International Empirical Study on Financial Infrastructure Development

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Abstract: This paper first discusses the commonalities and advantages in the development trend of financial infrastructure regulatory architecture and market architecture in various countries, then discusses the possible challenges in the future development, further analyzes the current situation and challenges of China's financial infrastructure, and puts forward corresponding policy suggestions combined with international experience.

1. Introduction

Financial infrastructure in a broad sense refers to the hardware facilities and relevant institutional arrangements that provide public services for financial activities. In a narrow sense, financial infrastructure mainly refers to the infrastructure of the post trade of the financial market, that is, the multilateral system and operating rules between financial market participants (including the operating institutions of the system) for payment, clearing, settlement or recording the transactions of financial products. Financial infrastructure in a narrow sense includes but is not limited to payment system, securities settlement system, central custody system, central counterparty and transaction database. National regulators can define its scope according to the development status of domestic financial infrastructure. As China has not yet defined the relevant concepts, this paper mainly discusses the supervision and development arrangements of financial infrastructure in a narrow sense.

2. Regulatory Framework for Financial Infrastructure

In 2012, the payment and market infrastructure Committee of the bank for International Settlements and the International Securities Regulatory Commission jointly issued the principles of financial market infrastructure. As a programmatic document in the field of financial infrastructure, the principles put forward principled requirements for the construction of financial infrastructure regulatory framework, risk prevention and control mechanism, access and connection arrangements, etc[1]. At the same time, the central bank, market regulators or other regulators are required to implement appropriate and effective supervision of financial infrastructure, strengthen domestic and international cooperation and share information in a timely manner.

At present, countries have formed a regulatory framework combining laws, departmental rules and self-discipline management, and accept multi sectoral supervision according to the business areas involved. In terms of laws, some countries have comprehensive regulatory regulations, and some countries or regions have issued laws and regulations in the fields of depository, clearing, settlement and payment respectively, forming their own top-level frameworks, such as the European market infrastructure regulatory rules, the central custody rules and the European financial Instruments Directive; In terms of departmental regulations, national regulators formulate regulatory provisions for their respective regulatory areas[2]. At the same time, the regulatory authorities of various countries will generally sign a memorandum of cooperation in overlapping regulatory areas to clarify the responsibilities of all parties, such as the memorandum of cooperation between UK regulatory authorities; In terms of self-discipline management, various industry norms ensure the enforceability and completeness of rules and agreements related to financial infrastructure.

3. Market Structure of Financial Infrastructure

3.1 Development Characteristics

The development of financial infrastructure is mainly affected by changes in market development, regulatory reform and technological development. First, the objective requirements for the development of financial markets. The healthy and orderly development of the financial market requires consistent and integrated financial infrastructure services. For example, the European capital clearing platform (target2) and securities settlement system (T2S) are established to promote the integration of European financial markets and improve the pricing and resource allocation problems caused by the fragmentation of European financial markets. Second, comply with the needs of regulatory framework adjustment. The adjustment of regulatory framework and regulatory policies will affect the form of market activities. Financial infrastructure needs to serve both market demand and regulatory demand. For example, in 2012, the adjustment of Russia's regulatory framework led to the merger of Russia's central trusteeship institutions and the establishment of the Russian trusteeship Clearing Company (DCC). Third, the requirements of the times for the progress of technological level. With the continuous leap in the level of science and technology, the payment and settlement methods of various countries have changed from paper-based transactions to paperless transactions. Significant changes have taken place in the transaction process and risk prevention and control mechanism, promoting the further development of financial infrastructure.

3.2 Development Model

From the perspective of its own development model, it is mainly manifested in horizontal integration and vertical integration. Horizontal integration refers to the cross market integration of a certain transaction link. For example, after the implementation of a single currency in the euro area, the ESES platform promoted by ouqing bank integrates the central custody institutions in France, the Netherlands, Belgium and other markets to provide securities delivery and custody services for the above markets with a single platform, and investors only need to use one central bank account to complete cross-border settlement[3]. Vertical integration is the integration of back-end services of financial products trading. For example, exchanges in Germany, Italy and other countries realize the integration by acquiring their own central custody institutions. The purpose of horizontal integration or

vertical integration is to provide investors and issuers with a single market access point, improve the settlement efficiency of funds and securities, reduce the market settlement cost and maintain the overall stability of the market. From the experience of developed countries, the integration between horizontal integration and vertical integration is more difficult. Under the background of the increasing improvement of international communication standards, the cost of cross-border communication is continuously reduced, which promotes the horizontal integration model in the field of payment and settlement to be more feasible and gradually become the mainstream model in the European market. For example, Europe first integrated the large value payment system of the central banks in the euro area and realized the integration of settlement currencies in cross-border transactions through target2 system as a single platform; Then, T2S platform is created to directly connect with central depository institutions of various countries to realize securities settlement by a single platform in cross-border transactions.

4. Suggestions on the Development of China's Financial Infrastructure

4.1 Development Status and Main Problems

After years of development, China's various financial infrastructures rely on the regulatory pattern of "one bank, three meetings" to form various payment, clearing, settlement, custody and other systems covering national, industrial and regional markets. According to the assessment results of cpmi-iosco on China's financial infrastructure in 2012, China's financial infrastructure is generally stable, the technical level and institutional arrangements in some fields have reached international standards, and have played a certain role in information collection and support supervision of the industry. The Third Plenary Session of the 18th CPC Central Committee called for "strengthening the construction of financial infrastructure to ensure the safe and efficient operation and overall stability of the financial market". Combined with the international development experience of financial infrastructure, there is great room for improvement in the regulatory and market structure of China's financial infrastructure.

From the perspective of market structure, China's financial infrastructure has changed from decentralized to centralized, but it has been divided again under the influence of multiple factors in recent years. First, market fragmentation makes market monitoring and maintenance more difficult. Moderate competition promotes development, while excessive competition affects stability. At present, three institutions handle the registration and custody business in the bond market. Among them, the exchange market is China Securities Depository and Clearing Corporation, and the inter-bank market is divided into Central Clearing Corporation and Shanghai clearing house. Due to the fragmentation of China's bond market and the implementation of different rules in different markets, there is a certain degree of pricing distortion in the bond market. The repeated construction of financial infrastructure reduces the safety and efficiency of the market. Second, it is more difficult to carry out cross-border business. The fragmentation of the infrastructure of the bond market weakens the overall competitiveness of China's bond market and cannot be consistent with the outside world. It is more difficult to negotiate in the competition in the market opening and foreign cooperation. At the same time, China's financial infrastructure presents the characteristics of differentiated vertical integration mode. The complexity and cost of inter agency adjustment to horizontal integration mode will increase significantly, which is not conducive to international integration. Third, it is more difficult to control risks. The differentiated vertical integration model has potential operational risks. For example, under

the background of immature risk management measures and extreme market fluctuations, the central counterparty has the function of central custodian, which is easy to increase the cross infection of risks.

4.2 Policy Recommendations.

(1) Strengthen legislative supply. In order to create a safe, efficient and stable financial market, it is suggested to study and formulate the basic principles of financial infrastructure supervision, standardize the access, governance structure and operation rules of financial infrastructure, and strengthen the top-level design of financial infrastructure development. In view of the cross market and cross regional trend of financial infrastructure development, we should further study and formulate the regulatory cooperation mechanism and strengthen the sharing of regulatory information. At the same time, in order to give better play to the decisive role of the market in resource allocation, solving the problem of infrastructure fragmentation is the key to current decision-making and the premise of overall supervision of the development of financial infrastructure.

(2) Build a cross-border regulatory cooperation framework. In order to strengthen the leading power of China's international exhibition of financial infrastructure and meet the needs of the international development of various financial infrastructure, it is suggested to study and formulate a cross-border regulatory cooperation framework, reduce the international differences in regulatory standards, guide the orderly development of China's financial infrastructure, and clarify the regulatory responsibilities and requirements of cross-border business, Comprehensively improve the depth and breadth of China's financial regulatory framework.

(3) Improve the construction of market regulation. It is suggested to integrate the rules of the bond market system and improve the securities legal system in promoting the revision of the securities law. For example, the definition scope of securities is revised to include relevant products conforming to securities attributes, take into account the characteristics differences of different trading places, and reserve space for differentiated risk control rules for order driven trading and quotation driven trading[5].

(4) Strengthen the construction of information standardization. It is suggested to establish a unified data information statistics standard in China according to the international standards of financial data statistics, such as the general message scheme for financial services and financial industry (iso20022), and strengthen the data sharing between regulatory authorities and financial infrastructure. On this basis, through regulatory Technology (regtech), further guide the financial infrastructure to deeply mine data, set risk early warning indicators, and improve the effectiveness of institutional supervision and the foresight of market supervision.

5. Conclusion

Promoting the overall planning and construction of financial infrastructure is of vital importance. It is suggested to combine the development level, integration trend and modernization trend of international financial infrastructure, give priority to promoting the formation of a unified securities custody and settlement system in China, and then integrate the infrastructure of different financial sub markets, gradually form a financial infrastructure group according to the direction of specialization, collectivization and internationalization, and break the market segmentation, Improve the overall safety and efficiency of China's financial market.

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