

Development Finance and Deepening the Supply-Side Structural Reform in China

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The objective of a development bank is to finance socially worthwhile projects that are not commercially viable on their own and that commercial banks cannot and will not fund for various reasons. A development bank thus specializes in financing projects with long pay-back periods, typically on the order of several decades, for example, infrastructure projects such as power plants, railroads, airports and seaports; projects that are excessively risky commercially, for example, a pilot nuclear plant based on new and as yet unproven technology; and projects the benefits of which have a large externalities component, for example, the retrofitting of existing public buildings to promote energy conservation, all preferably at fixed rates of interest.

In addition, only a development bank can finance projects that lead development. An example of a development-leading project is the U.S. trans-continental railroad, which was built to stimulate demand across the country that had not existed previously. (It was, however, not financed by a development bank.) Development-lagging projects, for example, augmenting the electricity generation capacity of a growing city, can more feasibly be financed commercially. However, even then, an infrastructural project such as an urban mass-transit system, the demand for which already exists, may not be commercially financeable because many of the benefits of such a project consist of externalities, for example, reduction of pollution, relief of traffic congestion, etc., that cannot be monetized.

Funding basic infrastructure projects is the bread and butter of development finance. China's own economic development experience strongly confirms that investment in basic infrastructure is indispensable for economic growth. Financing basic infrastructure needs is thus the first priority for a development bank. Yet infrastructure projects, especially development-leading ones, are not easy to finance. These projects often have to be built first, in order to attract the users, who come later. They also have very long payback periods and hence require long-term financing. Some projects, for example, a pilot semiconductor plant, may not break even directly at all. A development bank needs to take advantage of its sovereign or quasi-sovereign credit status to issue long-term bonds in the capital market to raise funds for its loans.

One objective of supply-side structural reform in China is to ensure that only socially productive (that is, including both public and private benefits) projects will be financed and undertaken. Thus, fixed investment in industries with excess production capacity, such as steel, cement, plate glass, ship-building, coal-mining, aluminum-smelting, solar panels and residential real estate, should no longer be undertaken in China today. Instead, investment should be channeled into socially more productive projects, such as cleaning up the environment--air, water and soil--or the provision of health care.

What is then the role of a development bank in supply-side structural reform?

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First of all, long-term financing for infrastructure projects cannot be provided by commercial banks because they do not have the long-term deposits to fund the loans, especially if a fixed rate of interest is required. Moreover, these infrastructure projects are also too lumpy, that is, they require very large loans that are beyond the lending capacity of most commercial banks. Thus, the credit market on its own is unlikely to be able to provide such financing. It is left to policy banks like the China Development Bank (CDB) to do so. A development bank must evaluate a project on the basis of its discounted present value of total social benefits and costs, assigning, if necessary, appropriate shadow prices on the externalities. Thus, even if a local government has the ability to repay, if the discounted present value of total social benefits and costs is negative, or lower than another competing project, it should not be funded. A development bank will need to make use of its project evaluation capability so as to decide whether a given infrastructural project should be funded.

However, infrastructural investment projects can enhance the rate of return of other public and private investment projects. There is complementarity between an infrastructure project and other types of fixed investment. For example, the existence of a power plant and a good road may stimulate additional investment in the same geographical area in manufacturing and housing, which may be commercially financeable. For this reason, it is frequently necessary for a development bank to take a broader, more macroeconomic and more holistic perspective in its lending. It must look at the potential total social rate of return over a long time horizon and at the same time avoid wasteful duplicative investment. For example, it probably should not simultaneously fund two power plants supplying the same area, or two nearby airports serving the same area. A development bank should actually act as an instrument for the validation and implementation of specific projects in a national plan. By picking and choosing infrastructural projects to fund, it will also fulfil a coordination function and contribute to deepening supply-side structural reform.

Today there are many worthwhile environmental or “green” projects and a development bank can finance these projects by issuing “green” bonds. Environmental projects generally have the characteristic that not all the benefits can be monetized. They would thus appear to have a lower pecuniary rate of return, other things being equal. (Investors in such “green” bonds would need to be compensated in some way.) A development bank can also finance the development of new technologies and new industries by providing funding for pilot plants, e.g., in nuclear power or even in fusion power, because the risk of failure can be too high for conventional financing. However, a bank, even a development bank, should not undertake to finance research and development, which should be left to governments, enterprises or venture capitalists. It is also important to distinguish clearly from the outset whether a project is to be financed through a grant from the government or a loan from a development bank. A grant does not need to be repaid whereas a loan should be.

A development bank like the CDB sells long-term bonds based on its quasi-sovereign credit status to investors and uses the proceeds to make loans to individual projects. Even if project-specific bond-financing is possible, the risk is too concentrated for the potential investors in these bonds. It is far better for investors to be able to buy the bonds from a development bank and then for the development bank to make the long-term loan for the project, because then the investors can reap the benefit of risk-pooling and risk-sharing among all the projects financed by the development bank. This direct funding model is preferred to a guarantee of the individual specific project-based bonds by the development bank. Another consideration is relevant for so-called “green” bonds for projects the benefits

of which are partly in non-pecuniary externalities that cannot be readily monetized. It may be necessary for these bonds to offer lower coupon rates than other project bonds that do not depend on externalities. In order to persuade investors to invest in these lower-coupon bonds, in addition to appealing to their social conscience and responsibility, it is possible to make the interest payments to the investors on these bonds income tax-exempt, thus equalizing the net after-tax rate of return on the green bonds and the regular “non-green” bonds.