Matching Supply and Demand of Financial Services for Belt and Road Projects*

Zheng Liansheng

Senior Research Fellow at the NIFD

The Belt and Road Initiative has a tremendous demand for financial services. For over 60 economies involved in this initiative, significant differences exist in their development stages, size, industrial structure and factor endowment. Hence, their demand for financial services is highly differentiated. Yet such demand is not satisfied by currently inadequate and structurally mismatched financial services. The heterogeneity of Belt and Road economies requires targeted, differentiated and diversified financial services on a sustainable basis.

1. Analysis of Investment and Financing Models for Belt and Road Projects

In analyzing the financial service system for Belt and Road projects, we must first identify the roles of financial institutions and markets. Currently, mainstream investment and financing models for Belt and Road projects include indirect debt financing; engineering, procurement and construction (EPC); direct debt financing and equity financing.

1.1 Indirect Debt Financing: The Most Common Model of Infrastructure Investment and Financing

Syndicated loans offer advantages as follows: First, multiple banks jointly provide lending support to infrastructure projects under the coordination of a leading bank. Participation of local financial institutions is conducive to mitigating investment risks. Moreover, as a result of shared risks, no individual banks will be exposed to excessive losses from investment, financing risks or other risks.

Moreover, China's domestic or cross-border syndicated loans also have the following features: First, steady growth in syndicated loans with relatively high asset quality. In the first half of 2017, the balance of syndicated loans in China amounted to 6.13 trillion yuan, which doubled over the level of six years ago, with an average non-performing loan (NPL) ratio of 0.53%. Another feature is the dominant role of developmental financial institutions and large banks. Policy banks and major commercial banks account for a significant share of syndicated loans. Their business coverage has extended beyond domestic business into overseas business. Integrated financial services have replaced traditional credit financing as a business priority. Cross-border syndicated loans play a more vibrant role in facilitating China's outbound investments, attracting foreign investments, and serving the Belt and Road Initiative.

---

*Zheng Liansheng (1980-), male, native of Yongchun County, Fujian Province, associate professor at the Institute of Finance and Banking (IFB), CASS. With PhD in economics, he is specialized in the research of market economics, financial markets and financial regulation. This paper is a result of the "Study on the Financial Crisis and Institutional Defects of Western Countries" (14CJL017), and the key project of the "Study on the Systemic Risks of China's Financial System and Reform of Financial Regulation" (13AJY018). Author acknowledges the assistance of Yu Zhenxue, a candidate of MA degree at the Graduate School of the Chinese Academy of Social Sciences (CASS).

1.2 EPC Is the Most Distinctive Model of Indirect Debt Financing

Under the EPC model, investment and financing primarily include export credit loans and "concessional loans and preferential export buyers' credits" (Wang Yan, 2018). Export credit loans, concessional loans and preferential export buyers' credits are in the category of bank loans. Concessional loans are mid- and long-term low-interest loans provided by the Chinese government to developing economies involved in the Belt and Road Initiative as development aid for purposes specified in bilateral government agreements. Preferential export buyers' credits are preferential loans issued to export buyers to promote economic and trade cooperation with Belt and Road economies. Export credits are low-interest loans or credit guarantee for overseas investments or exports provided by a country to support its overseas direct investments or trade and enhance the competitiveness of its firms. Buyers' credits are popular among home-country companies for facilitating their fund recovery.

1.3 Direct Debt Financing Is the Most Market-Based Model of Financing

Bond financing has the advantages of market-based operations and flexibility. Indeed, bond issuance also has the drawbacks of complex procedures with high standards and costs and fixed payment dates. Bonds need to be repaid in principal and interest. In case of a liquidity problem, a default may occur, and if mishandled, such default will affect the creditworthiness of a host country in the international market. Despite its limited volume, bond financing is encouraged by the World Bank and the Asian Development Bank (ADB) for its transparency and market-based operations.

1.4 Continued Growth in the Demand for Equity Financing Instruments

Industrial funds are common equity financing instruments for Belt and Road projects. They allow investors to access project information, control investment process and participate in decision-making. Public and private partnership (PPP) is an increasingly popular model of equity financing. Of course, the PPP model is far beyond the scope of equity financing. Under the PPP model, a common practice is to create an industrial investment fund before establishing a project investment, financing, operation and management system.

2. Demand for Financial Services from Belt and Road Projects

The Belt and Road Initiative needs to create a targeted, differentiated, diversified and integrated financial service support system, which incorporates bank loans, syndicated loans, EPC, bonds, industrial investment funds and PPP as major investment and financing models (Lu, 2015). We must identify demand for financial services from Belt and Road projects to create a system that matches supply with demand.

2.1 Guidance Function of Policy Financial Institutions

The policy financial system, which aims to offer guidance and start-up funds, comprises international multilateral and domestic policy financial institutions in partnerships. Policy financial institutions guide the early stage of infrastructure projects. The World Bank, the Asian Development Bank (ADB) and domestic policy financial institutions are essential sources of export credit loans, concessional loans and preferential export buyers' credits to Belt and Road projects. Such support is particularly important in the early stage of infrastructure construction.

2.2 Support Function of Commercial Financial Institutions

Commercial financial institutions are key financing entities for Belt and Road projects. The Belt and Road Initiative is primarily based on project cooperation, regional development and factor integration. It is a form of industrial and value chain cooperation among economic entities. Financial support, therefore, should also be extended through market-based mechanisms. By the end of 2016, the Bank of China (BOC) and the Industrial and Commercial Bank of China (ICBC) provided close to 170 billion US dollars in financial support to Belt and Road projects (Zheng, *et al*., 2018). Despite smaller early-stage financial support compared with policy financial institutions, the role of commercial financial system in the mid- and late stages of infrastructure construction is irreplaceable and increasingly important. Commercial financial institutions should be the primary financial service providers for EPC projects, which is critical for market-based project operation and risk pricing.

2.3 Diversified, Technical and Full-Process Financial Support and Services

Belt and Road economies require differentiated, diversified and technical financial services, such as export credit, bond issuance, equity investment, credit enhancement, consulting, regulatory compliance, and legal and accounting services, which need to be provided by professional financial, commercial and industrial service institutions.

For a typical Belt and Road project, demand for financial services exists throughout the entire lifecycle, and the home country has close financial, trade and investment ties with a host country. Such demand includes: (1) infrastructure project investment and financing; (2) trade financing services; (3) financial services for industrial investments and especially FDI; (4) development financing, especially soft loans, technical aid and grants for education, environmental protection, healthcare and poverty reduction; (5) two-way openness of financial markets and services; (6) financial infrastructure and policy cooperation and coordination.

3. Mismatch of Financial Service Supply and Demand for Belt and Road Projects

The Belt and Road Initiative needs to be supported by a complete financial service system that meets its massive demand for financing and financial services; such demand and particularly investment and financing demand is overwhelming for China’s currently limited financial service system.

3.1 Insufficient and Structurally Mismatched Financial Services

While policy financial institutions have offered the majority of indirect debt financing to Belt and Road projects, commercial financial institutions are yet to contribute more. The desire of EPC companies to participate in Belt and Road projects has been discouraged by the lack of commercial financial services. Take Asia for instance, the shortfall of infrastructure investment amounts to 8.8 trillion US dollars over the 2010-2020 period. The Belt and Road Initiative may involve more projects with a total financing demand that may exceed 10 trillion US dollars. By the end of 2016, however, only 750 billion US dollars in financial support were allocated to Belt and Road projects.

In overseas infrastructure construction projects, export credit loans are the largest and the most influential model of credit support. It is also an essential type of financial support for EPC projects. **However, such loans**

also present quantitative and structural dilemmas: The limited number of participating institutions poses a constraint to export credit. By the end of 2016, the amount of financial support to Belt and Road projects reached some 750 billion US dollars. This amount includes export credit support (primarily from China's Export Credit Insurance Corporation) worth 400 billion US dollars, which exceeded the sum of financial support from policy and commercial financial institutions. Credit support from China's Export Credit Insurance Corporation is constrained by its capital fund, compliance requirements, and capital operation and management capabilities. **Structurally,** export credit includes buyers' export credit and sellers' export credit. While sellers' export credit helps exporters from the home country rapidly recover funds, buyers' export credit helps importers overcome the shortage of import funds. The problem is that China's sellers' export credit far exceeds buyers' export credit, which means that its importers face the shortage of funds. In the mid and long run, this will affect China's imports and especially EPC imports.

3.2 Cost-Benefit Constraint Facing the Supply of Financial Services

Belt and Road projects face a short- and mid-term cost-benefit mismatch. Infrastructure investment projects are of public goods nature with social benefits far outweighing costs. The private sector, which does not profit from such social benefits, is not motivated to invest in public infrastructure. Many economies thus have a severe shortage of infrastructure investment. Take the Asian Development Bank (ADB) for instance, the contract rates of its bonds are in the range of 0.256%-6.65% subject to differences in issuance time and maturity. This rate represents the minimum interest rate for infrastructure financing in Asia (Gao, 2016).

Return on infrastructure investment is generally low. On the whole, return on infrastructure projects is in sync with and close to economic (GDP) growth. Given China's high growth rates compared with other Belt and Road countries, return on infrastructure investment in China is relatively high and stable. According to a study on 913 PPP projects in China by the Investment Research Institute of the National Development and Reform Commission (NDRC) (Wu, 2016), the rate of return on PPP projects was 5% to 8%. In 2015 and 2016, the average rate of return for infrastructure projects was 7.89% and 7.13% respectively. By category, the average rate of return on transportation and municipal public utilities was around 7% in 2016. Based on the benchmark rate of return for infrastructure projects released by the Ministry of Housing and Urban-Rural Development (MOHURD), the pre-tax benchmark financial rate of return was 3% to 8%.

The financing cost and investment return pose challenges to the economic performance of Belt and Road projects. **Belt and Road projects will achieve a slightly positive return only by reasonably estimating the financing cost and potential investment return for various economies and ensuring sound investment and financing, project operation and risk management.** Without a positive and stable return, market-based institutions and resources, especially overseas funds, may lack long-term commitment, and policy financing will not sustain as a financing model. Cost-benefit asymmetry is a key constraint to financing infrastructure projects.

3.3 Overreliance of Financial Services on Domestic Resources

While China is a major financial service supplier for Belt and Road infrastructure projects, foreign financial institutions are yet to contribute more. ***Policy financial institutions*** led or participated by China serve as vanguards for implementing the Belt and Road Initiative. These institutions include traditional and emerging policy institutions. Among traditional policy financial institutions, the China Development Bank (CDB), Export-Import Bank of China, and China Export & Credit Insurance Corporation will play a critical role. Emerging policy financial institutions include the Asian Infrastructure Investment Bank (AIIB) and the Silk Road Fund. ***China's financial institutions*** have become leading financial institutions for the Belt and Road Initiative. In particular, China's commercial banks may be involved in many Belt and Road projects and offer loans and integrated services such as investment banking and consulting. ***China's emerging financial institutions*** serve as supplementary financial institutions for the Belt and Road Initiative. Many industrial funds, investment funds, M&A funds and even asset management plans created by China in connection with the Belt and Road Initiative are intended to invest in the Belt and Road economies.

Chinese financial institutions have played a critical role in infrastructure loans, export credit financing, concessional loans and preferential export buyers' credits, syndicated loans, EPC, financial leasing, industrial funds, M&A and direct investment. They provide effective financial products and integrated services. In comparison, overseas financial institutions are yet to offer more financial services and contribute more capital to Belt and Road projects.

4. Policy Recommendations on Matching Financial Service Supply and Demand for Belt and Road Projects

4.1 Respect Market Laws and Systematically Identify Demand for Financial Services

Respect market laws: Market laws are the basis for the sustainability of the Belt and Road Initiative. Demand of various projects for financial services should be identified and screened. **Emphasize aggregate concept:** China should systematically evaluate the total demand for financial services from the Belt and Road regions and the types, products and risks of such services. **Deepen matrix analysis:** China should create a matrix for analyzing financial services, evaluating region/country-specific business models, and identifying demand, supply model, cost-benefit and risk management (Yan, *et al*., 2018).

4.2 Form an Interactive Supply Chain Mechanism

In operating Belt and Road projects, China should coordinate both domestic and overseas markets, create international market opportunities to domestic financial institutions, markets, capital and products, effectively coordinate and integrate domestic, overseas, policy, commercial, public and private factors and resources, and increase the interplay between domestic and overseas financial services.

Under the Belt and Road Initiative, China should integrate domestic and host countries' financial resources. China should invite host countries', regional and international policy financial institutions, and incorporate their preferential loans, technical aid, project experiences and other resources. For instance, such institutions include the World Bank, the Asian Development Bank (ADB), African Development Bank (AFDB) and the Multilateral Investment Guarantee Agency (MIGA). China should leverage host countries' government resources, and promote the synergy of political, economic and financial cooperation. Moreover, China should use host countries' market-based financial resources, and in particular, encourage commercial financial institutions and the private sector to participate as the backbone in developing Belt and Road projects. Finally, China should also engage financial services from international and regional financial centers such as Singapore, Hong Kong, Mumbai and Dubai.

4.3 Promote Loans, EPC and Bonds as Three Pillars

Financing is a critical demand for Belt and Road projects. Financing and investment plans should be formulated in light of project feasibility and the combination of internal and external resources. First, China should leverage bank loans and syndicated loans. By forming syndicated loans, China's domestic banks and host-country banks will combine resources and share risks. China should also enhance project screening, promote its cost advantage and experience, and utilize host countries' resources. It should invite potential operators and resources in host countries to achieve seamless links such as EPC, post-completion handover, operation, maintenance and function extensions. Various stakeholders should promote sustainable project development. What is more, China should promote transparent direct financing in the bond market, and encourage its financial institutions and EPC contractors to issue bonds in domestic and overseas bond markets to offer market-based financial support to Belt and Road projects. The Belt and Road economies should be encouraged to issue "panda bonds" in China to finance for infrastructure and other projects.

4.4 Promote Institutional, Market and Product Development

China should encourage its financial institutions to participate in sustainable development projects following market-based principles. The goal is to form a system of policy institutions as leaders and commercial institutions as the backbone with close cooperation between domestic and overseas entities. Bank capital and syndicated loans should play a key role in supporting the Belt and Road Initiative. China should enhance regional bond market, and develop direct financing instruments for Asia and surrounding regions. China should expand diversified financial services for the Belt and Road economies, including settlements, asset transactions, PPP, financial leasing, trade credit, developmental finance, green finance, financing guarantee, credit enhancement, and legal and accounting services.

4.5 Closely Follow Risk-Return Performance and Balance Short-Term Cost with Long-Term Benefits

Risk awareness: Matching demand with supply must follow a risk-based principle with prudence and robustness. Risk evaluation must precede step-by-step implementation. Communication must precede construction. **Complete considerations:** Sustainability, financing, economic, social and political risks must be taken into account to ensure that nothing is left out in risk evaluation. **Long-term awareness:** In evaluating the cost-benefit relationship, both immediate interests and long-term benefits and national strategies must be factored in.

(This article first appeared in *China Opening Journal*, Vol.1, 2019)

References:

[1] Asian Development Bank (ADB). Annual Report 2015 [R], April 2016.

[2] Bhagwati, J. "US Trade policy: The infatuation with Free trade agreements." Discussion paper series, Columbia University, 1995[EB]. https://academiccommons.columbia.edu/catalog/ac:100125. November 21, 2018.

[3] China Banking Association. "Report on the Development of China's Syndicated Loans Industry." 2017 [R], December 18, 2017.

[4] Gao Bei, Zheng Liansheng, Zhang Ming. "How Did the AIIB Acquire Triple-A Rating: Analysis Based on Super-Sovereign Credit Rating Method." *Studies of International Finance*, 2016 (2).

[5] Lu Feng, *et al*. Why China? Economic Rationality of the "Belt and Road Initiative." *International Economic Review*, 2015 (3).

[6] The Ministry of Housing and Urban-Rural Development (MOHURD). "Benchmark Pre-tax Financial Return of Total Investments of Urban Infrastructure Projects." September 2008.

[7] Wang Yan. "Analysis of the Financing Model for the Belt and Road Overseas Fund Projects." *International Financing*, 2018 (4).

[8] Wu Yaping. "Set Reasonable Investment Return for PPP Projects." *China Journal of Highway and Transport*, 2018 (10).

[9] Yan Xiaona, *et al*. "Creating the Financial Support System for the Belt and Road Initiative." *Economics Think Tank*, 2018 (5).

[10] Zhang Shaojun, Liu Zhibiao. Industrial Upgrade and Coordinated Regional Development: "From Global Value Chain to Domestic Value Chain." *Business Management Journal*, 2013 (8).

[11] Zheng Xuefeng, Liu Lifeng. "Investment and Financing Problems and Countermeasures for the Belt and Road Projects." *China Economic and Trade Journal*, 2018 (18).