

The end of China's rapid economic growth

Data published by the St. Louis Federal Reserve tells an interesting story. Between 1980 and 2020, even after eliminating the effects of inflation, China's per capita GDP grew at an average annual rate of 8.5 percent. To give some context, in the U.S., the same statistic grew at a 1.6 percent annual rate. If this story continues unchanged, China will catch up to the U.S. economically.

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But, the story has reached a pivot point: the huge disparity in economic growth rates won't continue for much longer.

China's rapid per capita GDP growth can be attributed to two main causes. First, China did not have to invent new technology. In 1980, China was using very old technology in its production processes. But over time, China started to use progressively more of the technology discovered in developed countries. This led to China's comparatively rapid economic growth since China was able to copy existing technology faster than developed countries could invent it. Developed countries, on the other hand, already used the existing technology, so only new technology contributed to their economic growth.

The second cause of China's rapid economic growth was that it had so few machines and factories

in 1980. This led to brisk growth because each new machine or tool would increase a worker's productivity by less than each previous tool or machine did. Because of this relationship, when China began giving workers' their first tools in 1980, these tools allowed workers to produce a lot more output. Over time, workers started to get their second and third tools, which each added progressively less to output. As long as China's workers had fewer tools than the U.S. workers did, investments that put tools in the hands of workers would increase output more in China than it would in the U.S.

These two causes of China's rapid economic growth are about to disappear. China has already copied the technology that it can easily copy. In order to obtain new technology, it will have to start generating technology for itself. We've already seen signs that China is producing cutting-edge technology. It is a leader in 5G. It also recently developed hypersonic missiles, a feat the U.S. has yet to match. Now that it has to rely on the technology it generates itself and the new technology generated by Western powers, China will be able to add less technology to its production processes than it had been adding over the last 40 years. As a result, China's growth will slow. China's future economic growth will resemble the U.S.'s economic growth, which relies on newly developed technology.

A similar story is true for tools and machines. China's success in getting tools into the hands of its workers, has a drawback: additional tools will become less impactful in promoting economic growth. Now when China invests in new plant and equipment, the expected return will no longer be very high. Now, the Chinese investment will allow its workers to produce about the same amount of output that U.S. workers could have produced if the investment had been made in the U.S.

Economically, China hasn't caught up to the U.S. yet, so it can still borrow some existing technology and still put tools in the hands of some workers for the first time. But these opportunities are not as easy to come by as they had been over the last 40 years. As a result, China's economic growth will slow.

It will be interesting to see how China handles its slowdown in economic growth. Its people have become accustomed to 8 percent growth rates, which allowed income per person to double every nine years. In the coming years, the economy won't be able to meet these expectations. Since people get unhappy when they do not get the benefits that they expect, there is a chance that these unmet expectations will lead to social unrest. The coming years will be a political challenge for the Chinese government, and we will see how well they handle the challenge.