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Between Two Economic Traps: Did China Peak in 2021?

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Summary

China's uneven recovery from the pandemic and U.S.-imposed limits on the country's access to technology could limit China's ascent to become an economic peer to the United States. An analysis of recent economic data from the International Monetary Fund reveals that while China's rise to become a high-income country remains on course, the country remains far from rivaling the economic power of the United States.



This brief is part of a special series organized jointly by the University of California Institute on Global Conflict and Cooperation (IGCC) and the Mercator Institute for China Studies (MERICS). This analysis was originally presented at the Conference on the Chinese National Innovation and Techno-Industrial Ecosystems in Berlin, September 5–6, 2023.

Key Findings

- Unlike most other economies which have come out of the COVID-19 pandemic with a V-shaped recovery, China has experienced an uneven W-shaped recovery. This could have profound implications for China's attempt to catch up economically with the United States.
- China's growth is subject to two economic and geopolitical constraints. The first is the middle-income trap, in which economic growth slows as a country reaches middle-income status. The second is the economic Thucydides trap, in which an incumbent economic hegemon seeks to slow the growth of a potential rival.
- China's growth trajectory suggests that the country could break free of the middle-income trap by the mid-2030s to become a high-income country. However, this trend does not account for a changed global geoeconomic environment following the pandemic.
- China's prospects for overcoming the economic Thucydides trap, however, are less optimistic. The rate at which China's overall economy is growing compared to the United States has slowed. Based on the last decade, China may only reach parity with the U.S. economy by the mid-2060s, three decades later than prior forecasts had predicted. Measures by the United States to limit Chinese access to high-end technologies present another threat to China's economic catch up.
- This paradox lies at the heart of China's growth story. Despite rising per capita incomes in the country, China remains a long way from rivaling the economic power of the United States. This may be due to the weakness of China's currency, which might hint at deeper economic vulnerabilities. In either case, China remains poised to provide a counterweight to U.S. economic power not seen since World War II.
- Based on the data, it appears that China's economy reached a peak in 2021 relative to the U.S. economy. Questions remain as to whether Chinese policymakers can reverse the country's relative economic decline.

Introduction: China's W-Shaped Recovery

While the world suffered enormously from the COVID-19 pandemic, most countries have undergone a V-shaped recovery—sharp decline followed by strong growth. However, China has been an exception. Although it was the only large economy to maintain low-but-positive growth in 2020 and recover strongly in 2021, China's economy witnessed a sharp decline in 2022, generating not a “V” but rather a W-shaped pattern of recovery.

China's economic decline in 2022 was due to the surprising lockdown of Shanghai, following lockdowns of other cities in the country. Given the importance of Shanghai to the overall Chinese economy, the lockdown seems to have had lasting impacts.

This weaker than expected recovery of China has global implications. It could have profound consequences for China's prospects of catching up with the United States and other advanced economies.

The Middle-Income and Economic Thucydides Traps

China's economic catch-up is measured in terms of per capita income as well as the overall size of the Chinese economy compared to the United States. These two indicators are related to two “traps” facing China, namely the middle-income trap (MIT) and the economic Thucydides trap (ETT).

Per capita income is related to the MIT, referring to a situation in which economic growth slows as a country reaches the middle-income status, exemplified by cases like Thailand and Brazil. The size of China's economy, or gross domestic product (GDP), is related to the issue of the ETT.

The Thucydides trap originally referred to the inevitability of conflict between a rising and an incumbent power. The economic Thucydides trap, however, refers to the economic containment that China as a rising power is facing due to the restrictions placed on it by the incumbent power, the United States.

My own book in 2021 measured and theorized these two traps.¹ It is now timely to re-examine them utilizing new data released by the International Monetary Fund (IMF) in October 2023. These data reflect the divergent economic performance of the two countries after the pandemic.²

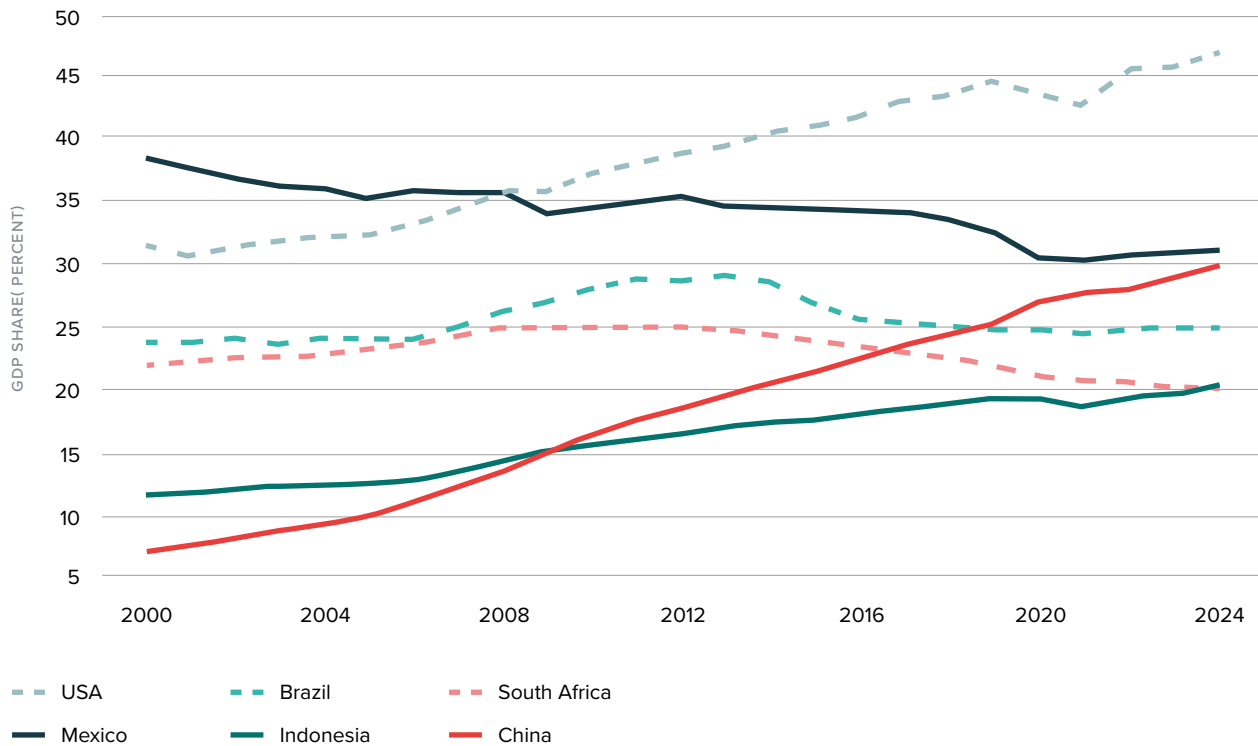
China Could Become a High-Income Economy by the Mid-2030s

China has been rapidly catching up with the United States in terms of per capita GDP adjusted for purchasing power parity (PPP), which controls for exchange rate fluctuations to measure the income level or living standards of a country. In 2000, China's per capita GDP (PPP) was less than 7 percent that of the United States, but reached 16 percent in 2010 and 27 percent in 2020. Despite the pandemic, the pace of China's catch-up has remained steady, with the ratio standing at 27.7 percent in 2021, 28 percent in 2022, and 29 percent in 2023 (see Figure 1).

China's remarkable record of catch-up is in contrast with Brazil, whose per capita GDP has declined steadily from its peak of 29.1 percent of U.S. per capita GDP in 2013 to 25 percent in 2023. The performance of Mexico is even worse; its per capita GDP was close to 40 percent that of the United States in the early 2000s but declined to 30 percent in the early 2020s.³

FIGURE 1

The Middle-Income Trap: Per Capita GDP (PPP) as a Percentage of U.S. GDP



Source: The author's drawing using the IMF (World Economic Forecast) data released in October 2023.

Now, China is approaching 30 percent of U.S. per capita GDP and is close to Mexico's level. One sign that a country is stuck in the MIT is its income level remaining below 40 percent of the U.S. per capita GDP for several decades.⁴ There are many countries that have fallen into the MIT by this definition. While China remains below the 40 percent threshold and may still be caught in this trap, its trajectory in catching up to the United States is vastly different from other emerging economies.

Using IMF data, it is seen that the speed of China's catching up has reduced the gap in income with the United States by about 1 percent per year over the last 10 years, from 19.6 percent in 2013 to 29 percent in 2023.

This pace has remained steady over the last five years, despite an otherwise uneven economic performance amid the pandemic (see Figure 1).

Extending this trend to the future, China's strong track record of economic catch up would enable it to reach the 40 percent level by the mid-2030s, thereby achieving high-income status and overcoming the MIT. While this projection also implies that the pandemic and U.S. measures will not have stopped China's catch up in terms of income levels, the story is quite different with respect to catching up in terms of the size of China's economy.

China's Sharp Decline Relative to the United States

China had shown an astonishing catch-up in the overall size of its economy compared to the United States. Comparing the size of their respective GDPs in current dollars—a measure that reflects nations' relative economic power—China has grown from a mere 11.8 percent of U.S. GDP in 2000 to 70.6 percent in 2020 (see Figure 2).⁵

This rapid catch up is in sharp contrast to Japan's trajectory, from almost 50 percent of U.S. GDP in the early 2000s to less than 20 percent in the early 2020s.⁶ Japan's relative economic decline was triggered by the sudden and rapid appreciation of the Japanese yen, leading to a financial bubble which burst in the mid-1990s. This might be a scenario that the incumbent hegemon of the United States hopes will happen to China. Since the pandemic and escalating U.S. measures to contain the rise of China, there are signs that China's catch up has slowed significantly.

The relative size of China's economy to that of the United States peaked in 2021, declining since then (see Figure 2). At that peak, China's economy was 76 percent of U.S. GDP, declining to 70.2 percent in 2022 and 65.7 percent in 2023.⁷ This is unprecedented. It is the first time that China has recorded such a decline, and the scale of that decline—by five percentage points per year over two consecutive years—is remarkable. The decline in 2022 reflects the impact of lockdown, while the further decline in 2023 suggests a slow recovery.

Over the last five years, the size of China's economy has decreased from 67.4 percent of U.S. GDP in 2018 to 65.7 percent in 2023.⁸ If China cannot reverse this trend, it will never catch up with the United States. However, if we look at a longer time frame, over the last 10 years, China has increased from 57.1 percent of U.S. GDP in 2013 to 65.7 percent in 2023 (see Figure 2).

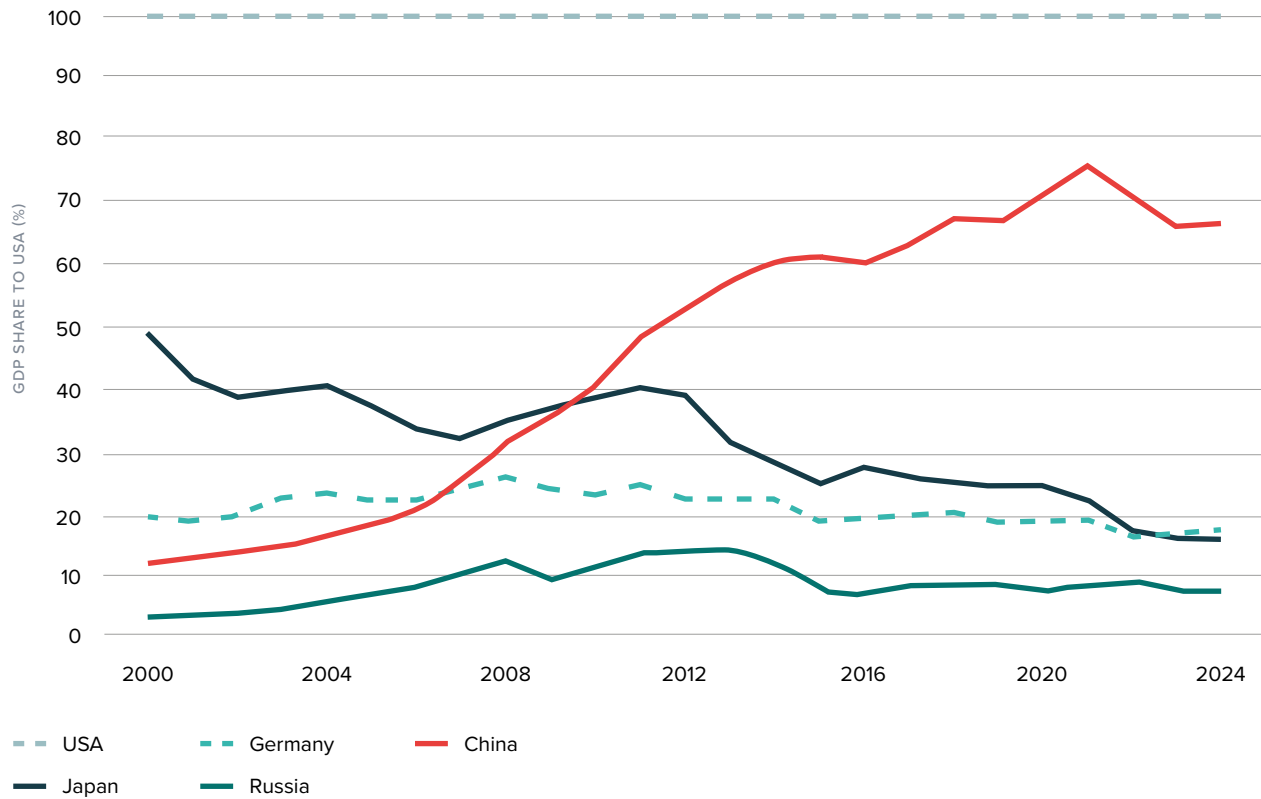


Photo: Adobe Stock

If we assume that China can maintain this long-term pace of catch up—which incorporates the short-term reversal of the past two years—that means that China will maintain a pace of 8.6 percentage points per decade.

Given the 35 percent difference in sizes between the U.S. and Chinese economies, at the current per-decade rate, it would take 40 years for China's GDP to equal that of the United States. The prediction that China would not catch up until the mid-2060s is a big retreat from previous and widespread forecasts that China would achieve parity by the mid-2030s.⁹

This is a very rough forecast, not accounting for future population trends which are a basic determinant of the size of a nation's economy. According to the United Nations *World Population Prospects*, China's population is projected to decline from its peak of 1.43 billion in 2022 to 1.38 billion in 2040. By contrast, the population of the United States is projected to increase from 337.5 million in 2022 to 366.0 million in 2040.¹⁰

FIGURE 2**China's Catch Up with the United States: Comparison by GDP in Current Prices**

Source: The author's drawing using the IMF (World Economic Forecast) data released in October 2023.

China's Economic Paradox

The discussion above indicates a paradox. Despite China steadily catching up to the United States in terms of per capita GDP, it is falling behind in terms of its relative economic size. To understand this puzzle, one must consider the depreciation of the Chinese currency, which has affected GDP in current prices but not per capita GDP adjusted for purchasing power parity. Recent econometric analyses confirm that currency undervaluation is positively associated with growth of per capita income but negatively associated with the share of a country's GDP in global GDP.¹¹

The value of China's currency, the yuan, has reversed its COVID-19-era appreciation to decline in value since 2021. After attaining its peak value of 6.05 yuan to the U.S. dollar in 2013, the yuan moved sharply downwards to 6.4 per dollar in 2021 and 7.2 in February 2024.¹² A depreciating currency often reflects a weakened economy, an outflow of foreign capital, or both.

Second, the puzzle may represent a relative success of China's new growth strategy emphasizing so-called "domestic circulation," which involves relying more on domestic demand and central and inland provinces for growth, rather than coastal provinces which rely on exports.

Expansion of economic activities targeting domestic demand and non-coastal provinces has tended to supply more goods and services at lower prices, leading to increased income levels for people living in these areas and working in non-export sectors.

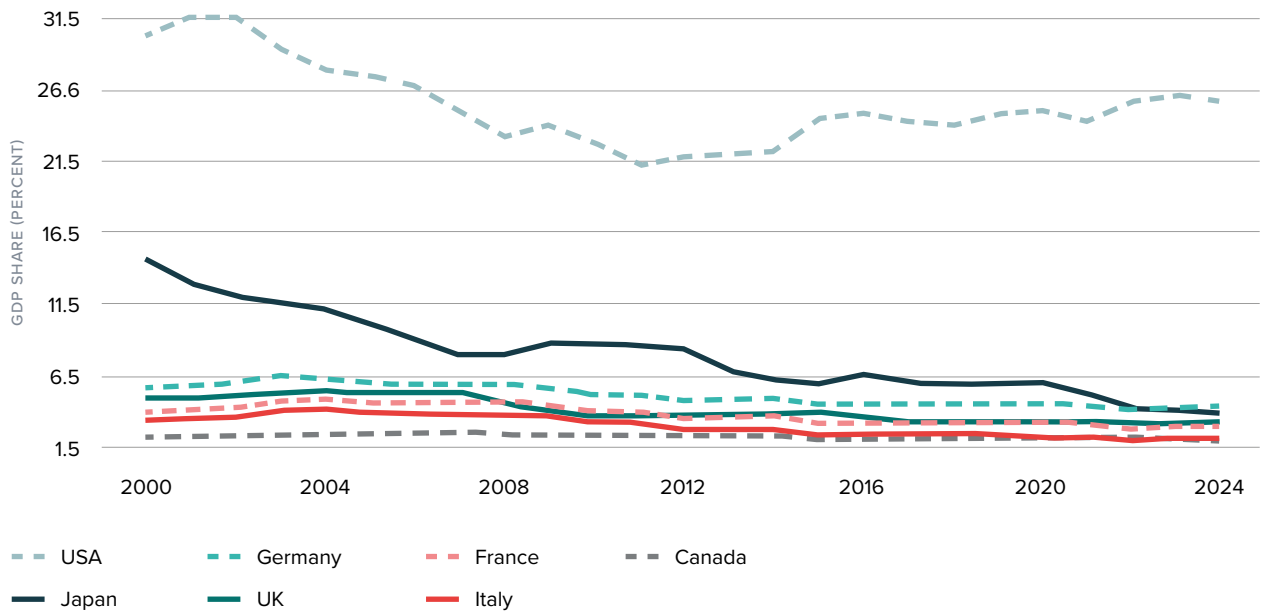
Finally, the relative size of the Chinese economy is affected not only by performance of China but also by that of the United States. The share of the United States in global GDP has been quite stable around 25 percent over the last 10 years, declining from its peak of 30 percent in the early 2000s after the burst of the dot-com bubble (see Figure 3).

Recently, however, the relative share of global GDP of the U.S. economy has been increasing from 24.4 percent in 2021 to 25.7 percent in 2022 and to 25.9 percent in 2023, a trajectory which is quite different from other G7 economies.¹³ Of course, this is primarily due to U.S. dollar appreciation, but the United States has recently outperformed other economies in real terms as well.

Through strong post-pandemic fiscal expenditures—which have caused the United States to attract the majority of foreign direct investment (FDI) flows due to the incentives of the Inflation Reduction Act and CHIPS and Science Act—the United States has created more jobs, in turn supporting strong domestic demand.

While the above forecast indicates that China overtaking the U.S. economy will not happen for a long time, this does not necessarily mean the continuation of U.S. economic hegemony. Based on the last ten years, China will reach 75 percent of U.S. GDP by the mid-2030s and over 80 percent by the early 2040s. Such a level of near parity with the United States is unprecedented in the post-World War II era. Further, given the ideological divergence between the two powers, the world is becoming subject to great uncertainty regarding the nature of their rivalry over the coming decades.

FIGURE 3
Share of Selected Countries in World GDP in Current Prices (Percent)



Source: The author's drawing using the IMF (World Economic Forecast) data released in October 2023.

Conclusion

China's economy peaked in 2021, relative to U.S. GDP. But China has continued to catch up with United States in per capita income adjusted for purchasing power parity. The latter may imply that China will reach 40 percent of U.S. per capita GDP (PPP), crossing the threshold to becoming a high-income economy. Thus, we can conclude that while China might avoid the MIT, it will find it more difficult to evade the ETT. Then, the next issue is the possible spillover from the ETT to MIT.

The initial trigger for China's relative economic decline was the 2021 lockdown. Meanwhile, various U.S. measures since the 2000s to limit China's access to Western technologies and the increasing decoupling of global value chains is starting to derail China's economic catch up. In fact, China's economy is weakening further due to problems in the real estate sector and their effects on domestic consumption, rising corporate and local government debts, and weak FDI and foreign capital inflows. While China has implemented some measures to address these challenges, such as lowering interest rates, they have had little impact. Constrained by a conservative policy approach, Chinese authorities seem to stay away from more fundamental economic policy steps that would foster recovery.

Endnotes

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Author

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