

Research on Asset-backed Securitization of PPP Projects

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Abstract: At the end of 2016, the China Securities Regulatory Commission and the National Development and Reform Commission officially launched asset-backed securities of PPP projects, which to a certain extent eased the difficulties in financing PPP projects and the complexity of social capital exit procedures. In early 2017, China's first asset-backed securities of PPP projects were successfully issued on the Shanghai Stock Exchange, which opened the prelude to China's PPP asset-backed securities. The asset-backed securitization of PPP projects has far-reaching significance for promoting the further healthy and rapid development of China's PPP model. This paper is based on the definition of asset-backed securitization. It expounds the characteristics of asset-backed securitization of PPP projects, the existing problems of asset-backed securitization of PPP projects at the present stage, and puts forward corresponding improvement suggestions.

1. Introduction

In November 2014, The State Council issued the "Guiding Opinions on Investment and Financing Mechanisms in Key Areas of Innovation to Encourage Social Investment", and the PPP (Public-Private-Partnership) model developed rapidly. The number of PPP projects and the amount of investment also showed explosive growth, and the project landing rate increased rapidly. On December 21, 2016, the China Securities Regulatory Commission and the National Development and Reform Commission issued the "Notice on Promoting the Relevant Work on Asset-backed Securitization of PPP Projects in the Traditional Infrastructure Sector", and officially opened asset-backed securitization of PPP projects for the first time.

2. Overview of Asset-backed Securitization

China's asset-backed securitization is in its infancy. With the guidance of the competent national authorities and the participation of different types of financial institutions, the process of asset-backed securitization has also shifted from a partial trial phase to a full-scale issuance.

2.1 Definition and Classification of Asset-backed Securitization

Asset-backed securitization refers to the use of cash flow generated by the underlying assets as repayment support, credit enhancement through structured methods, and the issuance of asset-backed securities business activities [1]. To put it simply: asset-backed securitization is the financing of the future cash flow of the sale of the underlying assets. Asset-backed securitization is currently divided into four types: the Asset Support Special Plan under the supervision of the China Securities Regulatory Commission, the asset-backed bill under the China Interbank Market Dealers Association, and the Project Asset Support Program under the supervision of the China Insurance Regulatory Commission. Securitization of credit assets under the supervision of the People's Bank of China and the China Banking Regulatory Commission [2].

Since this paper mainly discusses asset-backed securitization of PPP projects, the current PPP project is more mature based on project management rights and income rights. Therefore, this paper focuses on three models of asset support special plan, asset support bill and asset support plan. As

shown in Table 1, common PPP asset securitization types are shown.

Table 1 Types of common PPP asset-backed securitization

	Types	Specification file	definition
1	Asset support special plan	Notice on Relevant Issues Concerning Pilots of Securities Companies' Asset Securitization Business	The securities company promotes the asset support beneficiary certificate for the domestic institutional investors, initiates the establishment of a special asset management plan, and uses the funds raised to purchase the specific assets (ie, the basic assets) that the original equity holder can generate the expected stable cash flow. The income from the assets is allocated to the special asset management business activities of the beneficiary certificate holders.
2	Asset support bill	Guidelines for Non-financial Enterprise Asset Support Notes in the Interbank Bond Market	Asset-backed bill refer to debt financing instruments issued by non-financial companies in the inter-bank bond market. The cash flows generated by the underlying assets are backed up by repayments and agreed to repay principal and interest within a certain period of time.
3	Asset support plan	Interim Measures for the Administration of Assets Support Business	The asset support plan business refers to a business activity in which a professional management institution such as an insurance asset management company establishes a support plan as a trustee, provides cash backflow from the underlying assets, and issues beneficiary certificates to qualified investors such as insurance institutions.

2.2 Structure and Process of Asset-backed Securitization

According to the usual practice, the basic process of asset-backed securitization is roughly as follows: At the first, the project issuer (ie, the underlying asset holder) actually sells the assets that need to be securitized to the designated Special Purpose Institution (SPV). These assets are then combined by a special purpose agency to form a specific pool of assets. The future cash flows generated by the asset pool will be used to support the securities issued in the capital market and ultimately used to settle the issued securities. Specifically, a complete asset-backed securitization transaction process generally needs to include the following nine steps:

(1) The initiator of asset-backed securitization determines the underlying assets to be securitized and constructs an asset pool. In general, the basic assets that make up an asset pool need to have several characteristics such as stable cash flow, high homogeneity, relatively high credit rating, and reliable measurement.

(2) Establish a special purpose organization (SPV). The purpose of SPV is to enable the asset-backed securitization promoters (original stakeholders) and securitized assets to be sold in real terms to achieve risk isolation and reduce the negative impact of sponsor bankruptcy on securitized assets.

(3) The sponsor (original equity) actually sells the securitized assets to a special purpose agency (SPV). Through this step, it can be ensured that the creditor of the original asset no longer has recourse to the underlying asset that has been sold, and that the asset does not have to be reinstated to the creditor's debt after the sponsor is bankrupt.

(4) Credit enhancement. By increasing the credit of asset-backed securitization products, not only can the credit level of issued securities be increased, more investors can be attracted, but also the cost of financing through asset-backed securitization can be reduced to a certain extent. The credit rating is higher, and the cost of financing is correspondingly lower. In addition, after the credit is upgraded, the issuer's requirements in terms of accounting, supervision and financing objectives can also be met.

(5) After securitization products have been upgraded by credit, they also need to be rated by

professional rating agencies. The rating results need to be disclosed to investors, so that investors can choose the securities that meet their needs according to their own risk attitudes.

(6) After the credit rating results are announced, the special purpose institution will transfer the credited securitized products to the securities underwriters for underwriting. Commonly used underwriting methods are mainly from public offering and private offering.

(7) The special purpose institution shall pay the issuer the purchase price of the securitized asset at the price agreed upon with the underwriter.

(8) The special purpose agency hires a professional service provider to manage the asset pool, which is usually the sponsor. Because the promoters are relatively familiar with the underlying assets and liabilities of securitization, and also have more professional management skills, it is more convenient to manage the asset pool.

(9) On the reimbursement date agreed upon by the securitized product, the special purpose institution entrusts the asset trustee to pay the principal and interest to the securities investor on time and in full according to the agreement. If there is residual cash inflow after the full repayment of the securitized product is completed, the cash inflow is owned by the sponsor.

So far, the basic process of asset securitization has also ended.

3 Overview of Asset-backed Securitization of PPP Projects

Asset-backed securitization of PPP projects is a securities company and a fund management company's subsidiary as a manager. It establishes an asset-backed special plan to carry out asset securitization business, with PPP project income rights, PPP project assets, and PPP project company equity, etc. It is asset-backed securities issued by the underlying asset or the underlying asset cash flow source [3]. There is no essential difference between PPP project asset-backed securitization and general type project asset-backed securitization in terms of operation principle and operation process. However, due to the characteristics of PPP model, its asset-backed securitization has different characteristics, including:

First, the operational management rights and the charging income rights in the PPP project asset-backed securitization are separated.

According to the “Administrative Measures for Infrastructure and Utilities Franchising” (Order No. 25 of 2015), PPP projects in the fields of transportation, environmental protection, municipal engineering, etc. often involve franchising, so in the process of asset-backed securitization of these PPP projects The project's underlying assets are closely linked to government franchise rights. At the same time, because China has strict access requirements for the transferee of the franchise right, it is difficult to transfer the operation management right in the asset-backed securitization of PPP project. Therefore, in practice, the income right is more separated as the basic asset-backed securitization.

Second, the asset-backed securitization of PPP projects can use financial subsidies as the underlying assets. In the “Guidelines for the Negative List of Fundamental Assets in Asset Securitization Business”, “the local government is the basic asset of the direct or indirect debtor” is included in the negative list, but it is proposed that “the local government cooperates with the government and social capital in accordance with the rules of the prior disclosure of income. Except for financial subsidies that should be paid or borne under the (PPP) model, this provision provides policy possibilities for asset-backed securitization of PPP projects. In fact, financial subsidies, as an important source of income for some PPP projects, can produce stable and predictable cash flows, consistent with the general provisions of the underlying assets in asset-backed securitization.

Third, the term of the asset-backed securitization product of the PPP project should match the term of the PPP project. The term of the PPP project is generally 10-30 years, which is much longer than the current period of the current type of asset-backed securitization products (mostly within 7 years). Therefore, to design a PPP project asset-backed securitization product that matches the long-term characteristics of the PPP project, it is necessary to put forward stricter standards and higher requirements in terms of investment subject access and product liquidity, and continuously promote policy improvement and trading.

Fourth, asset-backed securitization of PPP projects is more concerned with the PPP project itself. The “Notice on Further Improving the Demonstration of PPP Projects” (Finance [2015] No. 57) clearly stipulates that “disguised financing through non-guarantee commitments, repurchase arrangements, and real stock bonds” is strictly prohibited. This banned local governments from committing to PPP project violation guarantees and raised higher requirements for PPP assets. Therefore, in the process of asset-backed securitization of PPP projects, more emphasis should be placed on the ability of project cash flow generation and the credit enhancement of social capital to ensure the smooth development of asset-backed securitization of PPP projects.

4 The Problems of Asset-backed Securitization of PPP Projects

4.1 Imperfect Laws and Regulations

In the current PPP related policy documents, PPP projects are explicitly encouraged to expand financing channels through asset-backed securitization. However, PPP itself as a new reform undertaking, PPP project asset-backed securitization has never had perfect legal protection, and many problems have not been clarified. For example, the issue of the right to income and the transfer of management rights. The right to income is closely dependent on the right to operate, but under the current framework, the right to income can only be used as a basic asset, and it can be transferred to the special purpose carrier of asset-backed securitization, and the right to operate cannot be transferred. If only the income right is used as the underlying asset to sell to SPV for asset securitization business, the operation right still belongs to PPP project company, which is similar to the asset-backed securitization project in which the general ownership is not transferred and the income right is transferred, and the income right project is also generated. The issue of real sale and bankruptcy isolation. But in fact, no matter from the practical level of PPP asset-backed securitization, or from the legal level, there is the effect that the real sale of the underlying assets and the risk income bankruptcy cannot be achieved [4].

4.2 The Trading Mechanism Needs to be Improved

From the actual situation, the relevant mechanisms for the acceptance, review and filing of PPP project asset-backed securitization business are still not perfect, and the current market size of PPP project asset-backed securitization products is relatively small, and product liquidity is low. Moreover, the secondary market trading mechanism of China's asset-backed securitization products is not perfect. For example, it is impossible to carry out standard pledge repurchase. In the PPP project investment, it is difficult for social capital to achieve real exit through asset securitization.

4.3 The Project Deadline Does not Match

The period of the PPP project is long, and the operating period is mostly 10-30 years. In principle, it cannot be less than 10 years. The duration of asset-backed securitization products is generally less than 5 years, and there are few asset-backed securitization products for more than 7 years. Therefore, the term of a single asset-backed securitization product is difficult to cover the full life cycle of a single PPP project [5]. If the asset-backed securitization product based on the PPP project income right expires, and then carry out another asset-backed securitization, not only the procedures are cumbersome, but also the financing cost will increase.

4.4 Lack of Medium and Long-term Investors

At present, the investor groups of domestic asset-backed securitization are mainly commercial banks, brokerage firms, public/private funds, finance companies, etc. These institutions prefer fixed-income products with medium and short-term maturities, usually within 5 years. At present, insurance companies have higher investment thresholds for asset-backed securitization products, and large institutional investors such as enterprise annuities and social security funds have clear restrictions on investment access to asset-backed securitization products. Since the term of the PPP project is usually 10-30 years, if the financing period is short, it is difficult to make full use of the future cash flow of the underlying assets, which makes the power of asset-backed securitization of

high-quality PPP projects insufficient.

5 Improve the PPP Project Asset-backed Securitization Suggestions

5.1 Strengthening the Top Design

On the one hand, it is necessary to construct a complete PPP project asset-backed securitization policy system. Promote the formulation of a special and unified PPP project asset-backed securitization policy document, rationally adjust the problems that hinder development, establish a unified issuance, listing and trading rules, and provide a standardized and reasonable legal framework for the development of PPP project asset-backed securitization business. On the other hand, the PPP competent department should cooperate with the CSRC to promote and improve relevant supporting measures. Clearly address the issues related to SPV, real sale, bankruptcy and other aspects of transfer of management rights, transfer of financial subsidies and asset-backed securitization transactions, clear up obstacles for asset-backed securitization of PPP projects, and actively promote the development of asset-backed securitization of PPP projects.

5.2 Improve the Mechanism Construction

In the next step, efforts should be made to improve the trading mechanism of the secondary market, improve the liquidity of asset-backed securitization products of PPP projects, and establish a market exit mechanism with diversified investment entities. Specifically, we can proceed from the following three aspects:

The first is to introduce a standard pledge repo trading mechanism for PPP project asset-backed securitization products. Standard voucher pledge repo is one of the effective ways to improve the liquidity of PPP project asset-backed securitization products and reduce trading risks. Allowing standard voucher pledge repo to increase product appeal and liquidity [6].

The second is to expand the trading platform of PPP project asset-backed securitization products. The centralized bidding system of the exchange market has a wide range of investors and active trading. The asset-backed securitization products of PPP projects can learn from the classified management methods of corporate bonds, and set certain standards for products. Products that meet the standards can be integrated in the exchange bidding system. Trading on platforms such as fixed income platforms and block trading systems.

The third is to allow public offerings to be made and to expand the market. For PPP project asset-backed securitization, public offering is very important. This is because the single-scale size of PPP project asset-backed securitization is usually large, the financing period is usually long, and the public offering is realized, which can effectively solve the problem of funding sources.

5.3 Strive to Achieve a Reasonable Distribution of Risks

Risk isolation is the requirement and guarantee for the asset-backed securitization of PPP projects. In the actual operation process, on the one hand, the PPP project company is separated from the risk of asset-backed securitization SPV through the design of real sale, bankruptcy isolation, etc. On the other hand, we must also avoid excessive transfer of risks, and strive to achieve a reasonable distribution of risks. This requires a scientific and reasonable risk allocation framework in the PPP project, so that the most appropriate party can bear the most appropriate risk. The design of different project risk allocation frameworks is different, but no matter what project, the core point is to be fair, equal and mutually beneficial, stress sharing and benefit sharing, no one should enjoy exclusive benefits, no one should profit.

5.4 Actively Guiding Medium and Long-term Institutional Investors

The PPP project has the characteristics of large investment scale, long term, stable income, etc., matching the needs of medium and long-term institutional investors, and matching with the investment needs of insurance and annuity. It is recommended to design asset-backed securitization products that meet the characteristics of PPP projects and cover the entire life cycle of PPP projects, and introduce relevant supporting measures to introduce medium and long-term institutional

investors, and encourage institutional investors such as insurance funds, social security funds, pension funds, and housing provident funds to participate. PPP project asset-backed securitization product investment. In addition, it is also possible to actively introduce various types of market funds such as PPP funds, invest in PPP project asset-backed securitization products, promote the establishment of a diversified and sustainable PPP project funding guarantee mechanism, and promote the development of the PPP model.

6 Conclusion

The main difference between asset-backed securitization of PPP projects and other asset-backed securitization products is the particularity of the PPP project itself. The PPP project is a cooperation between the government and social capital. As the basic asset of the PPP project asset securitization, it is usually the income right of the PPP project. Therefore, the risk of underlying assets and cash flow has a direct and important relationship with whether the government and social entities have strong performance capabilities. As a form of financial innovation, the asset-backed securitization of PPP projects is still in the stage of exploration and experimentation. The PPP project asset securitization business enriched the financing tools and investment exit channels of the social capital parties and related parties of the PPP project, which provided support for the sustainable and healthy development of the PPP model.

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