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Investment viewpoint

Will China grow old before it grows rich?

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This article is the second in a three-part series discussing the approaching demographic winter – the notion that many nations are experiencing the twin challenge of an aging population and shrinking workforce.

Key points

- China is facing a demographic winter as its population is expected to shrink by as much as half in the coming years.
- China aims to become a high-income country, in line with neighbouring South Korea and Japan. To achieve this, the nation needs to avoid the middle-income trap.
- The looming demographic winter will not make it any easier for China to do so, as it requires multiple economic transformations to transition from a manufacturing-dominated to consumer-driven economy, and prepare for the grey tsunami at the same time.
- It would also help if China de-escalated tensions with the US to avoid another, more hostile trap.

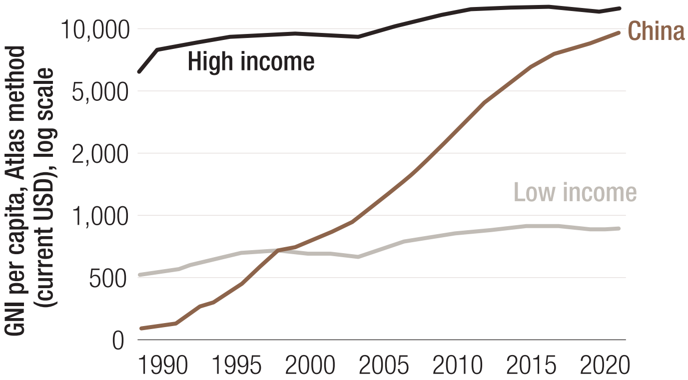
Introduction

China was on the cusp of qualifying as a high-income country in 2021, according to the National Bureau of Statistics of China. China's Gross National Income (GNI) per capita reached USD 11.9K at the end of 2021[1] – placing the country within reach of the World Bank's USD 12,376 threshold for high-income countries. Low-income economies are defined as those with a GNI per capita, below USD 1,025, while middle-income countries lie between the two.

China aims to become "a moderately developed country" by 2035, with GNI per capita doubling to ~USD 20K, as outlined in China's 2035 long-term development target. China needs to avoid the so-called 'middle-income trap' if it is to realise this objective, but it also needs to do so without the favourable demographic tailwinds that helped shape the preceding four decades. China can no longer rely on a strongly growing workforce, nor a young and ambitious population, which has fuelled the construction of the world's factory. As was also discussed in our previous paper about the coming demographic winter, China will now need to deal with a shrinking workforce and rapidly aging population. So, will China grow old before it grows rich?

FIG. 1 CHINA ALMOST REACHED THE HIGH INCOME STATUS

GNI PER CAPITA & INCOME THRESHOLDS



Source: datatopics.worldbank.org.

Growing old

Demography is destiny, according to 19th century French philosopher Auguste Comte. Any forward-looking estimate of China's demography would suggest that the destiny of China in the coming decades will be unrecognisable.

China is facing a coming demographic winter. According to the latest demographic forecasts from the United Nations (UN), the Chinese population may well shrink from a peak of just below 1.5 billion to somewhere between 600 and 800 million by this century's end. Reaching this 600 to 800 million mark depends on the future development of China's fertility rate. Figure 2 shows the forecast under the assumption of constant fertility, which at the end of 2021 stood at 1.18 live births per woman in China.

FIG. 2 DEMOGRAPHICAL FORECAST FOR CHINA

		1950	1975	2000	2025	2050	2100
China	Total population (in millions)	544	915	1,216	1,423	1,280	629
	20-64 working age cohort	51%	46%	60%	63%	56%	42%
	Population annualised growth		2.1%	1.3%	0.5%	-0.4%	-1.4%
	20-64 working age cohort ann. growth		1.7%	2.4%	0.7%	-0.9%	-2.0%

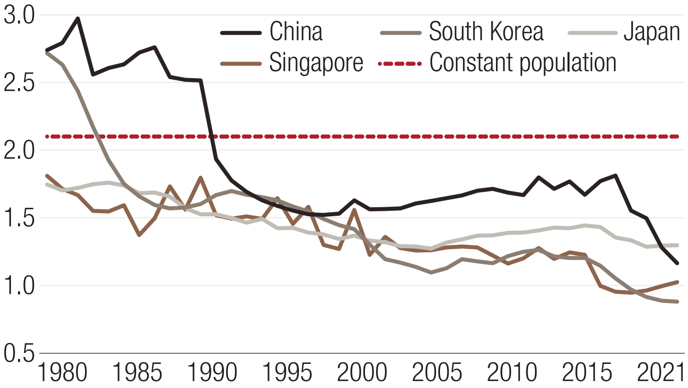
Source: UN 2022 population statistics, constant fertility scenario without migration.

Additionally, the table shows that only 42% of the Chinese population will be of working age in 2100, while 49% of the population will be classed as elderly. This century, the workforce of China will shrink almost as fast as it had grown in the previous one, assuming constant fertility. A fertility rate of 1.18 is the lowest ever measured in China. However, compared to other wealthy Asian countries Singapore, South Korea, and Japan a rate of 1.18 is not that low, as Figure 3 shows.

The UN and the Chinese Academy of Social Sciences suggest a higher fertility rate of 1.5 as a more realistic scenario in the foreseeable future as this would bring it more in line with Western instead of neighbouring countries. We would disagree, however. Even in the event of a higher fertility rate, this would still lead to China's working population halving by 2100 and would see the entire population shrink to 770 million within about three generations. Based on these more optimistic demographic forecasts, Bloomberg estimates that the Chinese workforce will be smaller by then than the combined workforce in Canada, the US and Mexico (NAFTA) and entire East Asian workforce will be smaller than Europe and NAFTA combined.[2]

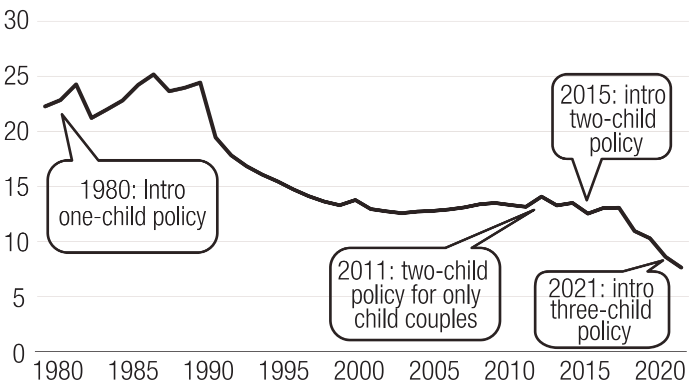
In one way, the declining fertility rate in China is entirely normal. A country's fertility rate falls as it grows richer. It's a mark of social success as women are better educated and have more career options and fewer children. But in China's case, it's quite abnormal. Other East Asian countries have become rich first and then gone into population decline. However, we partly must thank the one-child policy that came into effect in the 1980s for that. The Chinese authorities have been very aware of the upcoming population collapse. President Xi Jinping switched this one-child policy to a two-child version in 2015, and to a three-child version in 2021. The advent of the two-child policy did have some positive impact. The number of births surged, as can been seen in Figure 4. But only for one year. The number of babies born in China then went into steep decline. In 2021, there were only 10.8 million new-borns in China versus 10.6 million deaths. According to the latest from the Chinese authorities, the population actually declined in 2022. It's now down by more than 40% compared with the number born in 2016. "Too many people" ran the popular saying deployed in support of the government's one-child policy in 1980s. Remarkably,

FIG. 3 FERTILITY RATES WEALTHY ASIAN COUNTRIES



Source: UN population statistics.

FIG. 4 CRUDE BIRTH RATE IN CHINA



Source: UN population statistics.

the country is now gripped by the opposite problem: the median age in China has increased from 20.8 years in 1980 to 37.9 years today.

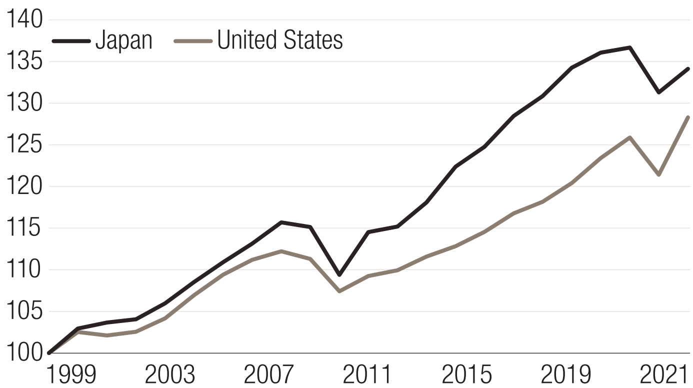
The problem with these demographic policies is that the Chinese society is not really designed for larger families. Because of almost 40 years of a one-child policy, most apartments in Chinese cities only offer two bedrooms, and raising children in China has become very expensive. The Economist estimates that it costs, on average, half a million yuan (USD 70,000) to raise one child in China.[3] Both the Chinese government and local authorities have introduced measures to try to ease the financial strain on parents. Recently private tutoring after school has become far more restrictive and some city councils have started to offer cash, sometimes up to 10,000 yuan (USD 1400) per year for a third child and half of that for a second. Beijing and Shanghai have extended maternity leave by 30 days to just over five months, while others are setting up cost-sensitive nurseries. With both parents working, grandparents are in China frequently brought in as nannies. China's wealthy neighbours have also tried to increase the birth-rate by introducing child and parent support measures in past decades. Japan, for example, provides cash incentives, housing subsidies, free childcare, free education, and free medical care for children under 16 years old. Figure 3 depicts limited long-term success, making us less optimistic about the effects of the Chinese stimulus policies.

All the world's rich nations have low fertility rates, often below the established replacement rate of 2.1. America's is 1.6, Switzerland's is 1.5 and Australia's is 1.7, for instance. The big difference is that each of these countries recognises the value of immigration. The average population age can be kept young by simply admitting more young immigrants. China, historically, decided not to take that option, just as Japan never really did. So, China is left with low fertility rates, failing baby stimulus policies, and lacklustre migration. A shrinking and ageing population seems inevitable.

Shrinking population means shrinking economy?

These circumstances will make it difficult for China to overtake the US as largest economy, especially as the US is expected to have a slightly increasing or stable population. With GDP growth driven by the combination of working population growth and productivity growth, there is a true productivity miracle needed for China to be able to outgrow the GDP of the US. Does this mean that China's GDP and wealth will shrink from here on out? Not necessarily. The FT recently showed that although the US has had a comparatively younger and faster growing population, their economy failed to keep pace with Japan's, at least in terms of wealth.[4] This century, until 2021, US GDP grew almost 54% while Japan's economy grew 14%. However, Japan achieved this with a shrinking working population. In terms of GDP/working population, or wealth per working class, Japan has grown 34% in the same period while US grew 28%. By comparison, China grew more than 500% on this measure. This raises the question of whether China will be able to continue to grow citizens' wealth in the coming decades and make the jump to high-income country status, like Japan did before in 1980s.

FIG. 5 GDP PER WORKING POPULATION US VERSUS JAPAN



Source: UN population statistics, World Bank data (constant 2015 USD).

Growing rich

China is not the first country to hold ambitions of becoming a high-income country. Many have tried and only a few have succeeded. Several Latin American economies have failed to achieve high-income levels despite reaching middle-income status many decades ago. The International Monetary Fund (IMF) calls this the middle-income trap.[5] This refers to the phenomenon of hitherto rapidly growing economies stagnating at middle-income levels and failing to graduate into the ranks of high-income countries.

A country caught in the middle-income trap has lost its competitive edge in the export of manufactured goods and is unable to keep up with more developed economies in the high-value-added market. The prior surplus of rural labour, that became available through automating the agricultural and mining sectors, is fully absorbed into the manufacturing sector in the city. Economists also call this the Lewis turning point and this typically causes unskilled wages to rise faster than the rate of inflation because the surplus labour pool has been exhausted.[6] As a result, newly industrialised economies such as South Africa and Brazil have spent decades in the middle-income range, as defined by the World Bank. They suffer from low investment, slow growth in the high-value-added industries and the services sector of the economy, limited industrial diversification and poor labour market conditions and, increasingly, ageing populations.

According to the IMF, only 15 out of 101 middle-income economies escaped the trap between 1960 to 2010, including Japan, Singapore, South Korea, and Taiwan. China has been a middle-income country for the last 25 years while South Korea, Taiwan, and Singapore spent 23, 27, and 29 years respectively as middle-income economies before moving to upper-income level. China has already begun to show signs that it is shifting away from the manufacturing-led growth model that has fuelled rapid economic growth in recent decades. The country's working age population has started to decline, and real wages have nearly doubled since 2003, which led the IMF to declare that China had begun to enter the Lewis Turning Point.[7] Brands like the US' Nike, Germany's Adidas, and Japan's Uniqlo have already swapped China for cheaper manufacturing hubs in Vietnam and Thailand.

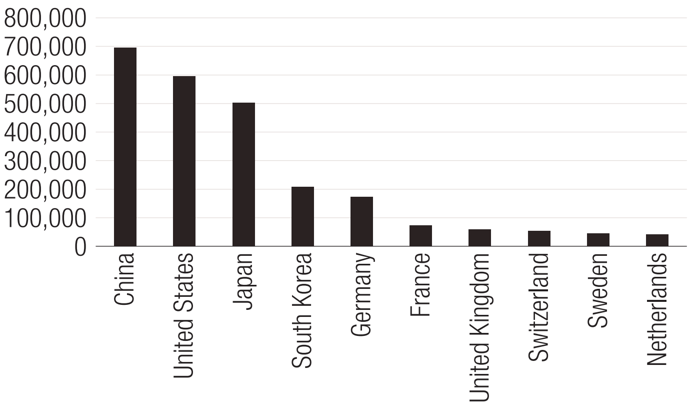
This presents Chinese authorities with their biggest challenge as the middle-income trap looms large at the horizon. The country's ability to follow in their neighbours' footsteps and become a high-income country depends on their ability to rebalance their economy and do so while avoiding a (cold) war with the US.

According to Oxford University's Keun Lee there are three characteristics that are shared by the countries that have escaped the middle-income trap, and that are absent from countries which remain trapped:[8]

- **Innovation:** to make the transition to a high-value-added economy,
- **Big businesses:** to take over the investments from the central government,
- **Entrepreneurship:** to keep the new developments going.

The Chinese economy is less dependent on commodity exports than Latin American or African economies and has cultivated high-value-add industries in solar and wind energy, consumer electronics, battery technology and EVs. China outspends many high-income countries on research and development (R&D) and is leading in terms of patents, as illustrated by Figure 6.

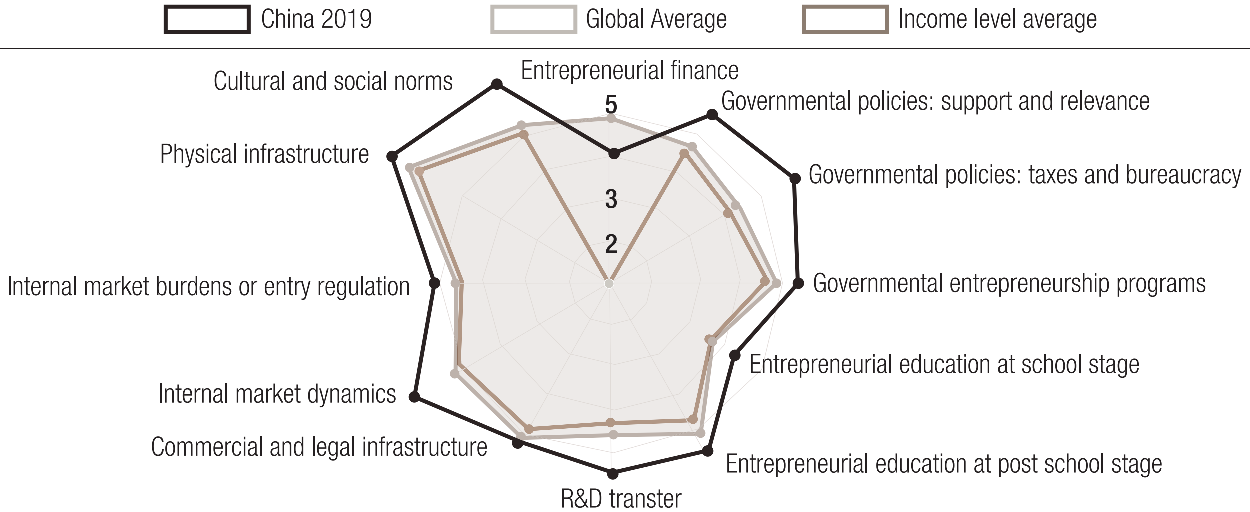
FIG. 6 CUMULATIVE NUMBER OF GRANTED NON-EXPIRED PATENTS



Source: worldpopulationreview.com/country-rankings/patents-by-country.

FIG. 7 ENTREPRENEURIAL SCORE IN CHINA 2019

Entrepreneurial framework conditions



Source: www.gemconsortium.org/economy-profiles/china-2.

The Chinese government is aware of the transition that the economy needs to make, as the stated goal is to become a more consumer-led economy that can afford high wages due to the high-value-add industries. In keeping with Japan, Singapore, and South Korea before it, China has also labelled some industries as essential and allocated significant resources and freedoms for development. Japan labelled this the "flying geese" model.[9] For China, this started with garments, later focused on consumer electronics, before centring on mobile networks, electric vehicles (EVs) and other high-value add products. China has also gathered a wide range of high-end technologies that will make it able to compete with Western countries in many areas. China is still lagging when it comes to semiconductor technology, seen by many economists as an essential building block for other technologies China leads in such as 5G, artificial intelligence and cloud computing. However, China sees Taiwan as part of China and with that TSMC – one of the market leaders on semiconductors manufacturing.

On Lee's second point regarding big business, China has cleared the hurdle. China is home to many world-class big businesses, not only in finance, energy, and manufacturing but also increasingly in consumer services. This is where the country differs from other middle-income countries, which have relatively few globally competitive large businesses. A recent worry, however, concerns the change in economic freedom afforded to certain companies. After 40 years of economic growth backed by economic liberalisation, China is now trying to make state enterprises larger and more powerful. This has put increasing pressure on consumer technology companies like Alibaba and Tencent. There are parallels between efforts to limit the near-monopoly power of Alibaba and Tencent, and the forced break-up of Standard Oil and JPMorgan in the US at the start of the 20th century. These measures can also be construed as the first step in returning to a planned economy, with the Chinese government trying to increase its control over the economy. This would make it harder to develop the kind of big businesses needed to escape the middle-income trap.

On the third point of entrepreneurship there is some disagreement among economist on how to best quantify this. Lee follows the classical theory of the Kuznets curve that says inequality needs to rise in middle-income countries as a sign of greater wealth creation by entrepreneurs. Once the high-income status has been reached, inequality then automatically comes down as more taxes are needed to fund social welfare, rising healthcare costs and state pensions. Kuznets based his curve on data from Latin American countries from the 1950s and 1960s, however the development of the Asian economies did not follow this curve, which also made Kuznets revisit his original conclusions. On top of that, the inequality in the US has been rising since the 1970s, despite the fact it is a high-income country, which contradicts the notion of the Kuznets curve. We prefer to use the Global Entrepreneurship Monitor (GEM) which quantifies the entrepreneurial spirit in China. As Figure 7 shows, besides scoring slightly lower on finance and education, China scores highly in terms of entrepreneurship, above the global average and above the average of the countries with a similar GDP per capita.

There is no major economic reason that China does not become a high-income country. China appears to satisfy Lee's three factors, and there are sufficient parallels with neighbouring countries in Asia that have already avoided the middle-income trap. A working population in decline, as well as an ageing society, only increases the need to speed up the transition of their economy away from the cheap labour export model to a high value-added manufacturing and service driven economy.

We have identified four major changes we believe the Chinese economy needs to implement in order to cope with the demographics changes, and still make the jump to high-income country. Some of them are already in progress, while others are still at the drawing board stage.

- **Real estate** The Chinese economy needs to become less real estate-dependent. Driven by the strong urbanisation, real estate development has been a major driver of the economic growth in the preceding decades. A shrinking and ageing population no longer needs large apartment blocks with two-bedroom-condos in new (ghost) cities, mostly bought for speculation. Instead, the focus should be on building less and building more elderly homes and other healthcare facilities. President Xi Jinping told the 19th party congress that "houses are for living in, not for speculation" in 2017, leading to a tightening of housing measures and permits across China. The lockdowns enforced during the pandemic delivered another hit to the real estate sector, after which the government needed to step in again.
- **Pensions** Increasing the tax-free investment opportunities for citizens in individual defined contribution schemes, would have the effect of calming the demand for privately owned real estate. Additionally, it would make sense, given the increased life expectancy, to increase the retirement age from the 60-55-year bracket for men and 55-50 years for women.
- **Healthcare** Further relaxation of regulation and government-only ownership of the healthcare sector would increase the necessary investments in healthcare services and facilities. The first steps have already been made. The Chinese government started to deregulate some parts of the healthcare sector, based on the lessons learned from the pandemic, allowing online pharmacies and other online healthcare services by private Chinese companies.
- **Welfare system** The state should consider overhauling the discriminating Chinese welfare system, which has its roots in the Mao years. One option is to introduce some basic unemployment insurance for all citizens, as it is currently dependent on the company you work for and the region you are living in. Additionally, eliminating the distinction between the urban hukou, official city citizens and rural people or Chinese migrant workers could yield large benefits. Although more than half of the Chinese population now lives in cities, only 35% of city dwellers have an urban hukou, needed to get access to the welfare system. Hukou is a system of official household registration. It is estimated that at least 250 million migrant workers lack access to social payments, whether for children's education or medical assistance.[10] With the concept of 'common prosperity', re-introduced within the first term of the Xi presidency, the government is clearly trying to boost low-income groups, and promote fairness, while making regional development more balanced. A new urbanisation plan with easier access to hukou is also part of this, however, implementation has been slow.

The combination of a new and well-funded pension system, with more inclusive social security systems, could potentially unleash the large personal savings in China which would stimulate the switch to more a consumer-oriented and less manufacturing-based economy. There are also some political factors at stake that might hold China back to becoming a high-income country.

Avoiding the Thucydides Trap

The ancient Athenian historian Thucydides called the Peloponnesian wars between Sparta and Athens inevitable because of Spartan fears regarding the growth of Athenian power. The term 'Thucydides Trap' was therefore used by political scientist Graham Allison in a 2012 article for the Financial Times, describing the tendency towards war when a rising power challenges the status of a dominant power.[11] According to a study conducted by Allison, there have been 16 historical instances of an emerging power rivalling a ruling power, of which 12 ended in war. This study is not entirely uncontroversial as, with hindsight, most historical events seem inevitable. The Thucydides Trap is also used to describe the escalating political tensions between the United States and China. Both sides have implemented export bans and other measures in past years, with the Inflation Reduction Act and the Infrastructure Investment and Jobs Act from the US. The official aim of the US is to re-establish domestic manufacturing, research and development (R&D) and modern infrastructure. However, not letting China take the lead in key technologies like semiconductors and artificial intelligence (AI), that also play a role in military defence, is no longer the hidden agenda behind the US measures, but is more and more an openly-discussed objective.

Source: iStock.

The current US measures for containing the rise of China as a superpower will not lead China to collapse, unless the US dares to wage an all-out war. Such a war seems very unlikely to us. Although one should never underestimate human stupidity, 2022 is not like 1914 when all parties involved were still thinking they could easily and swiftly win the military conflict. Of course, US politicians know that most of their wars after 1945, like Vietnam or Afghanistan, did not accomplish their objectives or were simply lost. The most successful war they have won in this period has been the cold war against the Soviet Union in which no bullet was been fired.[12] Additionally, any military conflicts with the nuclear army of China could potentially make it a suicidal one. The future relationship between China and Taiwan is seen by many as potential trigger for world war. China's position is that Taiwan needs become an active member again before the 100 years anniversary of the communist revolution in 2049. The US have formally adopted the one China policy and never acknowledged Taiwan as sovereign nation, in line with many other countries.[13] However, the US did promise Taiwan military assistance if China were to end up on these shores uninvited. We see a diplomatic solution the coming years as a much more likely scenario, especially if China were to assist in the unification of Korea.

The current economic measures that have been taken stand to disrupt China's development somewhat, however we believe that it will only delay the realisation of China's ambition to become 'a moderately developed country' at best. China has been preparing for more autarky for years with the 'Made in China 2025' and 'Belt and Road' policies. Although these policies will not give China the latest semiconductor technology, it will provide the commodities in which they are in short supply of. Additionally, the pandemic has shown us that although the Western world might have technologies that China lacks, the West is dependent on China on many more things like masks and antibiotics, next to their dominance in rare earth materials needed for batteries and windmills. If the West was really that afraid of the economic development of China, it should have never used China as cheap manufacturing hub and should never have outsourced consumer electronics and other value-add industries to them. It now seems simply too little and too late.

At the start of 21st century, most political analysts were still expecting China to follow their Asian neighbours and go down a path of political democratisation, amid increasing wealth and a move to a high-income country. The logic behind more democracy was always that taxations can only be justified by representation and higher taxation is needed for the welfare system of high-income countries. However so far, China's economic growth seems to have strengthened the Chinese Communist Party rather than brought about demands for political change. On the other hand, the Chinese American political scientist Minxin Pei has identified the first signs of political decay in China. Decades of credit-fuelled economic growth have brought China massive overcapacity and an unsustainable level of debt of more than 250% of GDP.[14] According to Mei, it is the strengthened position of President Xi after his anti-corruption campaign which has pushed back demands for more democratic representation. Surely a more democratic China would be welcomed by the US and the Western world and would make it easier to avoid both middle-income and Thucydides Traps. It is quite ironic that for the communist party to stay in charge they need wealth creation to continue and make the jump to a high-income country, while the easiest way to is reach this and to avoid the Thucydides Trap on top of it, is to give up centralised power.

We are not anticipating imminent nor inevitable political change in China. However, we do agree that a combination of economic reforms and political changes would make it much easier for China to achieve the goal of becoming a moderately-developed country by 2035.

So, will China grow old before it grows rich? Growing old does not make it easier for China to grow rich, however the development of their economy in comparison with their Asia neighbours that already made it to high-income countries, makes it most likely that China, one day, will become both old and rich, especially if they are able to deescalate the conflict with US.

References

1 Gross domestic product (GDP) and gross national income (GNI) are two measures of economic activity, but what they measure differs. GDP looks at the production level of an economy or the total annual value of what is produced in the nation; it measures an economy's size and growth rate. GNI is the total dollar value of everything produced by a country and the income its residents receive – whether it is earned at home or abroad.

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9 The "flying geese" model was first described by Akamatsu Kaname in 1935 to explain the process of Japanese-modelled economic development and provided inspiration to the other countries in the region.

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