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Infrastructure Asset-Backed Securitization (IABS) - Case Studies

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Case Study on IABS for toll roads in Indonesia

Case Study on IABS (Indonesia) – Securitization of Jakarta-Bogor-Ciawi (Jagorawi) toll road project

In August 2017, Jasa Marga, the largest toll road operator in Indonesia, sold its rights to future cash flow from the Jakarta-Bogor-Ciawi (Jagorawi) toll road, the country's oldest toll road, to a collective investment contract (KIK) established by PT Mandiri Manajemen Investasi (the investment manager) and PT Bank Rakyat Indonesia (the custodian bank). The KIK issued asset-backed securities (ABS or EBA) of IDR 2.0 trillion with the right to future cash flow as the source of payment for the principal, coupon, and all expenses related to the transaction.

Collective Investment Contract of Asset Backed Securities ("KIK-EBA"): The KIK-EBA structure does not require an SPV. A KIK-EBA is a quasi-legal entity established by way of contract by the investment manager and custodian bank. A KIK-EBA has its own assets and liabilities as well as its own tax obligations separate from the obligations of its founders.

Transaction Details

KIK EBA Mandiri JSMR01	
Originator and Collection Agent	PT Jasa Marga (Persero) Tbk
Investment Manager	PT Mandiri Manajemen Investasi
Custodian Bank	PT Bank Rakyat Indonesia (Persero) Tbk
Underlying Assets	5-year future cash flow from Jagorawi toll revenue
Total Cash Flow Amount	IDR 2,600 billion
Total EBA Issuance (Class A and B)	IDR 2,000 billion
Tenor	5 years
Principal Payment	Equal annual amortization
Coupon Payment	8.4% (annual rate) paid quarterly

Investor Class: The issuance was heavily oversubscribed at IDR 5.1 trillion, more than 2 times the total issuance value. Investors include banks, large international pension funds, asset management companies and insurance companies. The breakdown of investors in JSMR01: banks (48%), pension funds (21%),

BPJS-TK (12%), insurance companies (8%), SMI (4%) and others (7%).

Key Takeaways

- Alternative source of funding: Initiating securitization of the toll revenues opened possibilities to alternative funding sources from investors like large international pension funds, asset management companies and banks.
- Internal credit enhancements in terms of sub-ordination of Class B EBA and liquidity reserves were utilized. PEFINDO has assigned the highest debt security rating of AAA based on:
    - The obligors' capacity to meet its long-term financial commitment on the debt security, relative to other Indonesian obligors, is superior.
    - The rating reflects the very strong profile of the Jagorawi toll road, the very strong profile of Jasa Marga as the collection agent, and strong future cash flow projections.

Source: Credit Suisse (Jasa Marga (Persero) TBK PT - Credit Suisse)

Case Study on IABS for mobilizing institutional investors in India

Case Study (India): Credit enhancement of project bonds to mobilize institutional investors

The Asian Development Bank (ADB) established a first-of-its-kind guarantee facility to issue partial credit guarantees (PCGs) without government counter guarantee in aggregate of up to INR 7,168,000,000 in favor of eligible financial institutions providing credit enhancement for infrastructure project bonds in India. By providing credit enhancements, the facility will raise the credit rating of infrastructure project bonds to the required AA rating, thereby providing the critical missing step required to mobilize infrastructure financing from pension and insurance funds and promote development of the domestic corporate debt market.

Partial Credit Guarantee (PCG): The ADB has provided PCG to India Infrastructure Financing Company Ltd (IIFCL), a participating infrastructure intermediary (PFI), for project bond issuances by:

- Renew Wind Energy (Jath) Ltd in September 2015 to finance 84.65MW Wind Power Project in Maharashtra
- Porbandar Solar Power Limited in December 2015 to refinance 15MW Solar Power Plant in Porbandar, Gujarat

The PCGs under the facility involves the following main steps.

- A special purpose vehicle (SPV) operating an eligible infrastructure project issues a project bond.
- An eligible PFI will enhance the credit of the project bond to AA by providing a first loss guarantee.
- Third, ADB will provide a counter guarantee to the PFI for up to 50% of the exposure assumed by it under the first loss guarantee.

The first loss structure essentially acts as a credit buffer to bondholders.

Transaction Structure

Figure: Case Study (India): Credit enhancement of project bonds to mobilize institutional investors

Case Study (India): Credit enhancement of project bonds to mobilize institutional investors

Impact: Through partial guarantee from IIFCL, the bond's rating was credit enhanced to AA+ and was successfully subscribed.

Source: ADB (https://www.adb.org/sites/default/files/project-documents/43932/43932-014-xarr-en.pdf)

Key Takeaways

- Optimal market conditions: There is a need for optimal market conditions, particularly the interest rate conditions at the time of introducing a new fixed rate product.
- Regulatory restrictions: There needs to be discussion to address the regulatory restrictions and measures to mitigate heavy legal documentation for a new financial product.
- Early dissemination of new product information to educate stakeholders: As many stakeholders are involved in this facility, and especially for new products, it is important to educate the stakeholders to bring them up to speed on the pros and cons of the product. This will improve the perception and willingness to partake.
- Enhancement of technical capabilities of implementing agencies: Entities can consider establishing technical assistance facility to help with capacity building such as training, project preparation, understanding the regulations amongst others.

Case Study on IABS for catalyzing institutional investment in Nigeria

Case Study (Nigeria): InfraCredit catalyzing institutional investments in Nigeria

GuarantCo and the Nigeria Sovereign Investment Authority (NSIA) established the Nigerian Infrastructure Credit Enhancement Facility (InfraCredit) in 2017 to act as a market champion for the development of the local debt capital markets and to mobilize long-term investment from local institutional investors e.g., pension funds, insurance companies, and finance infrastructure projects in Nigeria in local currency. This is the first Nigerian based credit guarantor focused on credit enhancing infrastructure bonds.

Second-loss contingent funding

InfraCredit will provide guarantees to enhance the credit quality of local currency debt instruments (mainly in the form of corporate/infrastructure bonds) issued by eligible entities (corporates, state governments) to finance creditworthy infrastructure projects in Nigeria. InfraCredit will be capitalized with up to $200m, composed of paid-in equity and "second loss" contingent capital.

GuarantCo has executed a Callable Capital Funding Facility Agreement, providing $50m of the contingent capital, and will act as lead arranger for a further $50m to be sourced from international DFIs with high investment grade ratings.

NSIA has committed to subscribe $25m (Naira equivalent) of the paid in equity, with other investment interests to be sourced largely from institutional investors and international finance institutions.

Business Model of InfraCredit

Figure: Case Study (Nigeria): InfraCredit catalyzing institutional investments in Nigeria

Impact: With InfraCredit's guarantee, GPC Energy and Logistics Limited, a leading transportation and logistics company, was able to access the domestic debt capital markets for the first time and raised

NGN20 Billion 10-year Series 1 Guaranteed Bond under a NGN50 Billion program.

- The NGN20 Billion Series 1 Guaranteed Fixed Rate Infrastructure Bonds Due 2031 under a NGN50 billion Debt Issuance Programme was accorded a 'AAA' long term credit rating by Agusto and Co. and DataPro Limited, reflecting the highest degree of creditworthiness for bonds.

The Series 1 Bonds, a 10-Year Guaranteed Fixed Bond, was 25.3% oversubscribed by institutional investors including nine domestic pension funds.

Source: InfraCo Africa (https://infracoafrica.com/project/infracredit/), GuarantCo (https://guarantco.com/blended-knowledge/developing-local-currency-guarantors-tosupport-the-development-of-local-capital-markets-infracredit-nigeria-and-beyond-2/)

Case Study on IABS for future infrastructure

Case study (Thailand): Securitization of Highway Assets via the Thailand Future Fund

The State Enterprise Policy Office (SEPO), under the Ministry of Finance, established the Thailand Future Fund (TFFIF) in 2016. The TFFIF is a closed-end infrastructure fund aimed at monetizing highway assets through securitization. The fund was made available to general investors via an Initial Public Offering (IPO) in October 2018, in which it raised approximately USD 1.4 billion (THB 44.7 billion).

Fund Details

Under a Revenue Transfer Agreement, the TFFIF holds rights to 45% of the net toll revenue from two expressways: (i) the Chalong Rat Expressway, about 28.2 kilometers long serving northern Bangkok; and (ii) the Burapha Withi Expressway, about 55 kilometers long connecting southeastern Bangkok to critical industrial area Chonburi.

The TFFIF is managed by Krungthai Asset Management PCL (KTAM) and MFC Asset Management PCL (MFC), and supervised by the appointed trustee, Kasikorn Bank. The Expressway Authority of Thailand (EXAT) remains the property owner and manages the operations of the expressway assets. The Ministry of Finance of Thailand has been approved to hold minimally 10% of the total unitholdings in the Fund until the end-of the 5-year period after the start of the public trading in October 2018, with total subscription value not exceeding 10 billion baht.

Figure: Case study (Thailand): Securitization of Highway Assets via the Thailand Future Fund

Legend

- KTAM: Krungthai Asset Management Public Company Limited
- MFC: MFC Asset Management Public Company Limited
- EXAT : Expressway Authority of Thailand

Note: (1) The Ministry of Finance has been approved to hold investment units and subscribe to additional investment units (if any) to maintain the proportion of investment units in the fund at no less than 10% of the total investment units until the end of the 5-year period from the date the fund's investment units offered to the public for the first time start trading on the stock exchange, with a total subscription value not exceeding 10 billion baht, unless the Cabinet decides to allow the Ministry of Finance to subscribe to a higher number of investment units.

Thailand Future Fund – IPO Details

Transaction Structure and Business model	The transaction is structured as a public offering where units of the TFFIF are sold to investors. Revenue from toll collections is used to pay dividends to unit holders.
Originator and Collection Agent	Expressway Authority of Thailand (Exat)
Management Company	Krungthai Asset Management, MFC Asset Management
Custodian Bank	Krung Thai Bank
	Road Infrastructure
Underlying Assets and Asset Types	45% of net toll revenues from Chalong Rat Expressway and Burapha Withi Expressway under a Revenue Transfer Agreement (RTA) with Exat, for 30 years from the Transfer Date in the RTA
Total Issuance	Approximately USD 1.4 billion (THB 44.7 billion) during its IPO
Coupon payment	4.75% to 5.3%
Investor classes	Breakdown of unit issuance during the IPO: • 46.1% reserved for public (retail investors), • 33.5% for cornerstone investors (investors who agreed in advance to subscribe in the IPO), • 16% for institutional investors, • 8% for Ministry of Finance 15 cornerstone investors committed to the fund before the IPO launch: AIA, Muang Thai Life Assurance, Siam Commercial Bank Asset Management, Land and House Bank, Kasikorn Asset Management, Bangkok Life Assurance, Mahidol University
Legal Advice	Baker McKenzie
Joint international bookrunners	Bank of America Merrill Lynch, JP Morgan
Joint domestic book runners	Finansa Securities, Krungthai Bank, Phatra Securities
Bond rating	Quasi-sovereign nature. Rated a Risk Level 7

Future Developments

- Potential future assets: The fund started with two mature expressway assets. There is potential to expand the asset base to more motorways such as the Department of Highway's Bangkok Motorway 7 (Bangkok – Ban Chang) and Bangkok Motorway 9 (Bangkok Outer Ring Road) to fund their toll-based operations.
- Re-investment of capital: The capital from the fund will be invested to raise funds for future cash flows in Exat-run projects. The SEPO has noted plans to invest in greenfield projects in other sectors such as ports, airports, telecommunications, such as Stage 2 of the Rama3-Dao Khanong Expressway, and Stage 3 of the East-West Corridor Sector N2, and the MRT Brown Line.

Sources: Thailand Future Fund (https://www.tffif.com/th/about/fund-structure) Krung Thai Asset Management (https://www.ktam.co.th/property-fund-detail.aspx?IdF=11), Stock Exchange of Thailand

(https://www.set.or.th/thailandfocus/2018/files/Summary07_The_Launch_of_Thailand_Future_Fund.pdf)

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- **The PPPRC Asset Recycling Section**
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This section has not been prepared with any specific transaction in mind and are meant to serve only as general guidance. It is therefore critical that the content will be reviewed and adapted for specific transactions.

This is a new section of the website and is currently in draft form. For feedback on the content of this section or to suggest additional links or materials, please contact the PPP Resource Center using the feedback form.