and China. Now the actual size of China's economy has been a subject of extensive debate among economists. Measured in U.S. dollars using nominal exchange rates, China's GDP in 2011 estimated about \$6.99 trillion; its per capita GDP (a commonly used measure of living standards) was \$5.184. U.S. GDP and per capita GDP were estimated at \$15.06 trillion and \$48,147, respectively. These data could suggest that China's economy was substantially smaller than those of the United States.



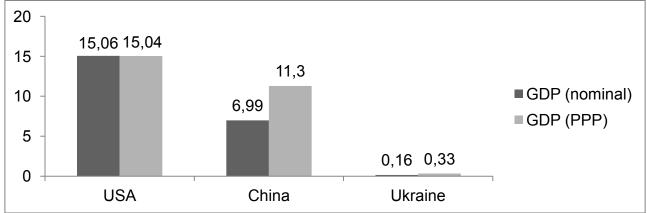
Picture 1.Comparison of countries by GDP (nominal) in 2011, \$ billions [4].

Picture 2.Comparison of countries by GDP per capita (nominal) in 2011, U.S. dollars [3].

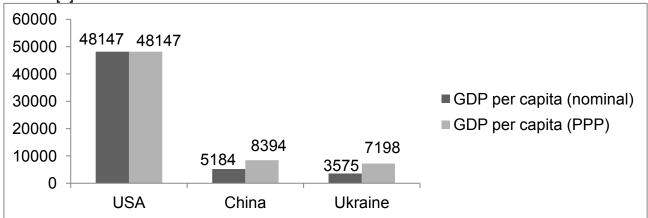
Many economists, however, contend that using nominal exchange rates to convert Chinese data into U.S. dollars substantially underestimates the size of China's economy. This is because prices in China for many goods and services are significantly lower than those in the United States and other developed countries. Economists have attempted to factor in these price differentials by using a purchasing power parity (PPP) measurement, which attempts to convert foreign currencies into U.S. dollars on the basis of the actual

purchasing power of such currency (based on surveys of the prices of various goods and services) in each respective country [1].

A comparison of economic data using nominal exchange rates and PPP for the United States and China for 2011 appears in Picture 3. Because prices for many goods and services are significantly lower in China than in the United States, the PPP exchange rate raises the estimated size of Chinese economy from \$6.99 trillion (nominal dollars) to \$11.3 trillion (PPP dollars), nearly three-fifths the size of the U.S. economy. PPP data also raise China's per capita GDP from \$5184 (nominal) to \$8394. The PPP figures indicate that, while the size of China's economy is substantial, its living standards fall far below those of the U.S. China's per capita GDP on a PPP basis is only17.5% of U.S. levels. Thus, even if China's GDP were to overtake that of the United States in the next few decades, its living standards would remain substantially below those of the United States for many years to come.

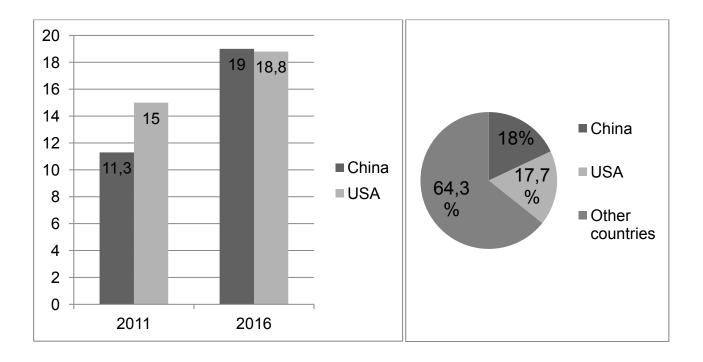


Picture 3.Estimates of U.S. and Chinese GDP in Nominal U.S. Dollars and PPP in 2011, \$ billions [4].



Picture 4.Estimates of U.S. and Chinese Per Capita GDP in Nominal U.S. Dollars and PPP in 2011, U.S. dollars [3].

Will China Overtake the U.S. Economy? Based on measurements of China's GDP on a PPP basis and projections of China's economic growth over the next several decades, it appears highly likely that China at some point will overtake the United States as the world's largest economy. According to the latest IMF projections done in April 2011 China could overtake The United States as the world's biggest economy in 2016. Using purchasing power parities, the International Monetary Fund determined that China's GDP will expand from \$11.3 trillion in 2011 to \$19 trillion in 2016. U.S. GDP would expand from \$15 trillion to \$18.8 trillion in the same period. China would reach 18 percent of world output. The U.S. would fall to 17.7 percent.



Picture 5.IMF Projections of U.S. and Chinese GDP (PPP Basis), \$ billions [3]. Picture 6.IMF Projections of U.S. and Chinese Share of World Output in 2016 [3]. A broader analysis by The Economist finds that China has already overtaken America on

over half of indicators such, as manufacturing output, exports and fixed investment. This chart predicts when China will surpass the United States on the other indicators. The Economist projects that by 2014 China could become the world's biggest importer and have the largest retail sales. The USA still the first in a few indicators by a wide margin. The U.S. stockmarket capitalization is four times bigger than those of China, and it spends five times more on defense. Even though China's defense budget is growing faster, on the same growth rates United States will remain larger until 2025 [2].

Consequences. Analysts describe a number of negative consequences of China's rapid economic growth, such as increasing demand for oil and raw materials (which drives up their prices) and growing pollution (which could have global implications). In addition, the lack of an effective intellectual property rights (IPR) enforcement regime (and limited market access for IPR-related products) has led to widespread IPR piracy in China. Not only such piracy greatly diminishes China as a market for IPR-related industries (such as music and software), such industries are further harmed by China's export of pirated products [1]. As for Ukraine, China's becoming the largest economy in the world may cause great difficulties. China's economic policies, such as subsidies to its state sector, an undervalued currency and low wages, threaten Ukraine's jobs and living standards. Furthermore, it will cause fluctuations in the currency market and structural changes in the balance of payments.

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