PAULKRUGMAN.SUBSTACK.COM – 4 GENNAIO 2026

China’s Trade Surplus, Part II

di Paul Krugman

Chart 1 Source: Brad Setser

China, which by some measures has the world’s largest economy, is also running the biggest trade surplus in world history. Its surplus is unprecedented in dollar terms; more important, it’s unprecedented as a share of the world economy, as illustrated by Chart 1 above, reproduced from last week’s primer.

And China’s big surplus is a big problem.

Last week I explained that the root cause of this massive trade surplus is the refusal of the Chinese government to change an economic strategy that has become unsustainable.

In the past, China achieved stunning economic growth in part through a combination of very high savings and very high investment. Its savings remain very high, but investment in China is running into diminishing returns in the face of slowing technological progress and a shrinking working-age population. Yet the Chinese government keeps failing to take effective steps to reduce savings and increase consumer demand. Instead, China is in effect exporting its excess savings via its massive trade surplus. It's using consumer demand in the rest of the world as a safety valve to keep Chinese workers employed. Otherwise, without the massive trade surplus, the Chinese economy would fall into a deep slump given its insufficient consumer demand.

In today's post I'll start by talking about how this policy works — that is, how China engineers its giant trade surplus. Then I'll talk about why China's surplus is a big problem for the rest of the world. Next week I'll talk about how policy should respond.

Beyond the paywall, I'll address the following:

1. How China generates its giant surpluses
2. The disruptive effects of China's surpluses on other nations
3. Chinese surpluses as a national security issue
4. Chinese surpluses as a threat to economic growth

How China generates giant surpluses

The fundamental cause of China's trade surplus is an excess of domestic savings over domestic investment opportunities. But exports and imports are the consequence of decisions at the level of companies and individuals — decisions about where to locate production, where to source inputs, which country's products to buy, and so on. These decisions aren't affected directly by macroeconomic data. So how does China's underconsumption problem translate into incentives for exporters and importers?

The most important channel runs through China's exchange rate — the rate at which yuan trade for other currencies. A weak yuan, other things equal, means lower Chinese

production costs measured in dollars, euros or yen. This in turn makes Chinese companies more competitive in export markets and makes foreign companies less competitive in the Chinese market.

An aside about terminology: You sometimes see China's currency referred to by its official name, the renminbi, literally "people's currency." The actual units of currency are, however, yuan. It's similar to the way the British still sometimes call their currency "sterling" even though the currency unit is the pound. For simplicity, I'll do what we do with the dollar and just use "yuan" to mean both the currency and the unit.

There are, of course, many exchange rates — yuan/dollar, yuan/euro, etc. Economists usually summarize a nation's exchange rate by taking an average of these individual currency rates, weighted by the importance of trade with each country: the so-called "effective exchange rate." It's also standard to adjust this measure for differences in national inflation rates, because a nation with high inflation will tend, other things equal, to become less competitive over time. The result, after adjustment, is the "real effective exchange rate."

Here's China's real effective exchange rate over time, as calculated by the Bank for International Settlements:

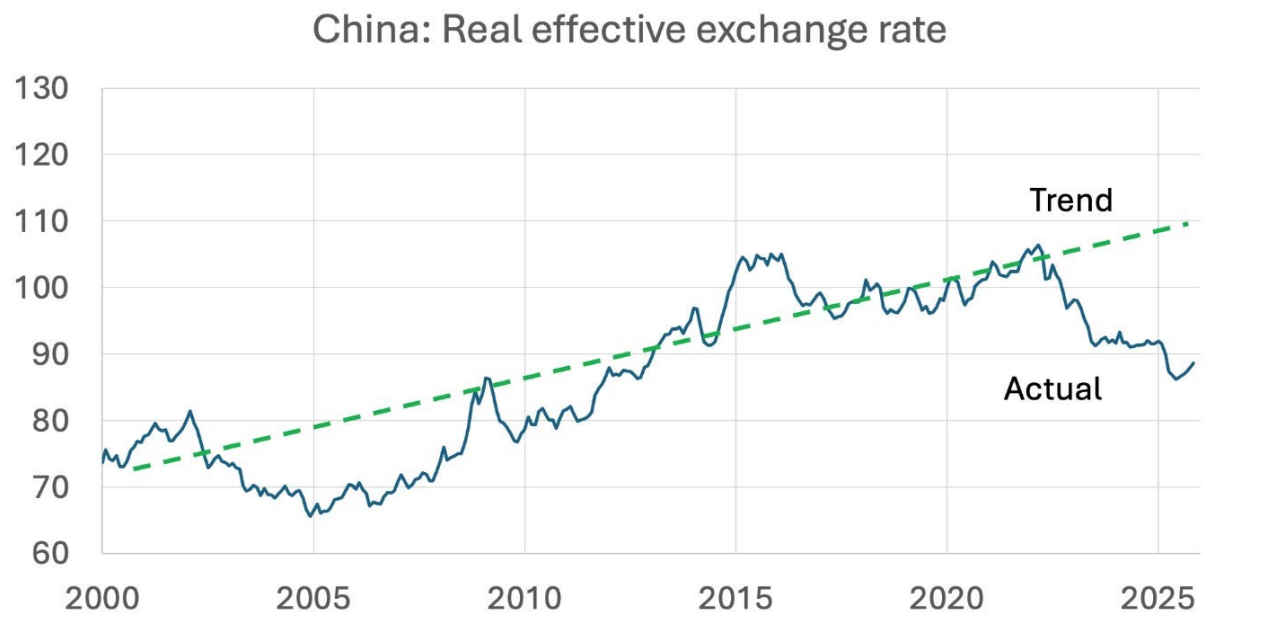

Chart 2 Source: Bank for International Settlements, via FRED

As you can see from Chart 2, China's real effective exchange rate has fallen substantially — the yuan has "depreciated" — since 2021. But this understates the yuan's true level of weakness. China's real effective exchange rate has risen — "appreciated" — over time as its economy has developed, a well-known phenomenon known as the Balassa-Samuelson effect. The green dotted line in Chart 2 is an illustration of that trend rather than a careful calculation, but it makes the point that the yuan is even weaker relative to trend than its raw depreciation data would suggest. This gives Chinese companies a large competitive advantage.

And the value of the yuan is basically set by the Chinese government.

The manipulation of the yuan by the Chinese government is unique. Nothing similar occurs with other major currencies. The value of the dollar or the euro is determined in global financial markets, not by government fiat. China, however, has extensive controls on the movement of capital into and out of the country, which in turn makes it possible for the government to reduce the value of the yuan by buying foreign currency.

As Setser and Sobel note, these days the Chinese government manipulates its currency largely by having state banks rather than the government proper buy dollars. These purchases don't show up in official reserves, so doing it this way hides the extent of the weak-yuan policy from casual observers. This resembles the way China cooks the books to make its trade surplus look smaller, which I described last week. In both cases the Chinese government tries to hide the extent to which it is deliberately running huge trade surpluses to compensate for weak domestic spending.

The weak yuan isn't the only way Chinese officials engineer trade surpluses. Industrial policy also plays a role. You see, while China no longer engages in old-style Communist central planning, the Chinese government still plays a large role in directing where resources, especially capital, go. In particular, it channels cheap credit into favored industries — which tend to be export industries or industries that compete with imports. Again,Chinese government policy encourages large trade surpluses.

There's much more that can be said on these topics, but for current purposes the essential point is this: by foregoing policies to boost domestic consumption, China is relying on huge surpluses to compensate for underconsumption, and its exchange rate and industrial policies are designed to enable those surpluses.

But are China's surpluses a problem for the rest of the world? And if they are, why?

The disruptive effect of China's surpluses

Some economists have in the past argued that China's surpluses are in fact positive for the rest of the world – a view that I disagree with. But it's not as easy as you may think to reject the no-problem view of Chinese surpluses.

Their argument goes like this: China — which keeps its exports cheap with a weak yuan and keeps the yuan weak by having state banks buy up U.S. debt — is like a store that sells you goods at very low prices and offers a buy-now-pay-later plan with low financing charges. It's a great deal. Why complain?

You might argue that massive Chinese surpluses cost us jobs. And that may have been true 15 years ago, after the global financial crisis, when America had stubbornly high unemployment. At that time I called for policies to force China to increase the value of the yuan. But the American and European labor markets have improved dramatically since then. Overall unemployment in both the United States and Europe has been low in recent years. So despite China's surpluses, we don't seem to have a problem creating jobs. And cheap imports from China hold down the overall price level, while Chinese purchases of our debt help hold down interest rates. This means that the Chinese trade surplus is good for affordability, the issue of the day.

But there are in fact two big negative consequences of massive Chinese surpluses. First, as I'll describe in this section, they are highly disruptive. Second, as I'll explain later, they threaten the extinction of some Western industries that may be crucial both for national security and for future economic growth.

On disruption: In 2013 David Autor, David Dorn and Gordon Hanson published a highly influential paper diagnosing what the authors called the "China shock" caused by rapidly rising Chinese exports to the United States before the global financial crisis. They estimated that the Chinese export surge had eliminated around 1.5 million U.S. manufacturing jobs. That's a big number, although well within the range that other

economists have produced. Yet America has a big economy and a very dynamic economy. There is constant churn in the labor market, as workers are constantly being laid off and finding new jobs. Autor et al's estimate of total workers displaced by Chinese exports over the course of a decade was roughly equal to the number of U.S. workers laid off in a typical *month*. So what was the big deal?

The answer to that question, and what set Autor, Dorn and Hanson apart from previous analysis, was their documentation of the fact that jobs displaced by Chinese exports weren't evenly spread across the United States. Instead, the damaged industries were often highly concentrated geographically. This meant that job losses caused by Chinese exports tore the heart out of whole communities, forcing workers to either move to find new jobs or stay in place and become impoverished.

The example I like to use is the furniture industry, which lost about 400,000 jobs from the China shock:

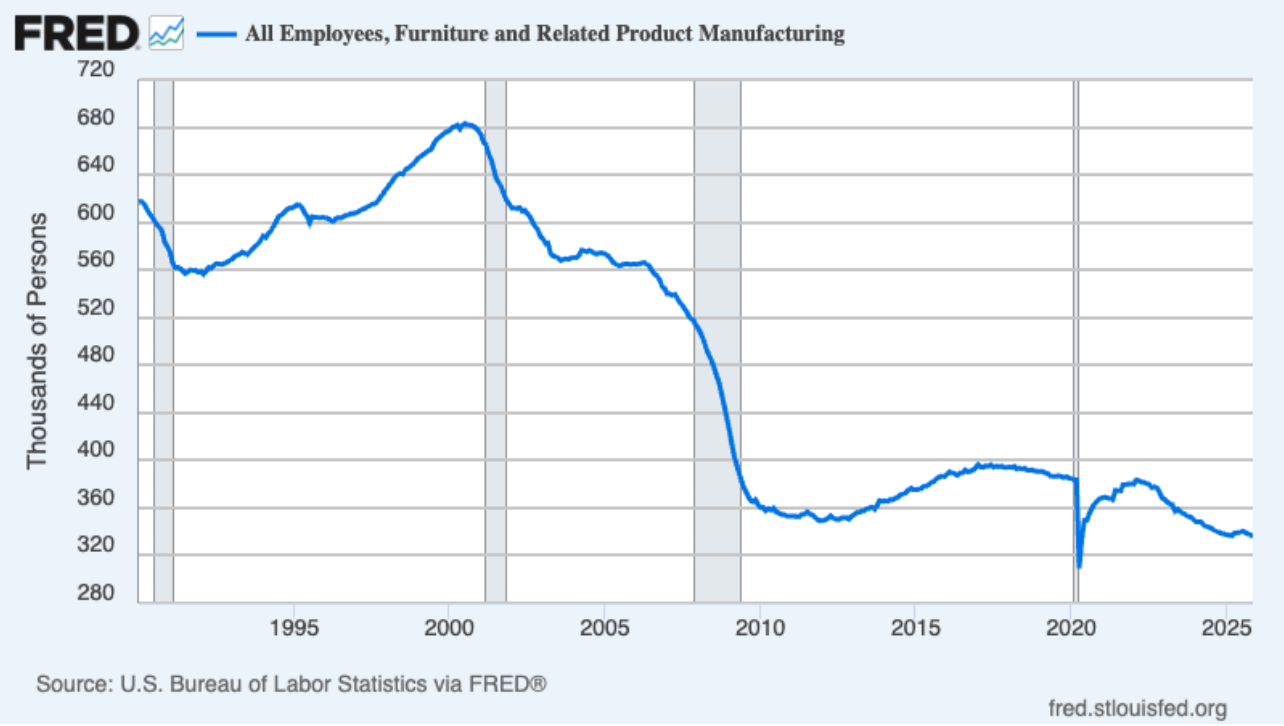

Chart 3

That's a relatively small number in a nation where total employment is more than 150 million. But the U.S. furniture industry was highly concentrated in the North Carolina Piedmont region, and the entire region suffered severe distress as a result of Chinese furniture imports. The region became hollowed out, as some workers left to find better paying work, but many were left behind and saw their incomes fall dramatically.

Furthermore, these adverse effects were persistent over time. In a follow-up study, Autor et al found that regions and workers hit hard by the first China shock, which plateaued in 2010, were still suffering badly a decade later.

I say the "first" China shock, because the rapid growth in China's trade surplus is presenting Western economies with a second, even bigger shock.

OK, I know what unrepentant but hard-headed free trade advocates would say about responding to the disruptive effects of China's surging trade surplus. They wouldn't deny that a significant number of people are hurt by rapid growth in imports. They would point out, however, that disruptive shocks hit modern economies all the time, with technological innovation, like the innovations that destroyed coal mining as a major source of employment, generally a bigger source of disruption than international trade. It's impossible to freeze the economy in place: economic change is a constant. So, they argue, why block only certain kinds of change – namely, why try to block shocks arising from globalization? Wouldn't it be far better to reinforce the safety net so that people can cope better with change, regardless of its origins?

As you can probably tell, I'm sympathetic to this line of argument. Yet I don't think it's right — or, for that matter, sustainable — to adopt a blasé attitude toward the second China shock although it may be theoretically plausible. I would give two reasons.

First, job losses due to Chinese exports create huge political challenges that can't be ignored.

While economists may see no difference between jobs lost because of innovation and jobs lost because of foreign competition, that's not how the public sees it — and berating people for not getting it is *not* helpful. Economists have been lecturing the public about the virtues of free trade for two centuries, but we achieved the low, pre-Trump tariffs not because politicians finally understood Econ 101, but through

successful negotiations based on enlightened mercantilism: Saying to our trading partners, we'll take your exports if you take ours.

So the first reason is that it will be politically impossible for government to stand aside in the face of China's export surge.

The second reason is that there are real concerns about the impact of China's massive surplus on national security and the economic future.

Chinese surpluses create national security concerns

Rare earth elements are not, it turns out, especially rare. They are, however, very difficult to extract and refine.Moreover, refining them is a highly polluting process. But they have unusual electrical and magnetic properties that make them essential to modern technology.

China has been subsidizing and promoting its rare earth industry for decades. Other countries, confronted with low prices and wary of pollution, have in many cases abandoned the industry. In 2024 China accounted for 92 percent of worldwide rare earth processing.

And in 2025 China weaponized its dominance of rare earths. When Donald Trump started his trade war, he probably imagined that America, which buys much more from China it sells to China, had the upper hand. But China responded by restricting exports of some crucial rare earths, posing a real threat to U.S. national security and U.S. advanced technology. And the U.S. had no easy response: We have rare earth deposits, but it would take years to build a domestic industry capable of replacing imports from China.

Economists have always understood that protecting national security can be a valid reason for limiting dependence on imports of certain goods. But they've generally downplayed such concerns, because national security can all too easily become an excuse for protecting everything and everything. For example, in September Donald Trump announced that he would be invoking national security as a justification for steep tariffs on … upholstered furniture and kitchen cabinets. These tariffs were supposed to take effect last week but have been postponed for a year.

China's huge trade surpluses, however, justify serious concerns over the national security implications of imports. For the first time in history, much of the world is at

risk of becoming dependent for many crucial goods on a single authoritarian power with global ambitions. That is, rare earths may soon become just one of multiple industries in which Chinese dominance has given Beijing real coercive power over the West — unless the West takes steps to limit its dependence.

As I said, I'll wait until next week to discuss policy responses to China's surplus, but one thing that should be clear is that national security should be invoked only to protect industries that are genuinely of strategic importance. I.e., yes on rare earths and semiconductors, no on couches and bathroom vanities.

Identifying industries that are crucial to national security isn't difficult. Identifying industries that may be crucial to future economic growth is harder, but not impossible — and Chinese trade surpluses make it important to try.

Chinese surpluses and economic growth

Alexander Hamilton submitted a "Report on the Subject of Manufactures" to Congress in 1791. It was an extraordinarily forward-looking document: the Industrial Revolution was still in its early stages, yet Hamilton recognized that the United States would need to participate in industrialization to realize its national potential. So he called for industrial policy to promote modern manufacturing.

Thus the idea that a nation's economic future depends on maintaining a presence in certain strategic sectors isn't new. The challenge has always been to identify these sectors. For example, after World War II many nations believed that their economic future depended on having substantial steel production. In fact, national steel industries have become white elephants, perpetually burdened by excess capacity. Likewise, in the early 1990s many people insisted that maintaining domestic semiconductor memory chip production was crucial to America's economic future. Instead, these chips have become a cheap commodity.

Today, however, it's reasonable to claim that there are a number of high-technology industries which are likely to be important for future economic growth.

I say "likely to be" advisedly. We don't actually know whether keeping a strong position in, say, AI or robotics will really be crucial for the future. Indeed, I recently argued against pronouncements that Europe is in deep trouble because it lags the United States in high technology. Why, then, am I claiming that the possibility that

China’s trade juggernaut will crowd the West out of cutting-edge industries should be a matter of national concern?

My first response is that loss of potentially key industries to China might well be irreversible -- or at any rate,very difficult to reverse. High technology industries are sustained by whole “ecologies” of interdependent companies with mutually reinforcing technological innovations, labor markets that reward specialized skills, and venture capitalists who understand these industries in detail. Lose such an ecology, as happened in the case of rare earths, and you may never get it back.

Second, once China has driven the West out of key industries, it seems all too likely that it will exploit its dominance for economic gain — much like companies that offer low prices and high quality to establish a monopoly position, then raise prices and reduce quality to cash in. Hello, enshittifiers of Silicon Valley! But China could engage in exploitation at national and global levels, orchestrated by an authoritarian government.

I could go on, but I hope I’ve made the point. Allowing China to dominate multiple industries via massive trade surpluses carries a high risk – it may turn out okay in the end, but we can’t be sure that it won’t have dire consequences. Hence it’s not a risk we should take.

Which brings us to policy. But this post is already long. So I’ll finish this topic next week, with a discussion of policy options, especially for Europe.