So, I’d like to talk about another of Japan’s structural problems – that is Japan’s insufficient demand.

And if you look at this figure, the orange line shows Japan’s potential GDP, how much Japan can produce. And the blue dotted line shows Japan’s actual GDP. And you can see that most of the time, after 1990, Japan’s actual GDP was much smaller than Japan’s potential GDP. That means, because of the scarcity of demand, we have, you know, our factories and workers are not fully used during this period.

The main problem of Japan is excess saving problem. And if you look at this figure, the upper part shows—the blue line shows Japan’s saving—private saving GDP rate, and orange dotted line shows Japan’s private investment GDP rate. And we can see that from around 1960s, Japan’s saving rate was very high, private saving rate was very high. And it was very important, and helped Japan’s very rapid economic growth because it provided—it financed—Japan’s capital accumulation in this period. But the high saving rate continued, even up to now. And as Japan did a lot of investment, and on the other hand, as I told in my last lecture, the TFP growth declined and also because of aging, Japan’s working age population is declining. So the opportunity for investment declined and the rate of return on capital also declined. So that caused the continuous decline of private investment.

And if people preferred to save a lot, that means consume less, and there is not enough private investment, then we have the problem of insufficient demand. So Japan suffered this problem for the last, say, 30 or 40 years.

And if you look at this slide, this slide shows—the left hand side shows Japan’s capital stock—capital service input-GDP ratio. So, in comparison with production, how much capital you input. And the red dotted line shows growth rate of return on capital. And we can see that Japan continued very rapid capital accumulation up to, say, middle of 2000, and probably reflecting too much capital accumulation, the rate of return on capital declined, continued to decline. And the right hand side shows U.S. case, and you can see that in the case of U.S., because of working age population increased, because of higher birth rate and migration, and also productivity improved substantially, so capital-GDP ratio actually declined. And rate of return on capital increased over time.
So fundamental problem of the Japanese economy is not the stagnation of investment, but the factors behind it. That is, low rate of return on capital and also high saving-GDP rate. Now, Japanese government tried to get out from deflation and reduce the real interest rate and stimulate private investment. But I think these policies are not enough to get out from Japan’s structural problems, and we need to reduce the savings-GDP rate and also accelerate productivity growth to solve Japan’s long time stagnation.

This figure compares China’s gross investment GDP rate and China’s gross saving GDP rate, and also Korea’s these numbers. And you can see that in the case of China, the saving GDP rate is very high and China invested a lot. The investment GDP rate was also very high. And China continued this amazing capital accumulation for more than 40 years. That means China’s—and also, according to recent works—the productivity growth of China is not so high, like Japan’s, say, recent years.

So that means, and also in China, like Japan, the working age population is expected to start to decline in five years. So that means China will have similar excess saving problem in near future, like what Japan experienced in the last 30 years.

And one evidence is this figure. This figure shows gross rate of return on capital in China’s manufacturing sector by subsectors. And we can see that after around 2010, the gross rate of return on capital is declining very sharply. So, like Japan, to solve the present slowdown of economic growth and insufficient demand problem, China needs to either reduce its saving GDP ratio or accelerate TFP growth.