

China to become the World's Largest Economy in 2033

— Korea set to overtake Japan in 2027 in terms of GDP per capita

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- China's GDP will surpass that of the United States for the first time in 2033, four to five years later than previous forecast
- If China-Taiwan tensions escalate in 2025, Asian economies will take a huge hit
- South Korea will overtake Japan in terms of GDP per capita in 2027; Taiwan to follow suit in 2028
- The COVID-19 crisis cost Asia 1.7 trillion dollars in lost output in 2020
- China's CO2 emissions target can be met three years earlier than planned based on GDP projections

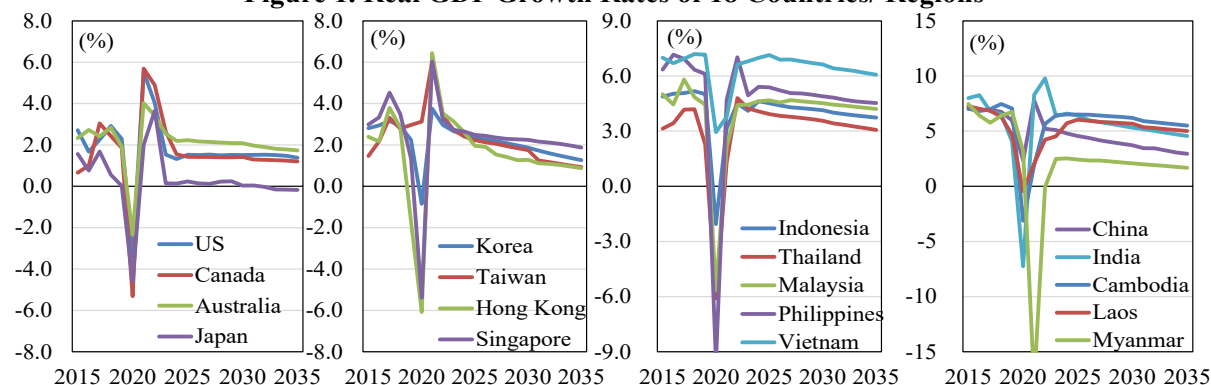
1. Digital Potential is key to economic growth

The Japan Center for Economic Research (JCER) released its 7th Medium-term Asian Economic Forecast, which projects GDP growth for 18 countries and regions in the Asia-Pacific region, from 2021 through 2035 (Figure 1).

The forecast covers 15 major Asian countries and regions, and the U.S., Australia and Canada for comparison. It extends over a time horizon of 15 years (2021-2035), nine years longer than the IMF's (International Monetary Fund) World Economic Outlook, which provides forecasts through 2026. Unlike the Asian Development Bank, which focuses on the current growth rate of developing countries in Asia, JCER's Asian Outlook is a long-term, comprehensive forecast of the Asian economy.

In this report, we calculate the digital potential of each country ("JCER Digital Potential Index"), and used the index as a basis for estimating Total Factor Productivity (TFP). The higher the digital potential, the more likely a country will be able to promote digital transformation (DX), key to economic growth, and boost labor productivity. In addition to the baseline scenario, our report includes various analyses of risk scenarios, and other related topics.

Figure 1. Real GDP Growth Rates of 18 Countries/ Regions



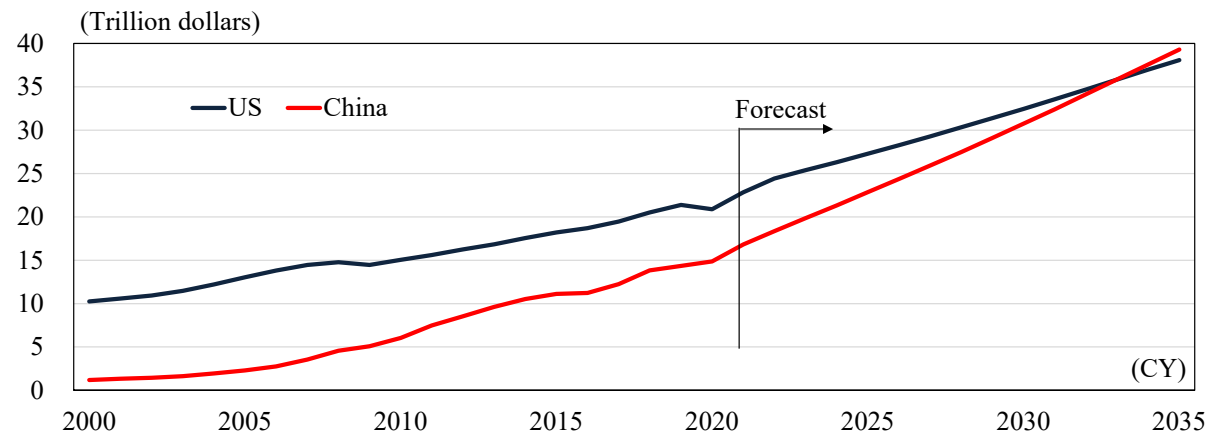
Source: IMF, forecast by JCER

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2. China's GDP will surpass that of the United States for the first time in 2033, making it the world's largest economy

Under the baseline scenario, in 2033, China's GDP (in nominal dollars) will become 2.4 times larger than in 2020, at \$35.841 trillion, surpassing the U.S. (\$35.821 trillion in 2033) and becoming the world's largest economy for the first time (Figure 2). The U.S.-China reversal is expected to be delayed by four years from last year's baseline forecast and by five years from the risk scenario, due to slower growth in China and the effects of aggressive fiscal policy in the United States. However, while China's declining population will put downward pressure on growth, the United States, which is expected to maintain stable population growth and high productivity, will regain its position as the world's largest economy by 2056.

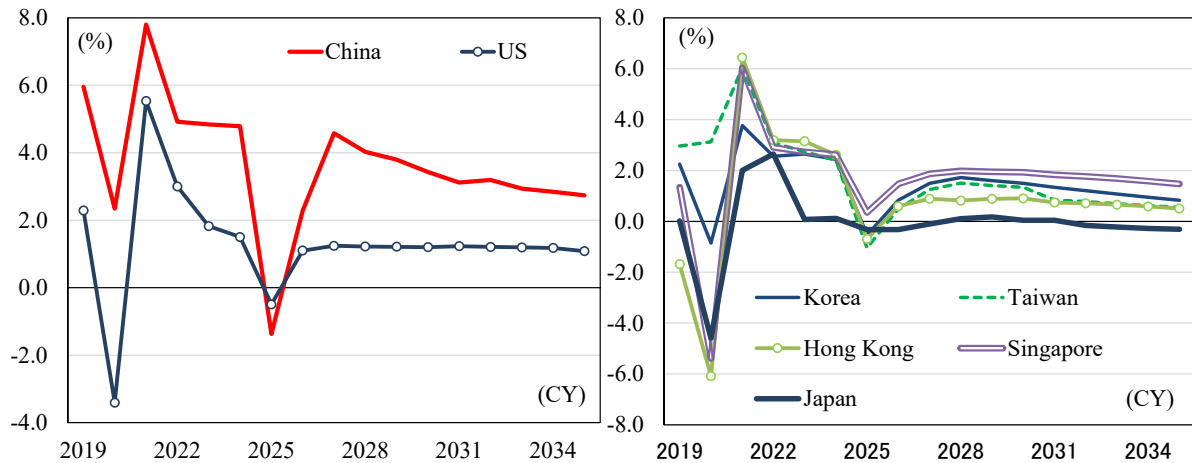
Figure 2. The U.S.-China reversal is delayed by four years from previous forecast



3. If China-Taiwan tensions escalate in 2025, Asian economies will take a huge hit

Tensions between China and Taiwan are on the rise. The statement by Taiwan's Defense Minister that China will have the capability to mount a "full scale" invasion of Taiwan by 2025, illustrates heightening risk of conflict. In our risk scenarios, we have estimated the economic impact of a "Cold War" erupting between the U.S. and China, even if it does not necessarily lead to an emergency situation. If a "Cold War" between the U.S. and China were to occur, China, Taiwan, South Korea, Japan, and other Asian countries would be hit hard, with negative growth (Figure 3).

Figure 3. Negative growth in 2025 due to the "Cold War" between the U.S. and China

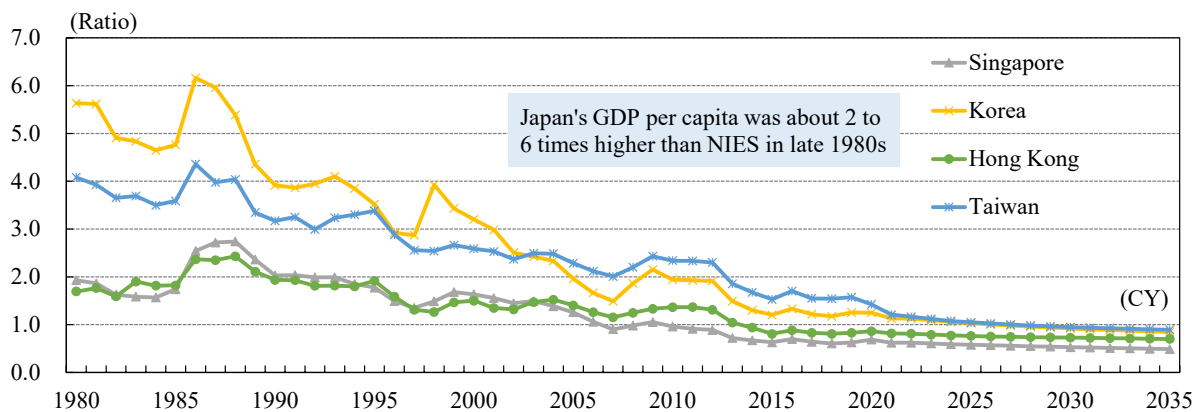


Source: Haver Analytics, forecast by JCER

4. South Korea to overtake Japan's GDP per capita in 2027, Taiwan in 2028

Japan's GDP per capita was overtaken by Singapore in 2007 and by Hong Kong in 2014. A core indicator of economic performance, GDP per capita can also be perceived as a measure of a country's labor productivity, and its slowdown portrays the stagnation of the Japanese economy. Considering that Japan's GDP per capita was 6.2 times higher than that of South Korea and 4.4 times higher than Taiwan's in 1986, at the start of its bubble economy, Japan's rapid decline in labor productivity is striking (Figure 4).

Figure 4. How many times is Japan's GDP per capita higher than that of comparable countries?



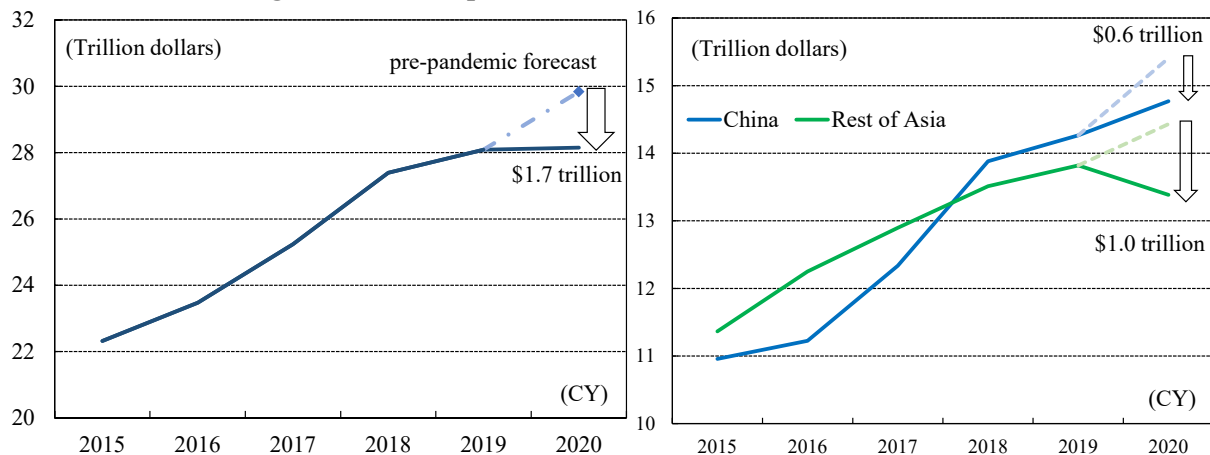
Note: Calculated as Japan's GDP per capita / GDP per capita of the comparator countries and regions.

Source: IMF, forecast by JCER

5. The COVID-19 crisis cost Asia 1.7 trillion dollars in lost output in 2020

How much wealth would the world have gained if there had been the COVID-19 pandemic? Applying the concept of "lost income," which is used in the case of traffic accidents, we estimated GDP in the absence of pandemic based on pre-COVID19 economic forecasts, and examined the difference from actual GDP. 15 Asian countries and regions lost approximately 1.7 trillion dollars in 2020 (Figure 5). The service sector took the biggest hit, with China losing 638 billion dollars and Japan losing 162 billion dollars.

Figure 5. Lost output from COVID-19 crisis: nominal GDP



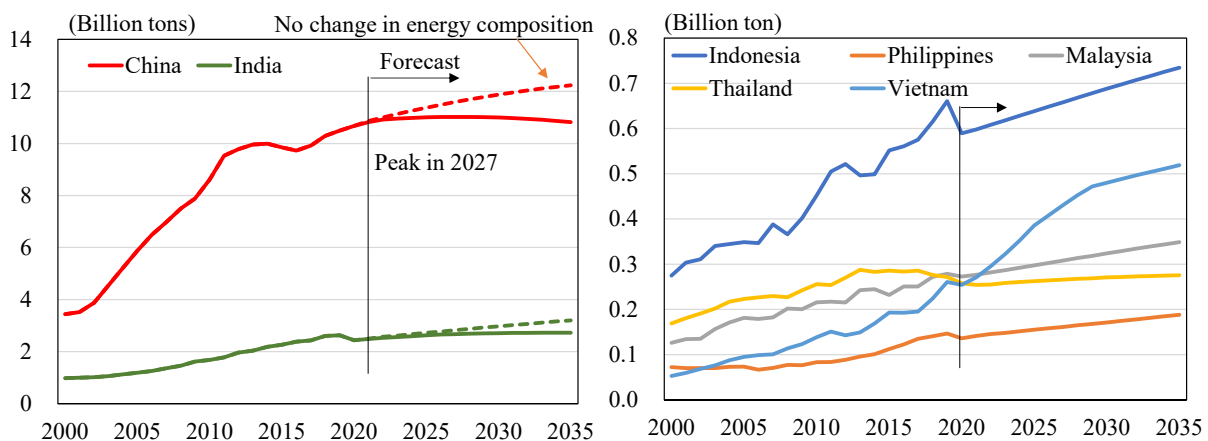
Notes: 1. The economic loss defined here is the GDP that would have been achieved if the COVID-19 crisis had not occurred minus the GDP that has actually been obtained during the COVID-19 crisis. We follow the concept of lost income.
 2. GDP in the absence of the COVID-19 crisis was based on International Monetary Fund (IMF) projections (World Economic outlook) as of October 2019, before the outbreak of the novel coronavirus became apparent.

Source: CEIC, IMF

6. China's CO2 emissions target can be met three years earlier than planned based on GDP projections

Many countries are aiming to become carbon-neutral by 2050 (i.e. to reduce their greenhouse gas emissions to zero overall). We estimate whether this is really feasible based on our GDP forecast. After breaking down CO2 emissions into energy intensity of GDP and CO2 intensity of energy, we found that China's target to peak CO2 emissions by 2030 can be met three years earlier than planned, if it achieves its renewable energy goals (Figure 6).

Figure 6. CO2 Emissions estimated from GDP forecast



Source: Oxford University "Our World in Data", forecast by JCER

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