Why China is Unlikely to Overtake the U.S.

For decades, the rise of China has been treated as something of a fait accompli. Economists, politicians and academics have wondered not if, but only when, China would surpass the United States as the world's preeminent economic superpower. The nation's sheer size, in terms of both land mass and population, and rapid transformation from an agrarian nation to one of the



centers of global trade have made its ascendence seemingly inevitable. However, China now faces several headwinds. Its rapid GDP growth has cooled in recent years, and new research calls into question just how accurate the lofty GDP figures are. One of the nation's greatest assets, its massive pool of cheap labor, has largely been tapped, and the labor force is rapidly aging, unable to be replenished by new workers because of Beijing's draconian one-child policy. The country is facing the "middle-income trap," where the growth potential of export-driven, low-skill manufacturing and debt-fueled infrastructure spending has been exhausted, and the cost of servicing debt outpaces its economic benefits. To become a truly developed nation, China will need to find a new growth model that instead relies on domestic consumption, increased worker productivity, and innovation, something that China may not be able to achieve.

It is easy to see why China's surpassing of the U.S. is treated as a foregone conclusion by many economists. According to estimates by World Bank, China's GDP was approximately 11% of the U.S. GDP in 1960, but by 2019 it had grown to 67%. Researchers at the Lowy Institute estimate that "China would overtake the United States to become the world's largest economy in nominal US dollar terms by about 2030." However, there are several issues with looking at China's nominal GDP as a measure of the nation's prosperity.

The first is that the accuracy of official GDP figures from China are highly suspect. Chinese GDP figures are based on data collected from local leaders, who are evaluated by the central government according to "the speed, efficiency, and potentials of economic develop-

ment." Researchers from Yale examined local economic data from 431 Chinese provinces and found that they were 4 to 5 times more likely to meet or exceed Beijing's GDP target. They were even more likely to exceed growth targets when promotions were on the line. This suggest that local officials are highly incentivized to inflate statistics, and in recent years, several regions have officially acknowledged the previous overreporting of their GDP, sometimes by as much as 50%. Economists have long noted that the clockwork-like accuracy of China setting a growth target and then meeting it year after year is likely a sign that data is being manipulated. GDP in much of the rest of the world is often highly volatile quarter to quarter and year to year, but not in China. In a paper published by the San Francisco arm of the Federal Reserve, researchers noted that "the steadiness calls into question the usefulness of China's official growth data in making policy and business decisions."

To get a more accurate sense of China's actual economic growth, the Brookings Institute published a working paper in which economists conducted a forensic examination of China's GDP figures using data that would be difficult to fake, such as tax receipts, nighttime light intensity observed from satellites, electricity generation, railway cargo. Their estimates are much more volatile and nearly always lower than the figures reported by China's National Bureau of Statistics. Using the discrepancy between these figures, the researchers estimate that the true growth rate of Chinese GDP was probably overstated by almost 2 percentage points from 2010 to 2016. Their calculations suggest that the current nominal size of the economy was about 18% lower than the official level of \$13.4 trillion at the end of 2018. Even that estimate may be conservative because of the years examined. If China has been similarly overstating their GDP since the 2000, when the nation first emerged as a major global trading partner, it is possible that their current GDP could be overstated by as much as 40%.

The second issue with Chinese GDP figures is that, even if they were accurate, they tell observers little about the economy's performance. According to the Carnegie Endowment for International Peace's Michael Pettis, Chinese GDP "is actually an input determined annually as the country's GDP growth target. The growth target of a given time period is decided well ahead of time, and to achieve it, various entities, including local governments, engage in the requisite amount of activity, usually funded by debt. As long as China has debt capacity, and as long as it can postpone the writing down of nonproductive assets, Beijing can achieve any



growth target it desires." China is able to meet its GDP growth target year after year because it is willing to amass debt and make the necessary investments to meet that target but doing so does little to build the country's wealth.

China's reliance on debt to fuel growth has led to an explosion of debt in the years since the 2007 Financial Crisis, which was then

further accelerated when the Coronavirus pandemic caused domestic consumption to crater. In 2020, China's official debt-to-GDP ratio surged to 270%. China's debt load now is comparable to that of the U.S., but China's debt is growing much faster than that of the US, and China's debt growth is the largest ever recorded by a developing country. The rise in debt itself is not necessarily a problem, but a large portion of Chinese debt goes to fund unproductive infrastructure investments.

China's mega-infrastructure projects are effective in boosting GDP in the short term, but most of them cost more to build than they will ever generate in economic returns. Construction accounts for roughly 25% of China's GDP, but researchers from Oxford University estimate that for more than half of China's infrastructure investments, construction costs are higher than any economic benefits generated. According to their analysis, only 28% of the nation's infrastructure projects were "genuinely economically productive," and that losses on infrastructure projects amount to about one-third of the nation's total debt. These massive spending projects also foster corruption. Corruption indexes, social network analyses and investigative reports have all found that incidences of crony capitalism are several times greater in China than in the U.S., and while Beijing has made steps to address rampant corruption in recent years, the efforts can also give cover to political prosecutions. China can continue to artificially boost its GDP growth by investing in wasteful bridges to nowhere, but to truly escape the middle-income trap, it must find a new growth path focused on domestic consumption, increased worker productivity, and innovation, something that the nation may not be able to do based on current demographics.

China is aging more rapidly than any society in history. The consequences of China's one-child policy, combined with dramatic improvements in health care, have contributed to increases in life expectancy and decreases in China's birth rate. During the years that the onechild policy was in effect, life expectancy in China improved from 67 to 75 and fertility rate decreased from 2.8 to 1.7. Ending the one-child policy has done little to increase the birth rate, and in 2020 it had fallen to just 1.3 birth per women, far below the replacement rate of 2.1. 2020 saw the fewest number of births since China's great famine in 1961. Meanwhile, China's working-age population is contracting. It is estimated that the nation has lost 40 million workers since 2010, and, according to some estimates, the working population will have shrunk by 220 million by 2050, at which time roughly one-quarter of the population will be over the age of 65. The dependency ratio — which measures the proportion of non-working-age population to total population — could rise to 66% by 2050. This could have serious consequences for the Chinese economy in the coming decades as the nation grapples with a declining labor supply, weakening consumption demand, rising need for elderly care, and widening funding gaps of social security systems. Projecting out even further, the situation becomes more dire. Researchers at the Shanghai Academy of Social Sciences estimate that by the end of the century, China's population could fall to 570 million, less than half of what it is today.

Some economists are optimistic that more productive workers will make up for the diminished workforce, but increasing productivity would require more-educated workers. Though Chinese universities produce millions of graduates trained in science and engineering, the average education level of the nation's 300 million migrant workers is junior high school. Research from Stanford University found that the deep gaps between education levels of urban and rural youths are not narrowing. This throttles China's ability to innovate, as the needs of more sophisticated industries will be poorly served by the nation's labor supply of unskilled workers.

While it remains possible that China's nominal GDP will eventually eclipse that of the U.S., the Lowy Institute concludes that China would "still be much poorer and less productive than the United States." By 2050, the authors calculate that the average Chinese worker would only be about 40% as rich as the average American and about half as productive. Couple that



with a population that expected to contract by half by the end of the century, and it remains extremely unlikely that China will ever surpass the U.S. as the world's leading economy.