COMMENTARY CHINA FINANCIAL MARKETS

What Will It Take for China's GDP to Grow at 4–5 Percent Over the Next Decade?

If China's GDP is to continue growing at 4–5 percent for the next decade, either other major economies must be willing to reduce their economies' investment and manufacturing shares to accommodate China or China must establish policies that cause the locus of growth to shift from investment to domestic consumption. Neither is easy, and the former is very unlikely.

By **Michael Pettis**
Published on December 4, 2023

There are two different groups of economists in China that believe that with the right—albeit very different—set of economic policies, China's economy will be able to grow sustainably by 4–5 percent for many more years. One group argues that China must maintain the investment-driven and manufacturing-intensive strategy it has followed during the past three to four decades. The other group argues instead that China can maintain high growth rates only if it sharply reduces the investment share of GDP and replaces it with a greater reliance on consumption, something which Beijing has been trying to do for over a decade.

However, both strategies face significant constraints that must be overcome if China is to maintain GDP growth rates even of 2–3 percent (or less). To take the first group's argument, if China were to maintain current growth rates while keeping its high investment and manufacturing shares of GDP, its share of global investment and manufacturing would expand much faster than its share of global GDP. In that case, it could only do so if the rest of the world agreed to accommodate that growth by reducing its own investment and manufacturing levels to less than half the Chinese level. Even without the geopolitical tensions of recent years and policies in the United States, India, and the European Union (EU) aimed at boosting domestic investment and manufacturing, this would still be highly unlikely.

To take the second group's argument, if China were to grow at these rates while reducing its high investment to a more sustainable level, its consumption growth would have to surge. While such a surge is not impossible, it would nonetheless require substantial, and politically contentious, transfers that would be very hard to implement. There is no evidence that Chinese policymakers recognize the extent of the needed transfers or have even begun to discuss how to overcome political, financial, and economic constraints.

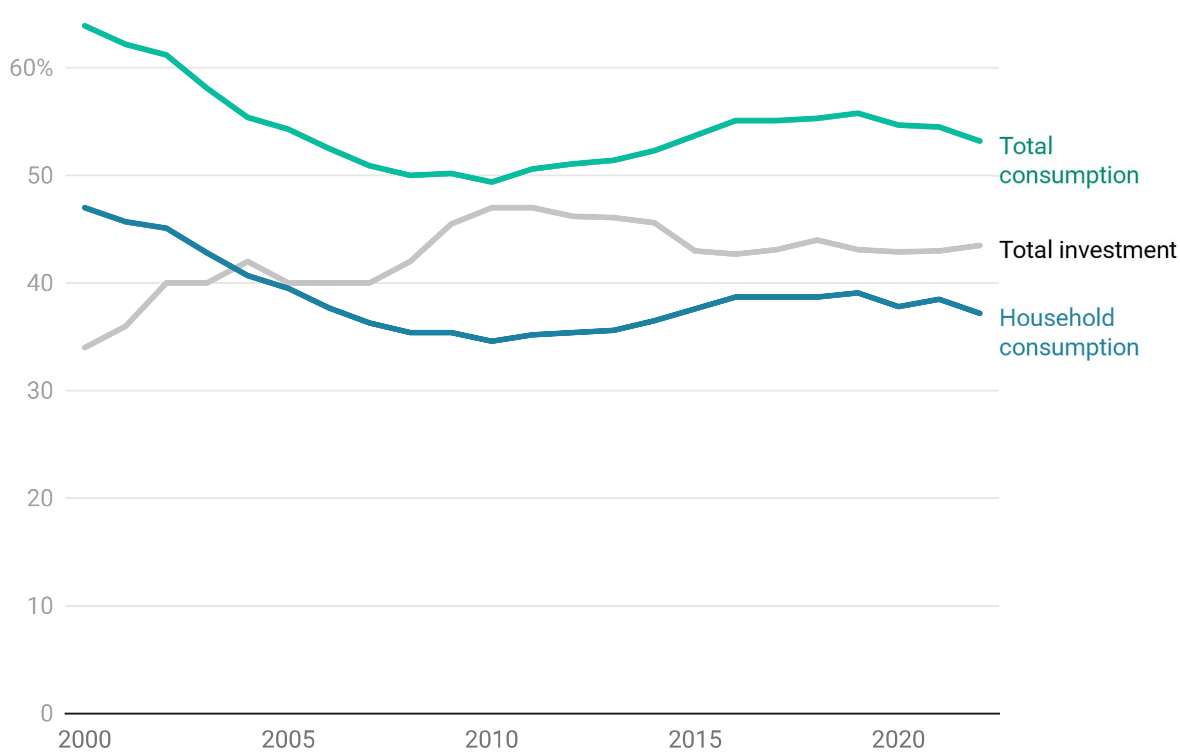
The Arithmetic of Investment-Driven GDP Growth

Can China maintain high GDP growth rates driven by high investment? Some simple arithmetic is useful here. Globally, according to the World Bank, investment represents on average 25 percent of each country's GDP and has remained within a tight range of between 23 percent and 27 percent during this century.

Of course, not all countries invest the same share of GDP. Investment in advanced economies typically ranges between 18 and 20 percent of GDP. Rapidly growing developing countries typically invest more than that, with investment in the highest-investing economies representing as much as 30–34 percent of their GDPs.

China, however, is a huge outlier. It currently invests 42–44 percent of its GDP. What's more, as the chart below shows, for the past two decades China's investment share of GDP has never been below 40 percent; it reached as high as 47 percent in 2010 and 2011. In the previous two decades, the investment share of GDP was lower, but it still exceeded 35 percent on average, leaving China during the past four decades with the highest investment share of GDP, and the fastest growth rate in investment, in history.

Figure 1. China's Investment, Total Consumption, and Household Consumption as Shares of GDP



Source: National Bureau of Statistics of China. • Created with Datawrapper

The obvious implication is that while China accounts for a disproportionately small share of global consumption, it accounts for a disproportionately large share of global investment. This imbalance didn't matter too much when China's economy made up a much smaller share of the global economy, but as its share has expanded, it has begun to matter a great deal. **According to the World Bank**, China's $18 trillion economy accounts for just under 18 percent of global GDP, making it the world's second-largest economy after the United States, which accounts for about 25 percent. But China comprises only 13 percent of global consumption and an astonishing 32 percent of global investment.

These rates are hard enough to sustain without surging debt, both in China and in the deficit economies of the world. They would be even harder to sustain if China's share of global GDP rose. This is where global constraints matter more than ever before: if China maintained its high investment share of GDP—in other words, if investment continued to grow as fast as GDP—and GDP grew at rates of 4–5 percent for the next decade, China's share of global GDP would rise by less than 3 percentage points, to 21 percent, while its share of global investment would rise by more than 5 percentage points, to 38 percent. Its share of global consumption, however, would rise by well under 2 percentage points, to less than 15 percent.

Can China really account for 38 percent of global investment while its economy comprises just 21 percent of global GDP and 15 percent of global consumption? Every $1 of investment has required approximately $3 of consumption globally to sustain it during this century. In China, however, $1 of investment is balanced by only $1.30 of consumption. If the global relationship between consumption and investment held over the next decade, an increase in the Chinese share of global investment from 32 percent today to 38 percent in a decade would require that the rest of the world disinvest to accommodate China's domestic imbalances.

To give a sense of just how extreme this requirement is, it would mean that to prevent a global overproduction crisis (which would hit China especially hard), the rest of the world would have to agree to reduce the investment share of its GDP by roughly 1 full percentage point, to 19 percent of GDP, well under half of the Chinese level. Needless to say, this is very unlikely, especially with the United States, the EU, and India putting into place policies aimed at boosting domestic investment.

What's more, to the extent that the surge in China's debt burden is driven by its extraordinarily high investment share of GDP, it would require China's debt-to-GDP ratio to rise from just under 300 percent today to at least 450–500 percent in a decade. Given the huge difficulties the Chinese economy is already facing at current debt levels, and the difficulties Beijing has had in its attempts to reduce the debt burden, it is hard to imagine that the economy could tolerate such a substantial increase in debt.

The Arithmetic of Manufacturing-Driven Growth

The same simple arithmetic shows just how difficult it would be for the rest of the world to accommodate high Chinese growth rates if China tried to maintain its current high dependence on the manufacturing sector. Globally, **according to World Bank data**, manufacturing represents 16 percent of GDP and has ranged from 13 percent to 17 percent during this century.

China, once again, is an extreme outlier, with manufacturing representing 28 percent of the country's GDP.[1] This share had declined from 32 percent in the decade before 2020, but it has risen in the past two years. This recent increase is not surprising. As a consequence of the contraction since 2021 in China's long-lasting property bubble, there has been a major, policy-driven shift in investment from the property sector to the manufacturing sector, even though the evidence suggests that investment in Chinese manufacturing has been constrained by weak demand—not by scarce capital—so that even more investment in the manufacturing sector implies a further growth in excess capacity (that is, growth in domestic capacity that exceeds growth in domestic demand).

This could create a problem for the rest of the world. While China accounts for 18 percent of global GDP and only 13 percent of global consumption, it currently accounts for an extraordinary 31 percent of global manufacturing. If China accounts for an extraordinary 31 percent of global manufacturing. If China maintained annual GDP growth rates of 4–5 percent while also maintaining the role of manufacturing in its economy, its share of global GDP would rise by less than 3 percentage points in a decade, to 21 percent, even as its share of global manufacturing would rise by more than 5 percentage points, to 36 percent. What's more, if—as a result of the massive shift in investment from the property sector to the manufacturing sector—the GDP share of China's manufacturing sector rose above its current 28 percent to, say, 30 percent, China's share of global manufacturing would rise to 39 percent.

To accommodate this and prevent a global overproduction crisis, the rest of the world would have to allow its manufacturing share of GDP to drop between 0.5 and 1.0 percentage points. It would also have to allow a surge in China's trade surplus—currently equal to nearly 1 percent of the GDP of the rest of the world—as a 5–8-percentage-point increase in China's share of global manufacturing would be backed by a 2-percentage-point increase in China's share of global consumption.

Again, this is very unlikely, especially with the United States, the EU, and India enacting policies aimed at protecting and boosting domestic manufacturing. In fact, given China's determination to increase its reliance on manufacturing to drive growth, I expect global trade relationships to deteriorate sharply in the next few years as the world's major economies battle over their respective manufacturing sectors.

something that we are seeing unfold

The problem is that the existing "rules-based" global trading system has few to no restrictions on the ability of economies to direct domestic resources into supply-side expansion of manufacturing exports, even when these policies also suppress any equivalent demand-side expansion of consumption and imports. If this happened in a world in which desired investment was constrained by scarce capital, as was mostly the case in the nineteenth century, at least we might expect that consumption-constraining policies would boost productive investment by raising the amount of savings that could be directed into desired investment. But with desired investment in these economies mainly constrained by weak consumer demand, and not scarce savings, there is unlikely to be a counterbalancing rise in investment.

The net result would be persistent downward pressure on global demand as major economies competed by subsidizing production at the expense of consumption. This would only worsen global trade relationships because, in the end, only economies that were willing to protect their manufacturing sectors, or maximize the subsidies they delivered to domestic manufacturers, would be able to prevent their manufacturing sectors from contracting as a share of total GDP.

The Arithmetic of Rebalancing

While much of the world discusses China's growth strategies as if global constraints matter no more today than they did ten or twenty years ago, when China represented a much smaller share of the global economy, it is obvious that in the next few years these constraints are likely to become extremely tight. If they set off a global trade conflict involving the United States, the EU, India, and Japan, the results would be especially painful for countries such as China that rely on large trade surpluses to balance weak domestic demand with an overreliance on manufacturing to drive growth.

That's because without sustained trade surpluses, there are only two ways a country can balance excess supply with weak domestic demand. One way involves a painful and potentially disruptive collapse in production, as occurred most famously in the United States in the early 1930s, when it had to try to resolve its huge trade surplus in a contracting world economy exacerbated by beggar-thy-neighbor trade and currency policies. The other way is to boost domestic demand as quickly as possible.

If China is to maintain high growth rates over the next decade but is unable to do so while maintaining its high investment and manufacturing shares of GDP, the only alternative requires that it sharply raise the consumption share of its GDP. While some Chinese economists and policymakers argue that there is no urgent need to shift the driver of Chinse growth from an excessive reliance on investment toward a greater reliance on consumption, there is a growing consensus among most Chinese economists of just such a need.

But this, too, won't be easy. Again, simple arithmetic can be very helpful in understanding what it will require for China to maintain growth rates of 4–5 percent if it wants to reverse the huge imbalances currently driving its economy. In order to work through the numbers, I make two simple (and fairly generous) assumptions about what the rebalancing process in China could look like.

The first assumption is about what a sustainable investment share of GDP might be in China. After four decades of extraordinarily high investment, one might reasonably argue that the current sustainable investment share for China might be on the low side of the global average, especially in light of the surge over the past ten to fifteen years in China's debt-to-GDP ratio. China, after all, has spent decades pouring its extraordinarily high savings rate into domestic investment and, as a result, suffers from huge amounts of unutilized property and underutilized infrastructure. [2]

But rather than assuming that to be sustainable Chinese investment must move closer to or below the global average, for the purpose of this exercise, I assume that the sustainable investment share of GDP for China can be as high as 33–34 percent. This is nearly one quarter below its current investment share, but even at these levels China would still be the highest-investing economy in the world for another decade.

My second (fairly generous) assumption is that China has ten years to bring its investment share of GDP to a more sustainable level. This means that over the next ten years, China's GDP growth would outpace the growth in investment by enough to bring the investment share of GDP down by nearly 10 percentage points to a still very high 34 percent.

The arithmetic, in this case, is fairly easy. As I showed **in an earlier entry** in *China Financial Markets*, for China to bring its investment share of GDP down by 10 percentage points in ten years, GDP growth would have to outpace investment growth by 2–3 percentage points every year. This also means that after lagging GDP growth for decades, consumption growth (the other major source of demand for a large economy) would have to pick up the pace and lead GDP growth, also by 2–3 percentage points, for every year of the next decade.

growth, also by 2–3 percentage points, for every year of the next decade.

In that case, at almost any level of GDP growth, the investment share of China's GDP will have dropped by 10 percentage points over the decade and the consumption share will have risen by 10 percentage points. Given those conditions, it should be obvious that the actual GDP growth rate would depend mainly on the consumption growth rate.

To put it another way, if China wanted to maintain GDP growth rates of 4–5 percent, Beijing would have to engineer policies that caused consumption to grow by at least 6–7 percent a year, with investment growing at roughly 1 percent annually. [3] Any lower consumption growth rate would mean that China could not rebalance its economy in a decade and still maintain current GDP growth rates.

If China pulled this off, at the end of the ten-year period its GDP would comprise 21 percent of global GDP (up from 18 percent in 2022). Its economy would be far more balanced, with investment comprising 29 percent of global investment (down from 31 percent in 2022) and consumption comprising 18 percent of global consumption (up from 13 percent in 2022). In that case, as its share of global GDP would rise by nearly 3 percentage points, its share of global investment would decline by 2 percentage points and its share of global consumption would rise by 5 percentage points.

With consumption growing at roughly 4 percent a year before the pandemic (and much less since), is 6–7 percent growth in consumption possible? No country in history at this stage of the development model has been able to prevent consumption from dropping, let alone cause it to surge, but that doesn't mean it's impossible.

But it won't be easy. With investment growth slowing, which means fewer jobs building bridges, train stations, and apartment complexes, the only way to accelerate consumption growth sustainably is to get household income growth to accelerate through transfers—either directly (such as through wages and other income) or indirectly (such as through a stronger social safety net). [4]

The problem with transfers is that they must be paid for, and there are only three sectors that, in theory, can meaningfully pay for them. One sector that can pay is the rich, who consume a much lower share of their income than ordinary households. As I **explained two years ago**, however, while wealth transfers from the rich would matter significantly in an economy like that of the United States, they would have a smaller impact on raising consumption in China.

A second sector that can be forced to pay is the business sector. For example, businesses can pay for these transfers in the form of rising wages, higher taxes, a strengthening currency, or higher borrowing costs (if these are matched by higher deposit rates for household savers). The problem is that with China's manufacturing competitiveness based primarily on the very low share of income Chinese workers retain relative to their productivity, this would seriously undermine Chinese manufacturing.

The only other sector that can pay is government. There are in fact two levels of government in China: Beijing and local governments. Given the structure of payments and social transfers in China, along with Beijing's explicit refusal to absorb the various debt and adjustment costs, it is very unlikely that Beijing will be willing to take on the full costs of transfers, which would require mainly central government borrowing.

That leaves local governments as the sector most likely to absorb the costs. By my calculations, if Beijing forced local governments to transfer roughly 1.5 percent of GDP every year to households, it would be possible to drive the growth in both household income and household consumption to around 7 percent annually. This is not as hard as it might at first seem. In spite of terrible cash flow pressures in recent years, local governments may own assets worth as much as 20–30 percent of China's GDP.

Will China's GDP Growth Rate Drop?

But transferring such a large share of local governments' assets won't be easy. Such substantial transfers would be politically contentious and require a transformation of a wide range of elite business, financial, and political institutions at the local and regional level. After all, if China's economy has been structured around four decades of direct and indirect transfers from households to subsidize manufacturing and investment—in the form of easy and cheap credit, weak wage growth, an undervalued currency, excess infrastructure spending, a weak social safety net, and other explicit and implicit transfers—it would be very surprising if China's manufacturing competitiveness and its ability to engage in massive infrastructure spending weren't also profoundly structured around these transfers.

The arithmetic, however, is quite straightforward: unless the rest of the world is willing to reverse its strategic economic priorities to accommodate Chinese growth ambitions, global constraints imply that China cannot continue growing its share of global GDP without sharply reducing the growth rate of investment and manufacturing. The only way to reduce these without a sharp drop in GDP growth would be through a sharp rise in consumption growth. That, in turn, would require a reversal of the past direction of transfers, with the only sector capable of funding these transfers being the government.

But that must result in a sharp change in the roles of Beijing and local governments in the Chinese economy. This change would be difficult. In the days of rapid growth, when income was transferred from households to subsidize preferred sectors of the economy, the main political issue was one of deciding who the winners among businesses and governments would be. Now that rebalancing requires that income be transferred back to the household sector, the political issue is one of deciding who the losers are going to be among those same sectors. Picking winners is much less disruptive than picking losers, and it requires either a transformation in the structure of government or—as has been the case in most other countries that have faced this problem—an acceptance of much lower growth rates.

In addition to this blog, I write a monthly newsletter that focuses on global imbalances and the Chinese economy. Those who would like a subscription to the newsletter should write to me at chinfinpettis@yahoo.com, stating their affiliations. My Twitter handle is @michaelxpettis.

Notes

[1] According to the World Bank, the only countries whose manufacturing levels exceed those of China are Ireland (38 percent), Liechtenstein (34 percent), and San Marino (33 percent), all of which are tiny economies whose predatory tax regimes sharply distort and overstate the reported value of their manufacturing sectors.

[2] The surge in China's debt-to-GDP ratio since the 2005–2007 period is significant. With most Chinese debt being directed to fund investment, if this investment had been economically productive (that is, the economic benefits exceeded the cost of the investment), the rise in China's nominal debt levels would have been matched or exceeded by the rise in China's nominal GDP. In that case, there would have been no sharp deterioration in the country's debt-to-GDP ratio. That was the case during the first two to three decades of China's extraordinary growth, but the fact that China's debt-to-GDP ratio in the past one to two decades has risen by among the fastest rates in history suggests that either most credit creation was used to fund consumption, which is patently not true, or that a substantial share of this investment failed to generate economic benefits that exceeded their economic costs.

[3] If we assume that business investment grows in line with GDP, this implies that infrastructure and property sector investment must collectively contract by roughly 1 percent annually.

[4] I should note that the World Bank, the International Monetary Fund, and many economists argue that strengthening the social safety net is the most effective way to increase transfers to the household sector because a stronger social safety net presumably allows households to reduce their savings. While these kinds of indirect transfers may be bureaucratically more satisfying, they are almost certainly much less efficient. This is because a direct increase in income immediately makes households feel richer by the nominal amount of the transfer and so translates into increased spending on consumption. An equivalent improvement in the social safety net, however, does not have the same effect. Given low credibility in China, it will take many years, perhaps even decades,

before transfers through the social safety net translate into increased consumer spending.

Carnegie does not take institutional positions on public policy issues; the views represented herein are those of the author(s) and do not necessarily reflect the views of Carnegie, its staff, or its trustees.