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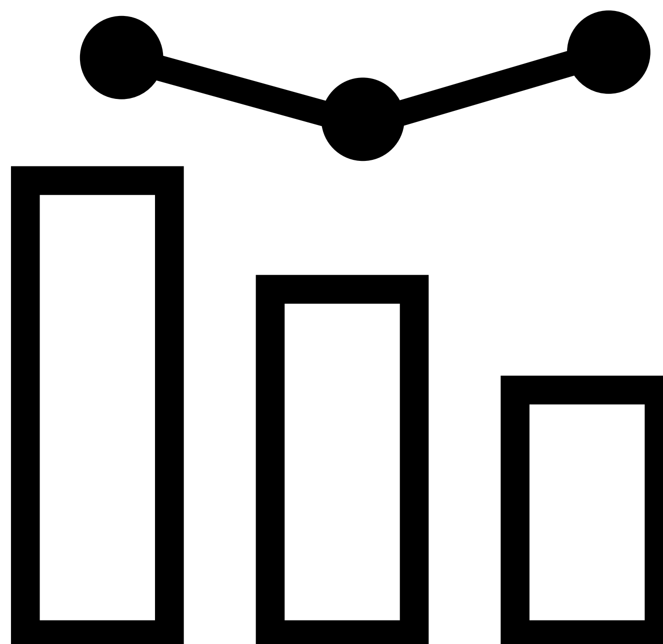

# Market: trends & topics

May 2023

# Is India becoming the new China?

If recent headlines are to be believed, it seems inevitable that in a few years' time,[1] India will replace China as the world's largest economy. Often cited as a major reason is the fact that India's population is growing, while China's is shrinking. Where are the nuances in this picture? That is what we address in this report.

## Productivity is more important than population growth

According to the traditional Solow economic model, long-term economic growth is determined by increases in capital, labour or more efficient use of labour and capital. So an economy grows when there is more work, more investment or more efficient use of one of these two production factors. More efficient use can take place, for example, through technological advances. As this is often difficult to measure, the 'Solow residual' (as it is termed) is used as a 'proxy' in practice. All economic growth that cannot be explained by an increase in capital or labour is then attributed to technology.

1 See, for example, these articles: FT, Bloomberg, FT(2), NRC and FD.

The US think tank Conference Board keeps data on labour and capital growth (broken down into human capital, IT capital and non-IT capital) by country, making it relatively easy to compare what the main drivers of economic growth have been in China and India.

This comparison (Figure 1) shows that the average contribution of population growth (more specifically, the contribution of labour growth) has been only 0.4% and 0.6% for China and India, respectively, over the past 30 years. The economies of India and China have been mainly driven by capital investment and productivity growth. This is also reflected in population growth figures. In fact, India's population has been growing faster than China's for years, while over the same period, China's economy has grown faster than India's (Figure 2).

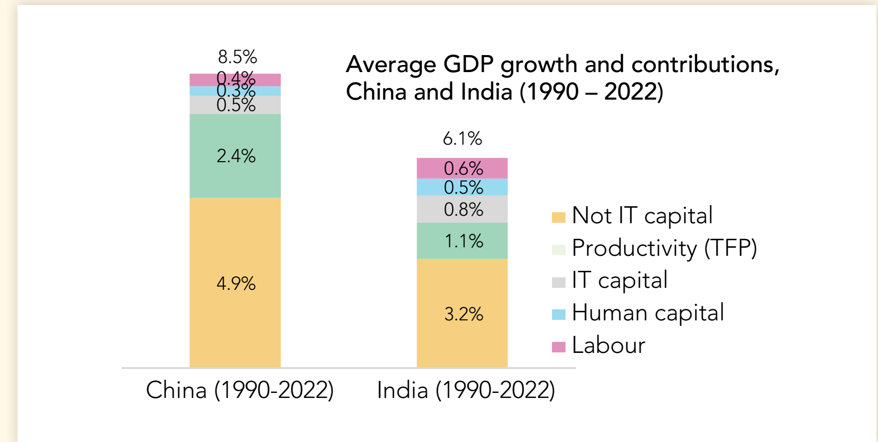


*Figure 1: Labour growth has contributed only marginally to economic growt. Source: The Conference Board (Total Economy Database)*

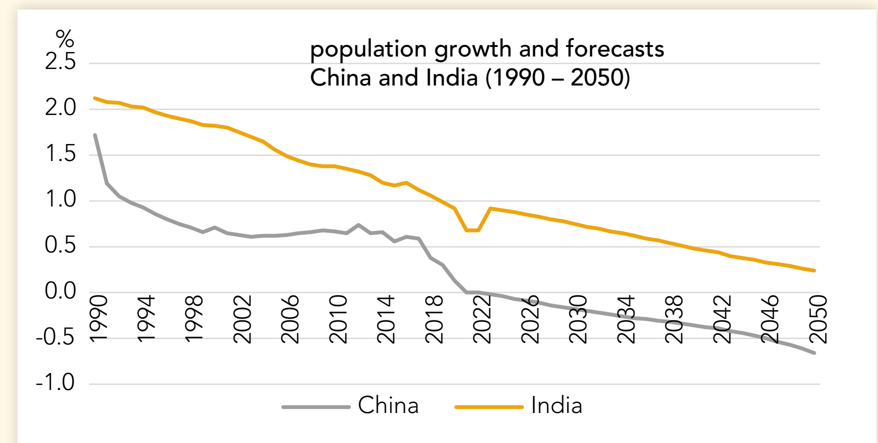


*Figure 2: India's population has been growing faster than China's for years. Source: Our World in Data (UN projections)*

## India versus China: institutional quality

Consequently, if population growth has not been the driver of China and India's economic growth, whether India will become bigger than China depends more on how much both countries will invest in capital and how their productivity will grow.

Investment in non-IT capital (e.g. infrastructure) has a marginally declining effect on economic growth and, although India is planning large-scale infrastructure investment in the medium term, what matters most for the long term is productivity growth.

To this end, the 'institutional quality' of a country seems to be an important factor (see, for example, Góes, 2016), especially since institutional quality helps reap the benefits of investments in knowledge and capital and is therefore reflected in productivity growth[2].

Institutional quality is a broad concept that according to the World Bank covers six aspects (democracy and freedom of expression, containment of corruption, government effectiveness, political stability, quality of the rule of law and quality of supervision). Together, these six World Bank Governance Indicators (WGIs) can be seen as proxies for a country's institutional quality[3].

India's overall institutional quality is higher than China's (Figure 3). It can be broadly stated in this context that India scores better on democracy and freedom of expression and China scores better on government effectiveness. India's lead over China may have narrowed in recent years, but looking ahead, it seems more likely that India can gain in government effectiveness than that China will become more democratic. In addition, China is more exposed to geopolitical tensions than India and, for investors in China, there is also the risk of capital controls (i.e. investors may not be able to get their invested money out of China in times of upheaval). So all in all, India has an edge over China in terms of institutional quality and hence long-term growth.

But India's economy will still be 40% smaller than that of China by 2050 despite higher growth, according to recent OECD estimates (Figure 4). In those estimates, the OECD already assumes that India's economy will grow more than one and a half times as fast as China's between 2020 and 2050 (4.7% as opposed to 2.9% for China).

2 A caveat here is that we do not know exactly which way causality runs. Does better institutional quality lead to higher economic growth or do countries with higher economic growth simply have more time and money to invest in improving their institutional quality? While this is not the last word on the subject, the research by the likes of Rabobank, 2016 and Acemoglu, Johnson and Robinson, 2005 does seem to indicate that causality runs mainly from institutional quality to economic growth rather than the reverse.

3 There are alternative indicators to WGIs such as Corruption Perception Index and Ease of Doing Business Index. We have not used these in this report because they either give the same conclusion as the WGIs or are no longer available.

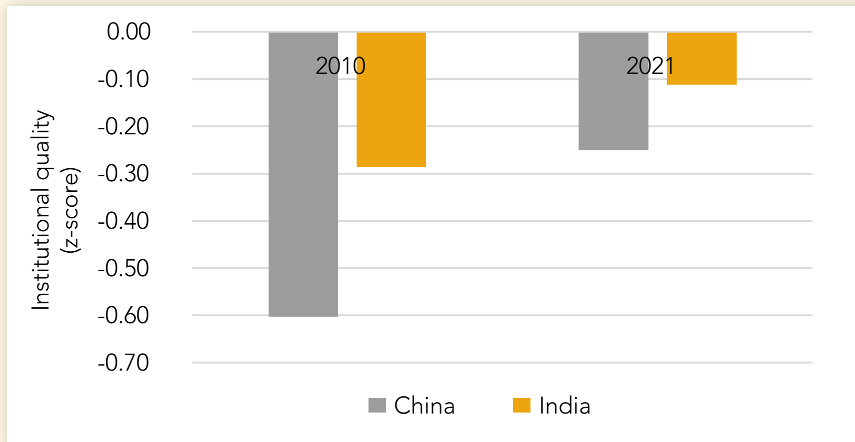


*Figure 3: The difference in institutional quality between China and India has narrowed. Sources: World Bank, a.s.r. calculations.*
*Comments: Institutional quality is the average of the z-scores on the six aspects of institutional quality.*

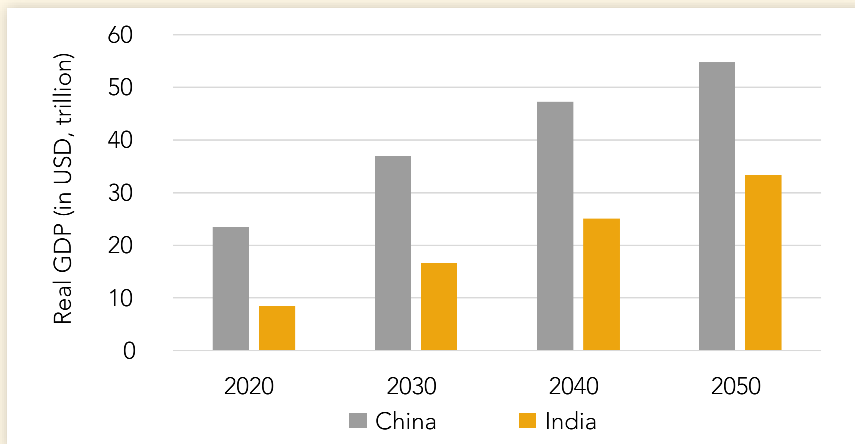


*Figure 4: According to OECD estimates, China remains larger than India. Source: OECD*

## India versus China: specialisation and wages

One of the reasons India is seen as the new China is that international companies have become more reluctant to operate in China because of geopolitical tensions. Neighbouring India then seems a natural alternative. An important aspect for companies looking to move production from China (or expand outside China) is that the country they may want to go to specialises in the same goods as China and where wages are identical or lower.

For the first aspect (specialisation in the same goods), the Economic Similarity index of Finger and Kreinin (1979) can be seen as a proxy. This index measures the overlap in product specialisation between countries based on their exports. If two countries specialise in exactly the same products, the index is 100% and in the case of no overlap, the index is 0%.

We calculated this index for several Asian countries and Mexico[4]. This shows that Vietnam, Thailand and South Korea in particular specialise in the same goods as China. India ranks relatively low on this list (Figure 5). This is because India has specialised mainly in diamonds, jewellery, medicines, aluminium and rice (together 17% of all exports), while China has specialised mainly in electronics such as mobile phones, computers and computer chips (together 18% of all exports)[5]. Vietnam's export range is more like China in that respect. By far Vietnam's biggest export product is mobile phones (22% of all exports).

4 We included Mexico because it is a better alternative in terms of location for US companies that may want to move production out of China.
5 We are omitting oil exports here despite the fact that refined oil is India's largest export product, as India imports more oil than it exports and is therefore on balance a net oil importer.

Furthermore, Taiwan and Malaysia, for example, specialise in computer chips (35% and 20% of all exports, respectively) and Thailand in computers and engines (together 14% of all exports). Within these sectors, these countries are possible alternatives to China.
As regards wages, India scores relatively well. Wages of factory workers in India are far lower than in China and similar to those in Vietnam (Figure 6).

The size of an economy is also important, for example because it says something about the market volume of a product or service. Market volume has been one of the reasons why China has been so popular for international companies. It was interesting not only for production, but also as an outlet. In addition, economic size says something about the absorptive capacity of new business activity. A country like Vietnam, for example, is far too small to fully absorb China's huge production capacity. India is in a better position in that regard (Figure 7).

Inspired by an earlier study by Rabobank (2019) , we averaged wages, degree of overlap in specialisation, institutional quality and size of the economy, from which an index score emerges (basically an updated version of Rabobank's index)[6].

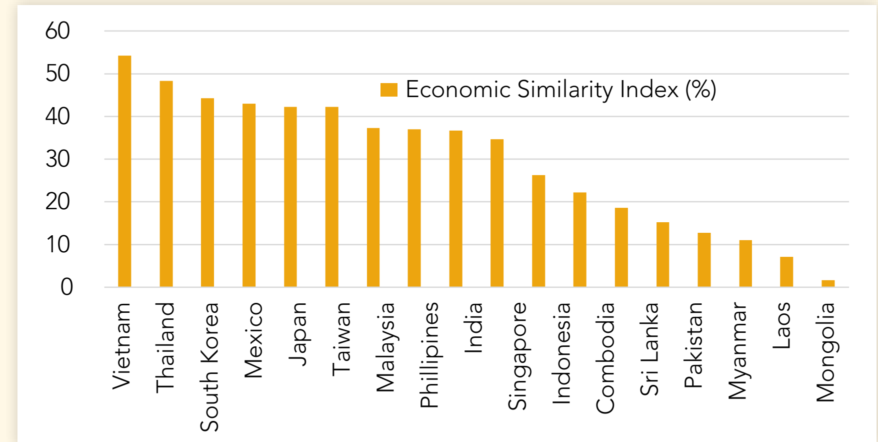


*Figure 5: India is a middle-ranking country in terms of overlap of specialisation with China. Source: Trademap.org, a.s.r. calculations. Dates are as of 2021*

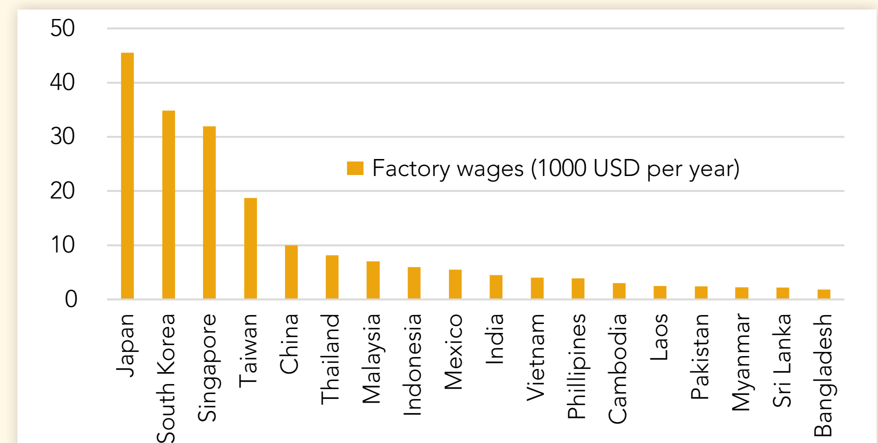


*Figure 6: In terms of wages, India can compete with South-East Asian countries. Sources: 2019 Jetro Survey, Bloomberg (Mexico), Japan Statistical Yearbook 2019 (Japan). Data are as of 2019*

6 To arrive at the average, as in the Rabobank study, we standardised each of these different characteristics by making it a z-score.

From this index score, India indeed emerges as a country likely to benefit from manufacturing relocation from China (Figure 8)[7]. But India is also likely to share that benefit with countries like Vietnam, Thailand and Malaysia (and possibly Mexico for US companies).

We admit that there is a fair amount to criticise in this analysis. For example, services are not explicitly included, the specialisation estimate of a country based on its export products is quite crude and we did not include distance to the country. Nevertheless, the analysis offers tools, for example to compare countries as an alternative to China to some extent[8].

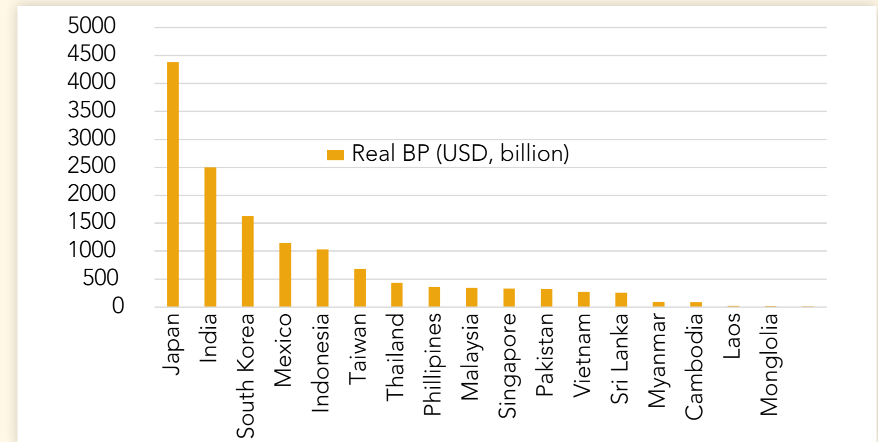


*Figure 7: India is relatively large and therefore attractive because of its domestic market Source: ourworldindata.org en Bloomberg (Taiwan). Data are as of 2021*

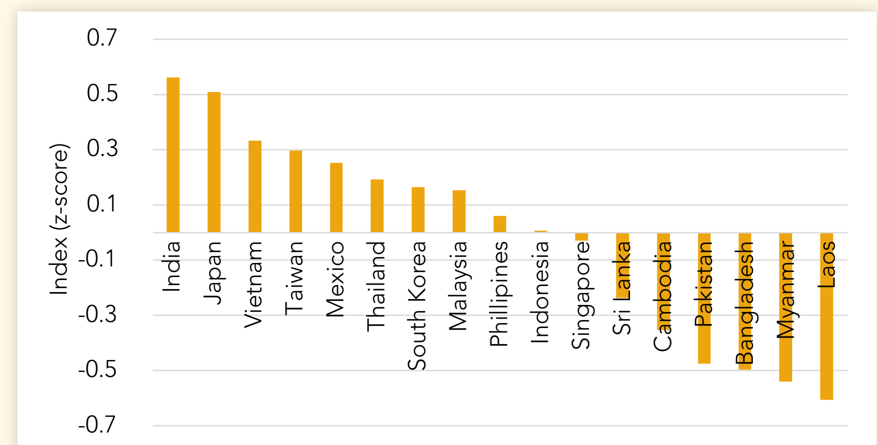


*Figure 8: Countries businesses may be considering as alternatives to China. Sources: Trademap.org, 2019 Jetro Survey, Bloomberg, Japan Statistical Yearbook 2019, Worldbank en ourworldindata.org.*
*The index is basically an update of Rabobank's WWTG index, from these and these reports.*

7 A caveat to Japan's high score is that it is driven by the size of its economy.

8 In addition to the economic outlook, it is also important for investors to consider the relative valuations and risks of Chinese and Indian assets. But that may vary across asset types and sectors, so we do not make explicit statements about that in this report.

## Conclusions

India's population is growing and China's is shrinking. According to newspaper headlines, this is a major reason why China's economic outlook is deteriorating, while India's remains good.

However, population growth matters less for long-term economic growth than capital and productivity growth. In the short term, investment in capital can boost growth. But in the long term, India's main interest is to improve its institutional quality, for instance through greater political stability and a more effective government. The same applies to a similar extent to China, although institutional quality improvement there must come mainly from greater public participation.

India is more than 'just another emerging market', as it is close to China and likely to become one of the world's largest economies in the next 30 years. So it will indeed become a major Chinese competitor. But it is far from certain whether it will replace China as the world's dominant economy.
To the extent that China could become less dominant as the 'factory of the world', other South-East Asian countries are likely to assume that position by sector (e.g. Taiwan and Malaysia for computer chips, Vietnam for mobile phones and Thailand for cars).

Which of the two countries has the leading position as the largest economy doesn't really matter much either. Importantly for investors, India offers good diversification in a spread emerging markets portfolio because India (i) is less dependent on China, while many other South-East Asian countries are very much so, (ii) will grow faster and (iii) has a different model of government than China.

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