



**DANUBE**  
INSTITUTE

# Peak China on the Horizon?

*Csaba Barnabas Horvath*

August 2024

# Peak China on the Horizon?

*Csaba Barnabás Horváth*

## **Abstract**

*Throughout the 2010s, many suggested the 21<sup>st</sup> century would be the 'Chinese century'. By the mid-2020s however, major emerging structural factors indicate that China's astonishing growth rates of the previous decades are no longer sustainable. These trends are so notable that they even provoke the question of how long Chinese GDP growth can remain above the global average. China's GDP growth falling and staying behind the global average would precipitate the shrinking of its share of global GDP. As a consequence, we might ask the question of when we will see 'Peak China'. Such a point may arrive sooner than most would believe.*

## Introduction

The phrase 'Peak China' can mark the moment at which China's power can be said to have reached its peak by certain metrics, and from which point on it will be on the decline. Such a point occurs in the history of every single empire, so it should be no surprise that China will also do so at one time or another in its upcoming history.

What 'peak China' means may of course be debated. But in general, it may be said that, while in the 2000s and 2010s it was a dominant belief to expect the 21<sup>st</sup> century to be "the Chinese century", clouds started to gather on the horizon by the early 2020s. Some scholars, such as Yi Fuxian, have gone as far as declaring, the 'Chinese Century' to already be over.<sup>1</sup>

If we interpret 'Peak China' in terms of the peak of China's absolute GDP or military power, that is unlikely to happen any time soon. At least not before the second half of the century, when China's absolute population is predicted to crash sharply. Indeed, the absolute size of the GDP or the military arsenal of a country is typically a poor indicator: The relative position of a country is defined not by such factors, but by how they relate to those of rival powers. If a country's GDP or military arsenal lags far behind its main rivals, the country maybe regarded as in a poor position, regardless of the absolute size of its economy or military. Conversely if its economy and military greatly outweigh its rivals, then it is in a advantageous position, regardless of the absolute size. Therefore, this paper defines 'Peak China' in terms of the point by which China's GDP reaches the maximum of its share in the global economy, measured as a percentage, before starting to gradually decline, due to its growth rate becoming slower than that of the global average. This will mark the peak of China's global economic power, from which point on it will be on a relative decline. While not too long ago, China was expected by many to become the dominant power in the world, now it seems that Peak China will possibly occur as early as the second half of this decade.

## The Debate

As recently as 2020, China's economy was expected to surpass that of the US as early as 2028. Soon, however, it became apparent that a general slowdown had started taking place, precipitating a debate around the timing of 'Peak China'. A paper published by the Brookings Institute in November 2023 cites China's property bubble and, demographic downturn as reasons for the slowdown, before summarizing the debate: At the time, different analyses put the Chinese growth rate for the rest of the decade anywhere between 2-5%.<sup>2</sup> A 2022 paper by Roland Rajan and Alyssa Leng, cited by the Brookings paper, predicts an average 2-3% GDP growth rate for China until

2050, with the average annual growth decelerating to 3% by 2030, and to 2% by 2040, a stark contrast to the 5-6% growth levels expected by many in the 2010s, as a basis for the predictions of China becoming the dominant superpower. With a growth rate of 5%, the GDP of China could become two and a half times the size of that of the US. However, if the forecast of Leng and Rajan is correct, it will never be more than 20% higher of that of the US. Leng and Rajan note that, among twenty recent studies, the majority predicted an average growth rate of higher than 5% until 2030 and 3.5-4% between 2020 and 2050.<sup>3</sup>

A general revaluation of the situation continued with the IMF dialling down its forecast. In April 2022 when the paper by Rajah & Leng was published, the IMF still predicted 4.92% and 4.48% growth for the years 2026 and 2027 respectively.<sup>4</sup> However, by their April 2024 forecast, it offered a more conservative forecast of 3.77% and 3.58%, closer to the range suggested by Leng and Rajah. Moreover, by predicting growth rates under 3.5% (specifically 3.38% and 3.31% for 2028 and 2029 respectively) for the last two years of the decade,<sup>5</sup> the IMF now predicts growth rates within the range of what Rajah & Leng predicted, instead of the conclusion of the twenty papers that Raja & Leng cited, which predicted a much faster growth rate as recently as 2022.

According to a 2022 long-term forecast by Goldman Sachs, China will only surpass the US in 2040, but by then its share in the global GDP will in fact be smaller than in 2030, which means that the 2030s will already be a decade when China's growth will already be slower than that of the global average. Thus, Goldman's forecast suggests that 'Peak China' can be put roughly at 2030. However, the time may be much closer than even that: For the years 2026, 2027, 2028, and 2029, the April 2024 forecast of the International Monetary Fund predicts a growth rate of 3.77%, 3.58%, 3.38%, and 3.31% respectively, while it forecasts 2.64%, 2.62%, 2.57% and 2.55% for the growth of the world economy for the same years respectively.<sup>6</sup> As for 2027-2028-2029, the difference between China's GDP growth and that of the global average will be less than one percent, which can very well be within the margin of error, this period can already be seen as the years of 'peak China'. As such a difference can likely be within the margin of error, and thus, within this period, China's growth can slide below the global average any time, and will most likely be slower than the global average from then on.

However, even the IMF forecast could be an overestimate. As transparency is often questionable in dictatorships, this should be no surprise. Rhodium group concluded that in reality GDP growth was only 1.5% in 2023, and is expected to be just 3-3.5% in 2024.<sup>7</sup> While this research of Rhodium Group didn't provide a forecast for the rest of the decade, if growth in those years is slower than the IMF forecast with a degree even remotely close to the discrepancy suggested for 2023-2024, would mean that 'Peak

China' - in the sense of the peaking of China's share in the global economy - is already occurring now, and China's growth will probably fall below the global average by the second half of the 2020s. Should Chinese GDP growth in the second half of the decade be slower than the IMF forecast by even a mere 1% on average annually, this would mean 'peak China' as early as 2026, and the pace of the growth of China in the second half of the decade would only be roughly on the same level as that of the United States.

*Table 1. Falling forecasts for China's GDP growth*

| Toning down forecasts for the GDP growth of China   | 2023  | 2024   | 2025  | 2026  | 2027  | 2028  | 2029  |
|---|---|--------|-------|-------|-------|-------|-------|
| Raja&Leng 2022 <sup>8</sup>   | decelerating to 3% by the end of the decade |        |       |       |       |       |       |
| Majority of twenty papers cited by Raja&Leng in 2022 <sup>9</sup>   | above 5% till the end of the decade         |        |       |       |       |       |       |
| Former IMF forecast in 2022 <sup>10</sup>   | 5,07%                                       | 5,09%  | 4,97% | 4,92% | 4,48% | N/A   |       |
| Revised current IMF forecast in 2024 <sup>11</sup>  | 5,24%                                       | 4,64%  | 4,09% | 3,77% | 3,58% | 3,38% | 3,31% |
| Revised figures by Rhodium group, 2023 <sup>12</sup>  | 1,50%                                       | 3-3,5% | N/A   |       |       |       |       |
| 2024 IMF forecast for Global growth, growth in the US, and some major, emerging Asian economies <sup>13</sup> |   |        |       |       |       |       |       |
| World   | 2,70%                                       | 2,71%  | 2,71% | 2,64% | 2,62% | 2,57% | 2,55% |
| United States   | 2,53%                                       | 2,73%  | 1,88% | 2,03% | 2,12% | 2,12% | 2,12% |
| Bangladesh  | 6,03%                                       | 5,70%  | 6,60% | 7,10% | 7,20% | 7%    | 7%    |
| India   | 7,83%                                       | 6,81%  | 6,46% | 6,47% | 6,48% | 6,49% | 6,50% |
| Indonesia   | 5,05%                                       | 4,96%  | 5,06% | 5,06% | 5,06% | 5,07% | 5,07% |
| Philippines   | 5,57%                                       | 6,16%  | 6,18% | 6,19% | 6,32% | 6,32% | 6,40% |
| Vietnam   | 5,05%                                       | 5,82%  | 6,50% | 6,50% | 6,50% | 6,50% | 6,50% |

## Factors foretelling an even lower growth rate

There are certain additional factors that strongly suggest that China's actual growth could very well be lower than even the revised 2024 IMF forecast, and thus support the claims of Rhodium Group. One of them is demographics. In their forecast published in 2022, the United Nations still expected China's total fertility rate to remain above 1.2 for the rest of the decade, and to be as high as 1.27 as late as 2030.<sup>14</sup> Since then, it turned out, however, that China's total fertility rate fell to 1.08 by 2023, and may remain under 1 for the rest of the decade.<sup>15</sup>

Also, while the 2022 estimate of the United Nations put China's population for 2023 at 1.426 billion, the January 2024 report of China's National Statistics Bureau put it to a mere 1.410 billion, 1.12% lower than the UN figure.<sup>16</sup> Also between 2017 and 2023, China's birth rate virtually halved, falling from 12.64 per 1000 inhabitants in 2017 to a mere 6.39 in 2023,<sup>17</sup> in absolute terms, falling from 17.23 million births in 2017 to 9.02 million births in 2023.<sup>18</sup> Had the April 2024 IMF forecast calculated with the 2022 UN population figures, this alone likely means that the IMF forecast on GDP growth is somewhat overestimated.

Even these, already disastrous demographic numbers may however be overestimates. Researcher Yi Fuxian has pointed out certain discrepancies that suggest that the 2022 UN figures based on official Chinese statistics, overestimated the cohort born between 1996 and 2007 by 15%, and the live birth in the years of 2018, 2019, and 2020 by 44%, 42% and 40% respectively. This suggests that for the years in between, deviation from the UN estimates would gradually increase from 2007 to 2018. This would mean China's total fertility rate to have already been under 1 in 2018, and presumably having dropped below 1 already in 2017 if the deviation in that year was even remotely close to that in 2018. Yi does not provide specific estimates for the years 2021, 2022, and 2023, but if the suggested trends between 2018 and 2020 did continue, then by now, China's total fertility rate may be on roughly the same level as that of South Korea, or possibly even below it, making China to have the lowest total fertility rate among all sovereign states in the world.

Yi's conclusions also suggest that instead of 2022, China's population already peaked as early as 2018, having been on the decline ever since then and that instead of the population of 1.43 billion estimated by the United Nations for the year 2022, China only had a population of 1.28 billion people that year. This would also mean that by 2050, China's population will have fallen to a mere 1.02 billion, as opposed to the 1.31 billion figure predicted by the UN in 2022. How Yi got to this conclusion, is twofold:

Regarding the cohort born between 1996 and 2007, Yi noticed that, while the Chinese Household Registration Database, put the number of between the ages 3-14 at 169 million in 2010, while for the years when this cohort was born, 1996-2007 it put the number of live births at 210 million.

This would give a discrepancy of 24%, however, the 2022 UN estimate already seems to have revised the number of this cohort down to below these birth figures, and put the number of this cohort at 195 million, decreasing the discrepancy to 15%. Regarding the number of Children born in 2018, 2019, and 2020, what Yi noticed was that the number of BCG vaccines, mandatory for every single Chinese infant at birth, started to gradually deviate from the number of lives to a degree that, by the late 2010s, the gap reached such a scale. A massive leak from the Shanghai Police Department also seems to confirm the discrepancy.<sup>19,20,21</sup> As the cohort born between 1996-2007 already represents the age group of 17-28-year-olds now, it is exactly the group of young adults joining the workforce in recent years. If calculations by Yi Fuxian are right, and this very cohort is 15% less numerous than the numbers on which the IMF forecast is based, while senior citizens reaching retirement age and leaving the workforce is unchanged, this can very well support the claims of Rhodium Group that the IMF forecast is an overestimate.

Adding to all of this is the 2024 demographic forecast of the United Nations, published on the 11th of July 2024. While the 2022 forecast, which is the standard point of reference for most economic forecasts now, predicted a 1.21 total fertility rate for the year 2024, the 2024 forecast gives an estimate of a mere 1.01 for 2024. This is still above the figures suggested by Yi Fuxiang, but already significantly below what most economic forecasts up until now used as reference.<sup>22</sup> While the paper by Leng & Rajah, calculating with an average annual decrease of 0.78% of China's working age population from 2022 to 2050,<sup>23</sup> concluded China's annual GDP growth to decelerate to 3% by 2030 and to 2% by 2040, the 2024 UN forecast already counts with an annual average decrease of 1.06% between 2024 and 2050, and potentially as steep as an average 1.21% annually at the lower end of their 80% uncertainty bound.<sup>24</sup>

This conservative estimate, while still significantly more optimistic, than Yi Fuxian's figures, already calculates with up to an extra 0.43% annual average loss of China's working age population compared to those of figures that Leng & Rajah used as reference for their estimates predicting China's average annual GDP growth slowdown. Should GDP per working-age population remain what Leng & Rajah forecasted, this would put the figures to slowing down to somewhere around 2.5% by 2030, and to somewhere around 1.5% by 2040.

A second such issue is China's property sector, which at its peak constituted 25% of China's GDP. The Chinese property industry financed its projects with massive loans. Fearing that debt levels of real estate companies have risen dangerously high, in 2020 the Chinese government also introduced the 'three red lines' policy, which restricted how much debt companies could take. As a side-effect, several major real estate companies defaulted. This also impacted customers and resulted in high numbers of mortgages over apartments that were not built. To help this problem, in 2024, the Chinese government introduced a stimulus plan, that obliges banks to offer mortgage loans with lower deposits and with lower interest rates. The plan also includes the Chinese government purchasing properties and lending them out as social housing.

However, the plan may be too small to cover the entire property market.<sup>25</sup> According to an analysis by S&P, the stimulus package risks causing trouble in the banking sector, because customers can get mortgages with both lower mortgage deposits and interest rates, which combined with falling property prices could result in a situation, where they could be sold for a price too low to cover the loans. Another problem in the property sector is that due to the inflating property bubble, it ended up heavily overbuilt. According to the Chinese Beike Research Institute, as of 2022, the average vacancy rate in 28 large and medium-sized cities of China was 12%, while in the most prosperous cities of Beijing, Shanghai, and Shenzhen, it stood somewhat lower, at 7%.<sup>26</sup>

He Keng, formerly the deputy head of the Chinese Statistics Bureau, suggests even higher numbers, claiming that the vacant homes in China could house 1.4-3 billion people, which would mean an overbuilt rate of 100-200%. Although from the phrasing it is not entirely clear whether He meant 1.4-3 billion in vacant homes only, or the entire housing stock of China. However, even in the latter case, this would mean an overbuilt ratio up to 100%, which is still a staggering level.<sup>27</sup>

Even if we assume that the more moderate and more detailed figures of the Beike Research Institute of 12% are true, even that is an alarming rate. As a result of all the issues above, Richard Wright, analyst of Rhodium Group, concluded that China's real estate market will stabilize at 40-50% of its peak level, and not rise above that in the long run.<sup>28</sup> As in China, the property sector is the primary target for household savings, containing 70% of household wealth,<sup>29</sup> and property prices stabilizing at a level of 40-50% of the peak may mean a significant loss of household savings on a mass level, and thus may increase social tensions. These troubles in China's property market could also have a slowing effect on its GDP growth.

A third factor that may mean growth figures significantly below the 2024 IMF figures for the rest of the decade, is debt-fueled growth, and the corresponding debt of China's



local governments. A factor that significantly contributed to China's growth has been infrastructure projects by provincial governments, as these governments were also expected by the central government to contribute to the country's GDP growth. However, this incentivised local governments to prioritize short-term GDP figures over both investments in long-term productivity, and long-term trends in debt. This led to much wasted effort on large-scale infrastructural projects, which added little to long-term productivity and growth, and caused a dramatic growth in local debt to finance this.<sup>30</sup>

By 2022, local debt in China has reached the staggering rate of 12.58 trillion USD, equivalent to 76% of the GDP of the country.<sup>31</sup> The debt-to-GDP ratio in two-thirds of China's provinces was above the global warning line of 60% by 2023.<sup>32</sup> An apparent example of this phenomenon has been the case of the province of Guizhou, which built nearly 30,000 bridges with a combined length of 4400km.<sup>33</sup> As a result, today more than 40 of the 100 highest bridges in the world, and five of the ten highest bridges in the world, are located in this single Chinese province. This boosted GDP growth in the short term, but with questionable benefits regarding long-term productivity. Chiefly financed by loans, these projects had a runaway effect on the debt, leading to the province applying for a bailout from central government.<sup>34</sup> Judging the increase of local debts to be unsustainable, this led to the Chinese government ordering a halt of such infrastructure projects in no less than twelve provincial-level administrative units.<sup>35</sup> As such infrastructure projects have been a major contributor to Chinese GDP growth, and halting them on such a massive scale could likely have a slowing effect on China's GDP growth, especially if in future the central government halts such projects in other provinces as well, due to the increasing local debt.

## Conclusion

The factors discussed above strongly support the claim of Rhodium Group that the IMF overestimated China's growth rate. Furthermore, they also imply that, in reality, 'peak China', as defined in this paper, is already taking place right now, in the mid-2020s. To get a realistic assessment of the situation, however, we must distinguish between what this kind of 'peak China' does and does not mean for trends in global politics.

On the one hand, it most likely does not mean a long-lasting period of recession for China any time soon, let alone collapse. Of course, one-off events, such as a potential collapse of the Chinese real estate sector, can trigger brief periods of recession, in the manner of the US subprime crisis, and of course, financial problems can trigger political power struggles and political crises. However, such examples are more unpredictable

'black swan' events than they are necessary outcomes of the long-term trends. 'Black swan' events may or may not occur, but even if they do, it is unclear if their impact is long-lasting or brief.

On the other hand, what long-term trends do suggest is something like the history of post-1990 Japan: First, the 1990s were labeled as the Lost Decade of Japan, but then, apart from some good years, the following decades didn't manage to achieve significantly higher growth rates in average either. Yes, Japan still remained a major advanced economy and a significant power, but instead of the rapid growth of the previous three decades, it became a state instead characterized by stagnation, and it started to slowly and steadily lose their edge in relation to the competition at both the regional and the global level.

Thus, for China, the 2020s could be what the 1990s were for Japan. The start of a lasting period of low growth, if not stagnation in an aging society, where China's average GDP growth lags the global average, and perhaps even behind that of the United States. Regarding the impact of such a situation on the international power balance, it does not mean an immediate, significant weakening of China, save from a scenario where the economic downturn triggers a 'black swan' event.

It still does mark several important turns of events, however: First, China's aspirations to achieve global dominance, or simply a degree of influence equal to that of the United States, are most likely futile. Second, as China's growth rate already lags behind major emerging economies of South and Southeast Asia, such as Bangladesh, India, Indonesia, the Philippines, and Vietnam, and is predicted to be less than half of most of these in the second half of our decade, China's aspiration to dominate Asia also seems to be futile. This trend is also reinforced by Japan doubling its military spending, which despite Japan's growth rate lagging behind that of China - will also mean a Japanese military expansion at least at the pace of that of China for the second half of our decade.

Paradoxically, due to the slow growth rate of the United States, this suggests that the impact of China's slowdown will be more apparent regarding its position in Asia, than its position relative to the United States. On the other hand, China's global influence rests on its position in Asia, and any weakening of the latter will also cause the weakening of the former. However, this means that the primary cause for the halt of China's global advance will likely be it becoming increasingly 'tied down' in Asia, rather than changes in its position relative to the United States on a one-on-one basis.

In other words, while China often seems to build its hopes on a multipolar shift in the global order at the expense of the United States, what we can see unfolding in front of our eyes is also a multipolar shift within Asia at the expense of China. As India, Japan, the Philippines, and Vietnam all bandwagon with the US to contain China, either under the Quad, the Quad Plus, or bilateral security pacts. Even Bangladesh and Indonesia are hardly China-leaning, but unaligned at best, this multipolar shift in the Asian order is a trend towards the containment of China, enabling the US to manage the multipolar shift in the global order in a way that it can retain the role of *primus inter pares*.

## Endnotes

- <sup>1</sup> <https://www.japantimes.co.jp/opinion/2023/03/10/commentary/world-commentary/china-population-decline/>
- <sup>2</sup> <https://www.brookings.edu/articles/peak-china-why-do-chinas-growth-projections-differ-so-much/>
- <sup>3</sup> <https://www.lowyinstitute.org/publications/revising-down-rise-china>
- <sup>4</sup> <https://www.imf.org/en/Publications/WEO/weo-database/2022/April>
- <sup>5</sup> <https://www.imf.org/en/Publications/WEO/weo-database/2024/April>
- <sup>6</sup> <https://www.imf.org/en/Publications/WEO/weo-database/2024/April>
- <sup>7</sup> <https://rhg.com/research/through-the-looking-glass-chinas-2023-gdp-and-the-year-ahead/>
- <sup>8</sup> <https://www.lowyinstitute.org/publications/revising-down-rise-china>
- <sup>9</sup> <https://www.lowyinstitute.org/publications/revising-down-rise-china>
- <sup>10</sup> <https://www.imf.org/en/Publications/WEO/weo-database/2022/April/>
- <sup>11</sup> <https://www.imf.org/en/Publications/WEO/weo-database/2024/April/>
- <sup>12</sup> <https://rhg.com/research/through-the-looking-glass-chinas-2023-gdp-and-the-year-ahead/>
- <sup>13</sup> <https://www.imf.org/en/Publications/WEO/weo-database/2024/April/>
- <sup>14</sup> <https://population.un.org/wpp/>
- <sup>15</sup> <https://theconversation.com/chinas-population-shrinks-again-and-could-more-than-halve-heres-what-that-means-220667>
- <sup>16</sup> <https://www.globaltimes.cn/page/202401/1305550.shtml>
- <sup>17</sup> <https://www.statista.com/statistics/251045/birth-rate-in-china/>
- <sup>18</sup> <https://www.statista.com/statistics/250650/number-of-births-in-china/>
- <sup>19</sup> <https://population.un.org/wpp/>
- <sup>20</sup> <https://asialink.unimelb.edu.au/insights/china-is-dying-out>
- <sup>21</sup> <https://www.project-syndicate.org/commentary/chinese-population-smaller-than-stated-and-shrinking-fast-by-yi-fuxian-2022-07>
- <sup>22</sup> <https://population.un.org/dataportal/home>
- <sup>23</sup> <https://www.lowyinstitute.org/publications/revising-down-rise-china>
- <sup>24</sup> <https://population.un.org/dataportal/home>
- <sup>25</sup> <https://www.scmp.com/business/china-business/article/3263202/china-property-beijings-stimulus-plan-needs-more-time-money-and-policy-support-resolve-long-standing>
- <sup>26</sup> <https://www.globaltimes.cn/page/202309/1298786.shtml>
- <sup>27</sup> <https://www.reuters.com/world/china/even-chinas-14-bltn-population-cant-fill-all-its-vacant-homes-former-official-2023-09-23/>
- <sup>28</sup> <https://www.msn.com/en-gb/money/other/analysis-china-sees-property-silver-lining-but-can-t-shake-japan-comparisons/ar-BB1nA3OP>
- <sup>29</sup> <https://www.chinadaily.com.cn/a/202401/29/WS65b6ff1ba3105f21a507ec78.html>
- <sup>30</sup> <https://www.ft.com/content/e8cb37b6-df30-4729-8509-8fc4d482d287>
- <sup>31</sup> <https://www.reuters.com/world/china/china-instructs-banks-roll-over-local-government-debt-sources-2023-10-17/>
- <sup>32</sup> <https://www.ft.com/content/e8cb37b6-df30-4729-8509-8fc4d482d287>
- <sup>33</sup> [http://www.eguizhou.gov.cn/2023-10/26/c\\_939177.htm](http://www.eguizhou.gov.cn/2023-10/26/c_939177.htm)
- <sup>34</sup> <https://www.ft.com/content/e8cb37b6-df30-4729-8509-8fc4d482d287>
- <sup>35</sup> <https://www.csmonitor.com/World/Asia-Pacific/2024/0119/China-wants-to-grow-its-economy.-So-why-is-it-halting-construction>