Mizuho Economic Outlook & Analysis

December 25, 2019

China's infrastructure investment coming out of sluggishness

Expected to continue a moderate recovery to shore up the economy in 2020

< Summary >

◆ The Chinese government increased issuance of local revenue bonds for financing infrastructure development in 2019, but infrastructure investment stayed sluggish. This mainly reflected funding constraints due to the Chinese governments' efforts to reduce off-the-book debts of local government and the rising use of revenue bond proceeds for land and real estate acquisitions.

◆ The Chinese government announced a string of policy measures since June 2019, boosting the supply of funds for infrastructure through revenue bonds and bank lending while banning the use of revenue bond for land and real estate purchases to funnel them to the infrastructure sector.

◆ Despite the continuing consideration to curb off-the-book debts, the effects of these government measures are expected to contribute to a moderate recovery in infrastructure investment during 2020 to help stabilize the Chinese economy. Stay alert to the risk of higher fiscal burdens stemming from an expansion of infrastructure investment slighting the quality.

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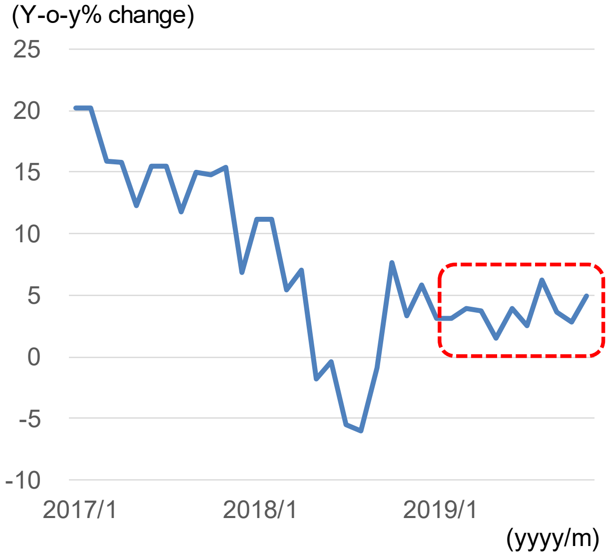
1. Infrastructure investment remained sluggish in 2019

In China, since the latter half of 2018, the government has reinforced its stance of propping up the economy amid mounting economy-dampening pressures of intensifying US-China trade tensions. At the National People's Congress held in March 2019, the government set forth the policy of boosting fiscal policy measures, making clearer its stance of expanding domestic demand with infrastructure investment by increasing issuance of special-purpose local government bonds by local governments (hereinafter referred to as "revenue bonds") to 2.15 trillion yuan from the previous year's 1.35 trillion yuan. Thereafter, local governments issued revenue bonds as scheduled by September 2019. However, infrastructure investment has been showing the continued sluggishness since early in the year (**Chart 1**).

Chart 1: Infrastructure investment (in nominal terms)



Note: The total of the three sectors of utilities, water/environment/public facilities, and transportation/warehousing/postal service.
Source: Made by MHRI based upon National Bureau of Statistics of China, CEIC data, etc.

In 2018, infrastructure investment amounted to 15 trillion yuan to account for 23% of fixed asset investment. Infrastructure investment is expected to serve as an important tool in the government's economic policy in 2020 in maintaining the stability of China's slowing economy. If infrastructure investment fails to expand in line with the government's policy, as did in 2019, it could become a destabilizing factor in the Chinese economy. In this paper, we analyze why infrastructure investment in 2019 lacked strength from the perspective of its funding, and then look to the future prospects in light of the government's responses to the situation.

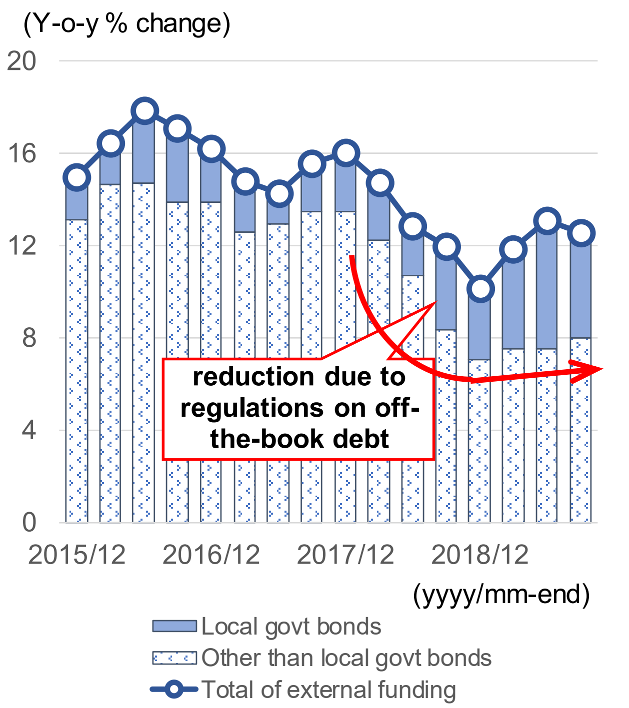
2. Factor analysis from the perspective of infrastructure funding: there are bottlenecks in both procurement and use of funds

(1) Constraints on the supply of infrastructure funding sources other than revenue bonds against the backdrop of the off-the-book debt problem

Exploring the factors behind the weak infrastructure investment from the viewpoint of funding sources, it is clear that there are bottlenecks in both procurement and use of funds. The first point concerns procurement. Specifically, the constraints on funding sources other than revenue bonds can be pointed out.

For instance, looking at the growth of the total balances (estimates) of revenue bonds and other externally procured funds, while the outstanding balance of revenue bonds expanded from 2018 to 2019, the balance of other externally raised funds began shrinking in 2018 and their expansion has remained checked in 2019. As a consequence, the overall growth of the combined balances stayed low in comparison with the past years (**Chart 2**).

Chart 2: Balances of revenue bonds and other funding resources



Note: Other than local government bonds, infrastructure-related lending of banks (including policy financial institutions), bonds, trusts and loans on commission (estimates).
Source: Made by MHRI based upon People's Bank of China, Ministry of Finance of China, China Trustee Association, CEIC data, wind

In the background of this development is the problem of off-the-book debts of local governments. Their off-the-book debts, which had expanded on the back of implicit government guarantees, are smoldering as potential flash points of financial risks because of the blurred picture of where debt repayment responsibility lies, and the Chinese government has enhanced its responses to tackle the situation since 2017. For example, in "Notice on Further Regulations on the Borrowing and Financing Activities of Local Governments" (April 2017), one of the key policy directives, and two other documents issued after this notice, "Opinion on the Prevention of Risks Related to Off-the-Book Debts of Local Governments" and "Rules for Accounting for Off-the-Book Debts of Local Governments" (July 2018), the government made it clear to strictly pursue responsibility of officials who would expand off-the-book debts by violating the rules. The funding sources other than revenue bonds appear to have dwindled as local governments and financial institutions apparently cowered in the face of the tighter regulations and became more negative toward the procurement and supply of funds for infrastructure investment.

(2) Many of revenue bonds used for sectors other than infrastructure

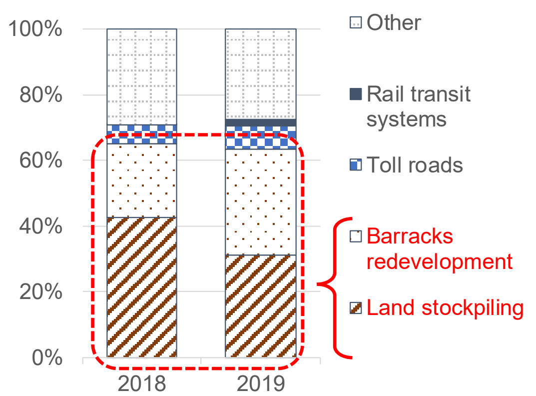
The second point has to do with problems concerning the use of procured funds. While introducing regulations on off-the-book debts, the Chinese government increased issuance of local government bonds as replacement funding sources, particularly revenue bonds to be redeemed with revenues from infrastructure management. Since the first placement in 2015, issuance of revenue bonds increased in stages, and expanded to 2.15 trillion yuan in 2019, as pointed out at the outset of this paper. **Chart 2** clearly shows that the increased issuance of revenue bonds made up for the shrinkage of off-the-book debts.

In reality, however, only a small portion of funds raised via revenue bonds have been actually appropriated for infrastructure investment. Looking at the breakdown of uses of proceeds of newly issued revenue bonds in 2018 and 2019, for example, a little more than 60% of the procured funds was used for land stockpiling, which is not counted in gross domestic product (GDP), and redevelopment of barracks (redevelopment of dense zones of decrepit houses) whose contribution to real estate development has been shrinking due to the scale-down of redevelopment projects. Funds actually spent on the infrastructure sector, such as construction of toll roads and rail transit systems, were only limited (**Chart 3**).

One of the factors that gave rise to this situation is the issue of profitability of infrastructure. Infrastructure projects such construction of toll roads and railways are one of public services, which are seen to have low profitability relative to other industries.

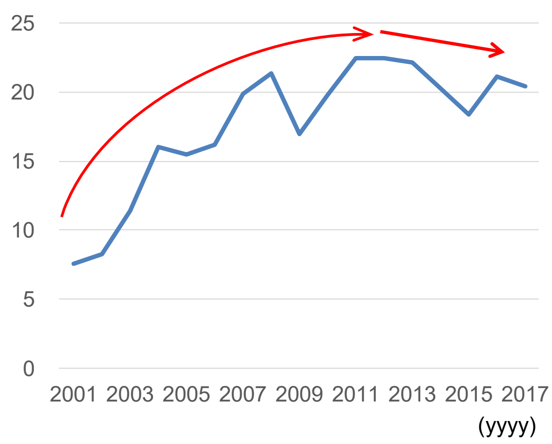
In addition, as a result of the accumulation of infrastructure capital after active

Chart 3: Uses of revenue bond proceeds



Source: Made by MHRI based upon wind

Chart 4: Productivity of infrastructure capital (estimates)



Note: GDP / Amount of infrastructure capital stock (estimate)
Source: Made by MHRI based upon National Bureau of Statistics of China, CEIC data, etc.

investment in the past, the increase in productivity of infrastructure capital appears to be peaking out, if taking no account of differences in regions or sectors. Thus, there is the possibility that it is becoming more difficult than before to organize profitable infrastructure projects. For instance, GDP (estimate) per unit of infrastructure capital stock has begun to grow only sluggishly in the 2010s after showing sharp rises in the 2000s (**Chart 4** on the previous page). In contrast, in the case of revenue bonds used for land stockpiling and redevelopment of barracks, they can be expected to generate relatively high profits through the sale of land-use rights and easily secure funds for redemptions. This appears to be a major factor behind the increase in revenue bonds tilted toward such uses.

3. China ramps up a string of measures for a recovery of infrastructure investment in 2019

In the wake of the unintended sluggishness of infrastructure investment against the backdrop of the above-mentioned bottlenecks, the Chinese government came out with a string of measures to reinvigorate infrastructure investment one after another in June, September and November 2019 (**Chart 5**).

Chart 5: Measures taken by China in 2019 to promote infrastructure investment

Timing	Details
Jun	■**Notice on Issuance of Special-Purpose Local Government Bonds by Local Governments and Execution of Project-Supporting Financing Measures (June 10)** ✓Revenue bonds: Allow the acceleration of issuance pace, appropriation to capital of projects ✓Other funds: Permit consultations on bridge financing for temporarily suspended infrastructure projects; encourage legitimate credit enhancement of local governments; eliminate the cowering of parties concerned due to possible censure for off-the book debts ✓Use: Clarify sectors for prioritized use of revenue bonds and other funds (regional development plans, Belt and Road construction, barracks redevelopment, measures against poverty, measures against natural disasters, railroads, toll roads, airports, water management projects, ecology and the environment, medicine and healthcare, utilities, urban infrastructure, etc.)
Sep	■ **Executive Meeting of the State Council (September 4)** ✓Revenue bonds: Permit the front-loaded issuance of bonds set for 2020 ✓Use: Prohibit the use of proceeds from revenue bonds for land stockpiling and real estate-related sectors. Expand areas for the use of procured funds (transportation (railroads, rail transits, urban parking lots), energy (electric cables between cities and rural areas, natural gas pipelines and stockpiling facilities), water management for agriculture and fishery, environmental protection (sewage and garbage disposal facilities), people's livelihood (vocational education, babysitting, medical services, facilities for the elderly), municipal government and industry-related (cold chain logistics facilities, utilities))
Nov	■ **Executive Meeting of the State Council (November 13), Notice on Strengthening of Capital Management for Fixed Asset Investment Projects (November 27)** ✓Conditionally permit the lowering of the minimum ratio of capital (from 25% to 20%) for port construction, coastal and river transportation projects and the lowering of the minimum ratio of capital (by up to 5%pt) for infrastructure projects involving reinforcement of weaknesses of roads, railroads, urban construction, logistics, ecology and environment protection, society and people's livelihood

Source: Made by MHRI based upon english.gov.cn

First of all, the government proceeded with measures mainly for the use of revenue bonds to deal with the bottleneck in fund procurement. In June, it allowed funds raised by revenue bonds to be used for capital of infrastructure projects, making it possible to leverage other externally procured funds, including bank borrowings. In November, it lowered the ratio of capital to project costs for such projects as port development, river transportation and much-needed roads and railroads, paying the way for greater leverage. Furthermore, the government in September came up with a policy of front-loading issuance of revenue bonds originally set for 2020 in favor of a seamless supply of funds.

In addition, in its policy step announced in June, the Chinese government presented ways to procure funds via methods other than revenue bonds. For example, concerning infrastructure projects undertaken by local government financing vehicles, suspended after an interruption of funding by tougher regulations, it allowed them to consult with financial institutions as needed on follow-up financing and also encouraged credit enhancement of local governments through legitimate methods. Together with these, the government emphasized the approach to "avoid the failure to act (not investing in infrastructure) by entities concerned for fear of censure," making it clear not to censure funding sources other than revenue bonds as long as they would not lead to increasing off-the-book debts in line with the government's policy.

Secondly, to deal with the bottleneck in the aspect of its uses, the government in September set forth the direct measure of banning the use of revenue bond proceeds for land stockpiling and real estate-related projects, including redevelopment of barracks, while encouraging the use of such funds in the infrastructure sector. For instance, it designated as priority areas state-level regional development plans, projects related to the Belt and Road initiative, measures to fight poverty, and measures against natural disasters in June, while transportation, energy, water management for agriculture and forestry, environment protection, people's livelihood, municipal government and industry-related projects were designated in September. Furthermore, it cited primary targets like "areas where conditions are in place for the start of work in winter 2019 and in spring 2020" and "projects having clear benefits to the economy and society that need to be undertaken soon or later." While the accumulation of infrastructure capital is proceeding as a whole, the government is apparently trying to dig up and fast-track new infrastructure projects, bearing in mind projects related to national projects and infrastructure much-needed for China's future development.

4. Infrastructure expected to recover moderately in 2020; future finance risk may rise depending on its quality

The aforementioned measures, if proven effective, should create room to raise more funds, and if the ratio of funds used for infrastructure projects rise, a recovery of infrastructure investment can be expected. Recently, the front-loaded issuance of revenue bonds to the tune of one trillion yuan was approved at the end of November 2019, an indication that moves in the wake of the government measures are beginning to emerge in earnest. From February, after the end of Lunar New Year holidays, issuance of revenue bonds designed to fund infrastructure projects should get into full swing and the recovery trend of infrastructure investment should become more pronounced from the start of spring. The pace of recovery of infrastructure investment going forward is expected to be only moderate, since the Chinese government are likely to remain negative toward the unregulated supply of funds amid persisting pressures for deleveraging and disposal of off-the-book debts of local governments. Nevertheless, the anticipated recovery should be strong enough to play a role of propping up the economy. As tailwind for the economy can be expected in 2020, including the coming off of the impacts of the first to third rounds of US punitive tariffs upon China, reduced downward pressure from the fourth round, the bottoming out of the IT cycle, and automobile sales coming out of the worst period, infrastructure investment in China is expected to be positioned as a means of micro adjustment until an autonomous economic recovery comes into play firmly, rather than a way of economic stimulation.

On the other hand, an excessive expansion of infrastructure investment can be seen as a potential risk. From the perspective of the economy immediately ahead, that is not necessarily bad news as it represents an upside risk to the economy. From the perspective of the medium- and long-term soundness of the economy, however, the rekindling of the problem of off-the-book debts and larger infrastructure than necessary could become a factor to increase finance risks in the future. In fact, in the past, the easing in the supply of funds in the stage of putting great energy into infrastructure investment helped expand the off-the-book debts. On each of such occasions, the Chinese government moved to improve the relevant systems and institutions. This time around, however, the likelihood of similar problems occurring cannot be entirely ruled out as China moves to ease the reins on the supply of funds for infrastructure investment. In addition, the series of the latest measures may result in the eating up of medium- and long-term demand for infrastructure ahead of time and narrow the leeway for future fiscal policies. If infrastructure projects conducive to economic development are implemented in an appropriate manner, China can design a path to economic development not dependent on fiscal policy.

If the accumulation of infrastructure capital goes ahead by slighting the quality of infrastructure, however, China could become mired in economic growth reliant on fiscal expenditures and face greater future finance risks as the burden of infrastructure maintenance squeezes its funding resources.