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Opportunities and challenges of implementing asset-backed securities in Indonesia

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ABSTRACT

Budget constraints continue to hinder the Indonesian government's ability to maximize infrastructure development. In order to address these limitations, innovative financing methods are essential for accelerating infrastructure projects with restricted resources. This study explores the potential and challenges of implementing asset-backed securities (ABS) as an alternative financing mechanism for infrastructure development in Indonesia. Employing a qualitative research approach, this study utilizes primary data from interviews and secondary data from financial statements, prospectuses, and previous research on infrastructure asset securitization. The findings indicate that although ABS can serve as a viable alternative financing method for infrastructure development, its implementation presents several challenges. This study aims to contribute valuable insights for regulators, originators, and investors to facilitate the more effective adoption of asset securitization in Indonesia.

KEYWORDS:
Asset securitization; asset-backed securities; state-owned enterprise assignments

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INTRODUCTION

Financial limitations currently impede the Indonesian government's efforts to maximize infrastructure development. The "2020–2024 National Medium-Term Development Plan" (RPJMN) states that the Indonesian government must spend at least IDR 6,445 trillion on infrastructure during this period. Unfortunately, the State/Local Government Budget (APBN/D) cannot fully cover this substantial financial requirement. Only about 37% of the total funding, or IDR 2,385 trillion, can be met through the APBN/D (Government of the Republic of Indonesia, 2020). State-owned enterprises (SOEs) will finance 21% of the required amount, or ~IDR 1,353 trillion, whereas the remaining 42%, or IDR 2,707 trillion, will be funded through private sector involvement (Ministry of National Development Planning, 2020), as illustrated in Figure 1.

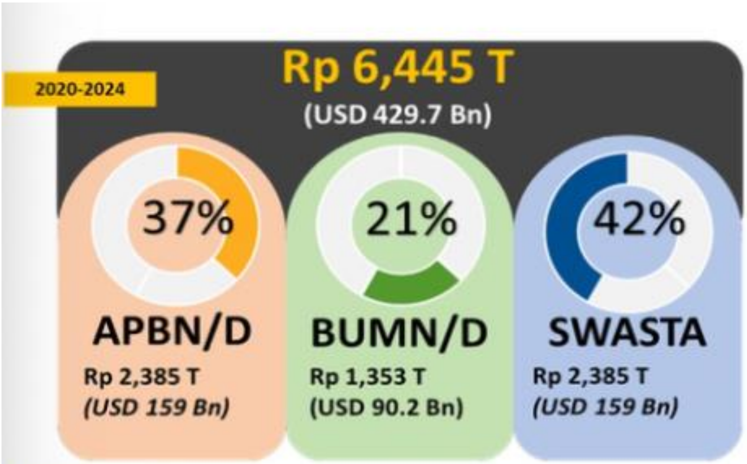

Figure 1. Infrastructure Financing Framework 2020–2024

Source: *Ministry of National Development Planning, 2020 & Amalia, 2019*

Innovative financing solutions are needed to accelerate infrastructure development with these limited resources. The use of creative financing aligns with the RPJMN 2020–2024 infrastructure funding model, which treats APBN/D as a last resort. Only essential expenditures—those that are urgent, fundamental, or cannot be delayed—are eligible for funding through APBN/D (Government of the Republic of Indonesia, 2020). Consequently, the government seeks to implement several innovative financing techniques to support infrastructure development.

Various funding sources are available to the government for infrastructure development, including contributions from the private sector, SOEs, and the Public Private Partnership (Anugrah et al., 2020; Government of the Republic of Indonesia, 2020). However, this study focuses specifically on SOE assignments as a financing mechanism (i.e., government mandate from the President or relevant technical ministry) directing an SOE to construct and/or operate certain infrastructure (Surachman, 2022). SOE assignments can be made either bottom-up or top-down (Surachman, 2022). When assigned a project, SOEs require substantial funding for infrastructure development. Because they function both as corporations and government agencies, they have multiple options for securing financing. For example, they can raise funds through equity offerings, debt issuance, or asset securitization (Surachman, 2022). This study focuses primarily on asset securitization as the financing strategy.

According to Presidential Regulation Number 1 of 2008, which amends Presidential Regulation Number 19 of 2005 on secondary housing financing, securitization is the process of converting illiquid assets into liquid ones by purchasing financial assets from the original creditor and issuing asset-backed securities (ABSs). Apart from these, Nassr and Wehinger (2014) identified several other types of asset securitization, including collateralized debt obligations, mortgage-backed securities (MBSs), and asset-backed commercial paper.

The two most common forms of asset securitization in Indonesia are ABS and MBS, differing based on the type of collateral. ABS covers a broader range of assets, including credit card receivables, small and medium enterprise loans, vehicle loans, leases, and other financial assets eligible for securitization (Sari et al., 2017; Yarett et al., 2021). In contrast, MBS is backed specifically by pools of housing loans, both commercial or residential (Sari et al., 2017). Although MBS falls under a broader category of ABS, it is often treated separately in research due to its high volume and to prevent data bias (Sari et al., 2017).

This study focuses specifically on ABS as a form of asset securitization because it presents a promising alternative for infrastructure financing, where the underlying collateral consists of infrastructure assets. Moreover, ABS remains underexplored in academic literature; hence, we are provided an opportunity to contribute fresh insights. By examining ABS in the context of infrastructure financing, this study aims to address research gaps and present a new perspective on its potential application.

In Indonesia, asset securitization is a relatively new practice. However, it has significant potential when analyzed from the supply side (Suselo et al., 2013). This is evident in Indonesia's infrastructure financing gap, which amounts to IDR 6,445 trillion, with 63% of this amount unfunded by the APBN (Ministry of National Development Planning, 2020). This suggests that asset securitization could be a viable funding source for large-scale infrastructure projects (Buchanan, 2016). Furthermore, several SOEs have successfully implemented securitization strategies. For instance, PT Jasa Marga securitized toll road revenue from the Jakarta Outer Ring Road to secure Rp2.5 trillion in funding. Similarly, PT Waskita Karya pledged five toll roads as part of its asset securitization efforts (Sidik, 2020). Other examples include Bank BTN, which has experience securitizing home ownership loan receivables, and PT Garuda Indonesia, which leveraged ticket sales revenue from Jeddah and Madinah flight routes as collateral for asset securitization (Fiscal Policy Agency, 2021).

Based on these prior studies, the authors seek to explore the potential for expanding securitization in Indonesia and the challenges associated with its implementation. Research on ABS in Indonesia remains limited, as most previous studies have focused on securitization for micro, small, and medium enterprise financing (Sari et al., 2017; Santoso et al., 2014). Other relevant studies include those by Suselo et al. (2013) and Amelia (2011), which primarily examined asset securitization as an alternative funding source for banks and financial institutions. Their research also explored the feasibility of secondary mortgage facilities for Indonesian banks and identified the necessary steps to promote MBSs. In contrast, this study aims to analyze the potential and challenges of implementing ABS as an alternative infrastructure financing solution in Indonesia. Additionally, this research proposes recommendations to facilitate the development of asset securitization in the country.

Principal–Agent Theory

Agency theory defines the contractual relationship between an owner (principal) and another party who acts as the principal's agent to perform certain services (Jensen & Meckling, 1976). Under this contractual arrangement, shareholders delegate certain decision-making authority to management to maximize profits (Firmansyah et al., 2021; Johnson & Koyama, 2016). However, conflicts frequently arise due to differences in interests or imbalances in the information available to shareholders and management (Jensen & Meckling, 1976). This issue is referred to as the "agency problem."

Agency theory can also be applied to the relationship between the government and the management of SOEs. The government, through the Ministry of State-Owned Enterprises, is the majority shareholder of most SOEs in Indonesia. In this context, the government serves as the principal, whereas SOE management functions as an agent responsible for carrying out government-mandated tasks. Agency theory also considers incentives as a mechanism for the principal to regulate the agent's actions (Damayanti, 2011). Like private firms, SOEs implement a structured system of performance incentives for members of the board of directors or commissioners, as outlined in "Regulation of the Minister of SOEs Number PER-3/MBU/03/2023."

However, agency theory is not entirely suitable for application in the public sector because the public and private sectors pursue different objectives. The government prioritizes public welfare through service delivery, whereas private enterprises focus on profit maximization (Dincecco & Katz, 2016; Hu et al., 2024). Despite these conflicting objectives, SOEs balance both roles, functioning as corporate entities and government agents. As businesses, SOEs share the same goal as private companies—to generate profits. As government agents, they fulfill several mandates outlined in "Law Number 19 of 2003" concerning SOEs, including contributing to national economic development and state revenues, providing public services by ensuring the availability of essential goods and services, pioneering business activities that the private sector and cooperatives cannot undertake, and assisting disadvantaged economic groups, cooperatives, and communities.

Notably, as a shareholder, the government has its own objectives in managing SOEs. According to the Indonesia Stock Exchange (2018), the government's primary aim in owning SOEs is political and social rather than purely financial. Although these objectives do not always align with those of SOEs as private enterprises, studies indicate that government ownership provides strategic advantages (Angela et al., 2019). For instance, SOEs enjoy preferential access to government projects, particularly infrastructure development (Diharja & Rossieta, 2014). Additionally, SOEs often receive special treatment, including easier access to resources, bailouts, regulatory flexibility, favorable loan and trade terms, and direct financial assistance from the government (Shleifer & Vishny, 2000; Wang et al., 2008; Zhou et al., 2016). Ultimately, government ownership can enhance SOE performance by providing unique benefits that improve operational efficiency and financial stability (Le & Chizema, 2011; Shleifer & Vishny, 2000; Sun et al., 2002).

Asset-Backed Securities (ABSs)

Lumpkin (1999) defined securitization as the process of pooling together similar assets and repackaging them with specific features, such as predetermined interest rates and economic benefits, for sale to investors. The Committee on the Global Financial System (2005) reinforced this definition, describing securitization as a mechanism that transforms illiquid and high-risk assets into liquid, lower-risk, and more marketable assets.

Several Indonesian regulations also define asset securitization. According to Bank of Indonesia Regulation Number 7/4/PBI/2005 on Prudential Principles in Asset Securitization Activities for Commercial Banks, asset securitization involves the issuance of securities backed by financial assets transferred from the original creditor, with investor payments derived from proceeds generated by these securities. Presidential Regulation Number 1 of 2008 defines securitization as converting illiquid assets into liquid ones by purchasing financial assets from the original creditor and issuing ABSs. Meanwhile, Financial Services Authority Regulation Number 23/POJK.04/2014 describes secondary financing as the redistribution of medium- and long-term funds to the original creditor through the acquisition and resale of receivable pools, either via ABSparticipating certificates or the direct purchase of receivables from them.

Saunders and Cornett (2011) and Gorton & Metrick (2012) outlined the asset securitization process as follows. First, a bank acting as the originator transfers a pool of assets from its balance sheet to a special purpose vehicle (SPV) through a legitimate sale. An SPV is a specially created institution established by the arranger with a limited lifespan, typically lasting only until the maturity of the issued securities. Before transferring assets to an SPV, the bank selects them based on specific criteria. The SPV then issues securities backed by the cash flows of the transferred assets via ABS securitization. These ABS securities are subsequently offered to institutional and retail investors. The funds generated from the sale of ABS are transferred back to the originator in exchange for the asset pool. The SPV is responsible for distributing interest and principal payments to investors until the securities mature. As the securitization process unfolds, all debtor payments and associated collateral become the investors' property. The complete securitization transaction process is summarized in Figure 2.

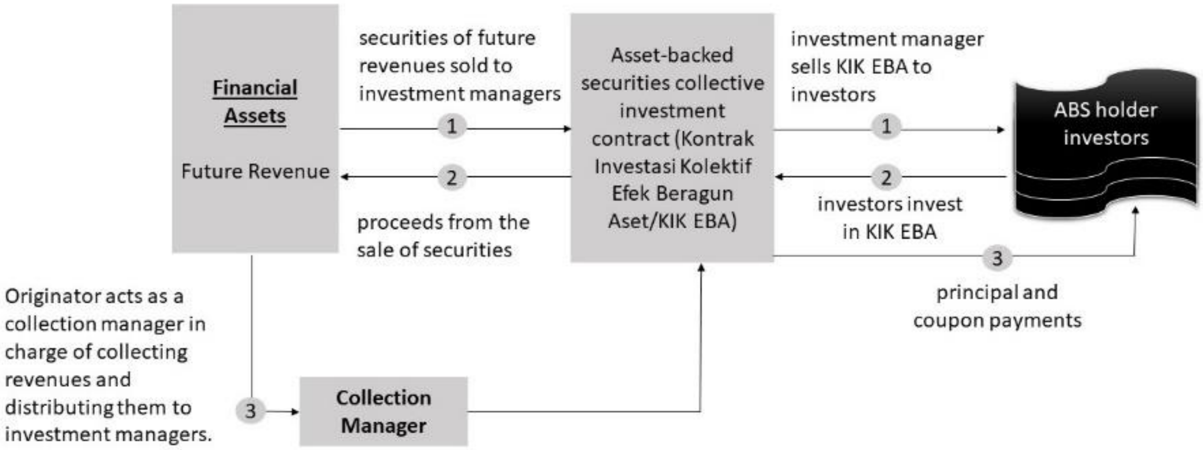

Figure 2. Securitization Asset Process
Source: *PT Jasa Marga (adjusted by the authors), 2017*

ABSs play a vital role in enhancing market liquidity by converting illiquid assets into tradeable securities, thereby expanding investment opportunities (Ayotte & Gaon, 2011; Deku et al., 2019). This transformation is fundamental to the efficient functioning of modern financial markets (Bhattacharya & Fabozzi, 1996). A study on the Term Asset-Backed Securities Loan Facility (TALF), which facilitates Federal Reserve lending to eligible borrowers against ABSs, suggested that TALF reduces borrowing costs for consumers and businesses (Campbell et al., 2011). The study also found that TALF improves securitization market conditions without subsidizing individual securities and poses minimal risk of financial loss to the U.S. government (Campbell et al., 2011).

Further research by Fabozzi and Kothari (2008) also Kaniadakis and Constantinides (2014) highlighted the continuous evolution of the ABS market, which has introduced innovative financial instruments that benefit both investors and issuers. However, stakeholders must remain cautious of the inherent risks associated with ABS. Proper due diligence, transparency, and adherence to regulatory frameworks are essential for maintaining market stability and investor confidence (Fabozzi & Kothari, 2008).

RESEARCH METHOD

This study utilizes both primary and secondary data. The primary data were collected through semi-structured interviews, which began with a list of themes determined by the researcher in the form of key questions further developed during the interview process. Secondary data was obtained from PT Jasa Marga's financial statements, prospecta, asset securitization journals, working papers, and other related references.

The research participants included academics, staff from the Committee for Accelerating the Provision of Priority Infrastructure (KPPIP), the Financial Services Authority, the Directorate General of Budget Financing and Risk Management, the Ministry of SOEs, PT Jasa Marga, and PT Penjaminan Infrastruktur Indonesia. The selection of informants was based on their involvement, expertise, and professional experience with infrastructure asset securitization. Interviews were conducted to develop a comprehensive understanding of the securitization mechanism, to support data triangulation, and to provide insights into the implementation of securitization in Indonesia from the perspectives of regulators, academics, and infrastructure guarantors. Table 1 presents a complete list of informants and their respective institutions.

Table 1. Informant and Interview Details

Informant	Agency
EK	Academics
YG	Committee for Accelerating the Provision of Priority Infrastructure
BM	Committee for Accelerating the Provision of Priority Infrastructure
ES	Committee for Accelerating the Provision of Priority Infrastructure
OC	Directorate General of Budget Financing and Risk Management, Ministry of Finance
RD	PT Penjaminan Infrastruktur Indonesia
SP	Ministry of State-Owned Enterprises
ID	PT Jasa Marga
AD	PT Jasa Marga

The authors employed thematic analysis to examine qualitative data, a process that included transcription and coding. Data gathered from the interviews were transcribed verbatim and then coded using NVIVO software. This helped identify connections between codes, draw conclusions, and extract essential information that might have been overlooked. The expected output from NVIVO included project maps, mind maps, and concept maps, which were then used as the foundation for the narrative and analysis in the result and discussion section.

RESULT AND DISCUSSION

The authors conducted a first- and second-cycle coding process (Charmaz, 2006), which involved grouping data into categories or themes. With NVIVO, the authors categorized information from interview transcripts into two primary themes: “Securitization Potential” and “Securitization Challenges.” The overall coding results are presented as a project map, illustrated in Figure 3.

Opportunities of Asset Securitization in Indonesia

Several studies have explored asset securitization as a potential financing alternative. For example, Suselo et al. (2013) stated that asset securitization is a widely used financing option for financial companies. Similarly, Amelia (2011) indicated that the potential for future development of asset securitization remains vast. However, this potential has not been fully utilized. Both studies suggested that Indonesia has significant opportunities for asset securitization, although they do not specifically address ABS securitization.

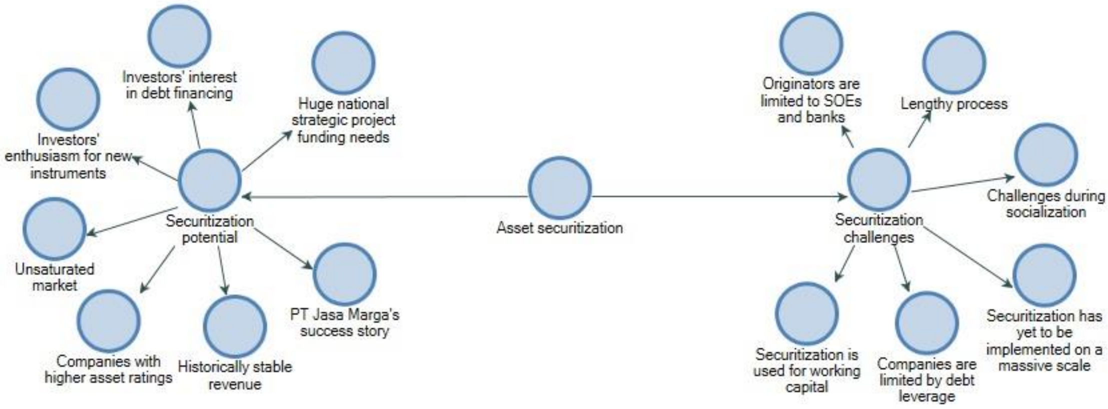

Figure 3. Project Map of Research Themes

One of the key factors supporting asset securitization for infrastructure financing is the high financing need for a National Strategic Project (PSN). YG noted, "If you look at the total project plan, from KPPIP alone, the PSN still requires a lot of dollars. So far, it can be explored." This statement was supported by data from the Coordinating Ministry of Economic Affairs (2023), which indicated that 31 PSN projects worth IDR 172 trillion were set for completion by 2024, excluding industrial park development. Additionally, the government identified 56 more PSN projects for completion after 2024, with a total investment value of IDR 1,963 trillion, excluding industrial estate development (Coordinating Ministry of Economic Affairs, 2023; Theodora, 2023).

The government has also developed a financial strategy to accelerate PSN completion. Of the total expected PSN investment of IDR 5,746 trillion, approximately 67% will be funded by the private sector, 20% by SOEs, and 13% by the government through the state budget (Theodora, 2023). The substantial involvement of the private sector and SOEs in PSN development demonstrates that there is significant room for creative financing mechanisms, including asset securitization.

Another key factor is investor demand for debt financing over equity financing. Investors prefer debt financing because it offers more predictable returns than stock investments, where share value fluctuations increase the risk of loss (Doherty & Schlesinger, 2002; Susilawati, 2016). Additionally, debt investors receive priority repayment in financial distress over equity investors. For example, when a company declares bankruptcy, its first obligation is to pay creditors, including debt financing investors.

> "...yet, there is a lot of demand since investors are more confident in debt than equity financing. Mutual funds, for example, are used to finance infrastructure projects through limited participation mutual funds (Reksa Dana Penyertaan Terbatas/RDPT), which are equity-based. Well, on the demand side, an investor is less likely to invest there. Instead, there is more opportunity for debt financing" (BM).

Moreover, institutional investors are particularly eager to invest in new financial products because they aim to diversify their portfolios, which helps reduce investment risk in volatile market conditions (Dewi, 2020; Klein et al., 2021). Investing in securitization allows investors to diversify their holdings while mitigating risk.

> “As for potential, investors are satisfied when they are supplied with a decent product. Indeed, as long as the risk is quantified and the gain appeals to them, they will want it. It’s simply a matter of how you package the product so that the risk is manageable. The goal is to get an AAA rating, and the interest rate is appealing to investors. As a result, most investors are looking forward to that” (ID).

Market saturation occurs when the supply of products exceeds demand, causing stagnation (Tusin, 2022), and the market for ABSs is far from saturated. However, the ABS market in Indonesia remains underdeveloped, with only PT Jasa Marga and PT Garuda Indonesia issuing securitizations based on future revenue. Despite this, investor interest in ABS remains strong, suggesting that demand exceeds supply and that the market has ample room for growth.

This trend was evident when Jasa Marga and PT Indonesia Power launched securitization offerings in 2017. PT Jasa Marga’s issuance was oversubscribed by IDR 5.1 trillion -2.5 times its IDR 2 trillion offering (Audriene, 2017). Similarly, Indonesia Power’s securitization offering reached IDR 10 trillion in oversubscriptions, far surpassing its initial IDR 4 trillion issuance (Eviondra, 2017). These figures underscore the strong investor demand for ABS, reinforcing its viability as an infrastructure financing solution.

> “I do not think infrastructure securitization is overly saturated. No, it is not like a government bond that Bank Indonesia buys all of, which is really saturated. This indicates that the market for infrastructure securitization is still not saturated, in the sense that there is positive demand” (BM).

Another factor favoring securitization is that companies with high-rated assets but lower corporate ratings can benefit from it. Because asset cash flows back ABS issuances, companies can issue ABS using higher-rated assets as collateral rather than relying on their overall corporate credit rating (Kara et al., 2016; Le et al., 2016). For example, PT Jasa Marga has a corporate rating of AA, whereas its Jagorawi toll road has a AAA rating, making it a strong candidate for securitization (Saputra, 2017).

> “Similar to the case of Jasa Marga, in terms of the issuer, perhaps the opportunity exists for companies with underlying assets that are highly rated than the company itself. For example, Jasa Marga has an AA corporate rating, while the Jagorawi toll road can be rated AAA” (AD).

Furthermore, based on PT Jasa Marga’s securitization experience, companies issuing ABS must have a stable historical income. If income fluctuates significantly, it becomes difficult to convince investors and stakeholders that the securitization product is secure (Abdelsalam et al., 2022; Acharya et al., 2013). Finally, PT Jasa Marga’s success in asset securitization can pave the way for other originators to issue ABS. The PT Jasa Marga securitization case serves as both an example and a learning tool for other companies considering ABS issuances. Investors and stakeholders who participated in PT Jasa Marga’s ABS issuance process will now better understand securitization, making future issuances easier to explain and market to investors.

Challenges to Implementing Asset Securitization in Indonesia

Although ABS has significant development potential in terms of both demand and supply, its implementation presents several challenges. One of the primary obstacles is the limited number of ABS originators in Indonesia, which are mostly restricted to SOEs and banks. To date, only a small number of companies have issued securitization. For example, PT Jasa Marga, which securitized revenue from the Jagorawi toll road, and PT Garuda Indonesia, which securitized ticket sales revenue from Jeddah and Madinah flight routes, are among the few SOEs that have done so. Other examples include Bank BTN, which securitized mortgage receivables, and PT Indonesia Power, which securitized receivables under the Power Purchase Agreement (Coordinating Ministry for

Economic Affairs, 2017).

Another challenge is that, compared with other funding options such as bond issuances or bank loans, the securitization process is significantly longer and more complex (Cheng et al., 2011; Carbo-Valverde et al., 2015). Companies must secure approvals from multiple regulators before they can issue securitization, making the licensing process both time-consuming and administratively demanding. Additionally, structuring securitization itself is a lengthy process (Shi & Shang, 2021).

> “The first challenge is from the internal one. To meet the securitization structure as it is today, we have to go through a long process. Historically, only receivables have been securitized, but Jasa Marga has no receivables. The next one is conducting hearings with regulators. One of them is the Directorate General of Taxes regarding tax issues. ...because there are three things that are exempt from Value Added Tax (VAT), right? ...and one of them is securities. That’s why we finally packaged this securitization as securities. Well, that was also criticized by the Directorate General of Taxes” (AD).

AD’s explanation clarifies that securitization was still a relatively new concept in Indonesia in 2017, and PT Jasa Marga was the first company to issue securitization with future revenue as the underlying asset. Without a prior model to follow, the company had to develop a securitization framework from scratch, significantly extending the approval and issuance timeline. PT Jasa Marga required approximately six months to complete the securitization process before the product was ready for issuance. Another major hurdle is convincing stakeholders. Based on PT Jasa Marga’s experience, originators must work extensively to persuade stakeholders, particularly investors, that the projected future revenue is secure. It is not enough to simply state that past revenue was stable; the originator must also demonstrate that the securitized assets have strong future growth potential. Additionally, originators must consider that not all investors have the same risk tolerance.

Further complicating the process, originators must obtain high ratings from credit rating agencies. A higher credit rating is directly tied to the risk and revenue-generating potential of the securitized assets (de Mendonça & Barcelos, 2015; Efing & Hau, 2015; Farruggio & Uhde, 2015). The better the rating, the lower the perceived risk of the underlying asset, increasing investor confidence that revenue will be sufficient to cover both principal and interest payments (Almazan et al., 2015; DeYoung & Torna, 2013; Dou et al., 2014; Yang et al., 2020). Another barrier exists for originators carrying a large amount of debt. These companies cannot securitize their assets on a large scale. As an example to illustrate this restriction, if a company has nine assets and intends to securitize one or two of them, it is generally not an issue. However, if the company seeks to securitize six out of nine assets, leaving only three unsecuritized, creditors may become concerned about collateral availability. The more assets that are securitized, the fewer assets remain as collateral in case of default, increasing the perceived risk for creditors.

Indonesian commercial entities also face debt-to-equity ratio (DER) restrictions, which limit the extent of securitization. According to Minister of Finance Regulation Number 169/PMK.010/2015, a company’s DER cannot exceed four to one. When a business issues securitization, a Securitization Debt account appears under liabilities. The DER is calculated as total liabilities divided by total equity, meaning that an increase in securitization-related debt will raise the company’s overall liabilities (Casu et al., 2011; Furfine, 2020). If this increase is not offset by a proportional rise in equity, it will result in a higher DER, potentially breaching regulatory limits.

The final challenge relates to the use of funds from securitization sales. Many SOEs that have issued securitization have primarily used the proceeds for working capital financing, even when free cash flow should be sufficient to cover such needs. Ideally, given the time and effort required for securitization issuance, the proceeds should be used for investment rather than short-term financing (Brown et al., 2014; Dong et al., 2021). This issue aligns with SP's argument that SOEs should focus more on reinvestment rather than simply covering operational expenses.

> "SOEs should focus more on reinvestment. So, if the BUMN makes a large profit, the government should avoid withdrawing a high dividend right away because dividends will run out within a year. So, if possible, the portion of the dividend paid to the government should be used for reinvestment. Because if you withdraw PNBP, it will only last for one year and will be paid to the state in the following year, so the state budget will be used up. However, if it is reinvested, the government will receive a higher yield" (SP).

CONCLUSION

Based on the aforementioned discussion, the authors conclude that ABSs can serve as an alternative financing source for infrastructure development, including projects undertaken through SOE assignments. As demonstrated in the case of PT Jasa Marga, the securitization process can begin with a government assignment. Although ABS has not yet been widely adopted in Indonesia, it presents significant growth potential. This potential is evident in the substantial financing needs of the PSN in the coming years, investor preference for debt financing over equity financing, and an ABS market that remains unsaturated. ABS is also particularly effective when issued by enterprises with asset ratings higher than their corporate ratings. Furthermore, PT Jasa Marga's success in issuing securitization can serve as a model for other originators seeking to issue ABS.

Despite its advantages, asset securitization in Indonesia faces several challenges. The limited number of securitization originators, which are primarily SOEs and banks, restricts market expansion. Additionally, the securitization issuance process is longer and more complex than other financing methods. DER requirements also limit the ability of SOEs to issue debt through securitization. Another challenge is that SOEs frequently use securitization proceeds to finance working capital rather than long-term investments. Moreover, originators must navigate challenges in persuading stakeholders throughout the securitization process, and those with high levels of existing debt may face restrictions on the scale of assets they can securitize.

This study has certain limitations, primarily due to time constraints during preparation. The authors conducted interviews with academics, regulators, the Indonesia Infrastructure Guarantee Fund Institute, and securitization issuers. However, several other critical aspects of asset securitization could be explored further. Therefore, the authors recommend that future research incorporate insights from the Financial Services Authority, investment managers, custodian banks, the Directorate General of Taxes, investors, and credit rating agencies.

Finally, this study is expected to provide valuable insights for both academics and practitioners. From an academic perspective, this study contributes to the accounting and finance literature, particularly in the area of government infrastructure financing. For regulators, the findings support the development and improvement of asset securitization policies and practices. For originators, this study provides an overview of the opportunities and challenges associated with securitization in Indonesia, with the hope that more originators will consider issuing securitizations in the future, particularly for infrastructure financing. Additionally, this study helps investors gain a clearer understanding of the benefits and risks of securitization products, enabling them to make informed investment decisions in the securitization market.

REFERENCES

Abdelsalam, O., Elnahass, M., Ahmed, H., & Williams, J. (2022). Asset securitizations and bank stability: Evidence from different banking systems. *Global Finance Journal, 51*, 100551. https://doi.org/10.1016/j.gfj.2020.100551

Acharya, V. V., Schnabl, P., & Suarez, G. (2013). Securitization without risk transfer. *Journal of Financial Economics, 107*(3), 515-536. https://doi.org/10.1016/j.jfineco.2012.09.004

Almazan, A., Martín-Oliver, A., & Saurina, J. (2015). Securitization and banks' capital structure. *Review of Corporate Finance Studies, 4*, 206-238. https://doi.org/10.1093/rcfs/cfv002

Amalia, D. (2019). *Analisis pengaruh infrastruktur terhadap pertumbuhan ekonomi (Studi pada 33 provinsi di Indonesia tahun 2008-2017).* Universitas Brawijaya.

Amelia, I. L. (2011). *Sekuritisasi aset sebagai alternatif strategi pendanaan pada Bank XYZ.* Universitas Indonesia.

Angela, J., Jessica, M., Rinaningsih, & Haryono, L. (2019). Pengaruh kepemilikan pemerintah terhadap kinerja perusahaan badan usaha milik negara yang terdaftar di BEI. *Studi Akuntansi Dan Keuangan Indonesia, 2*(2), 55–75.

Anugrah, D., Kusumatuti, I. D., & Tim Kontributor Pemberitaan. (2020). *Buletin BPIW Edisi 47: Alternatif pembiayaan infrastruktur sektor PUPR*. Badan Pengembangan Infrastruktur Wilayah Kementerian PUPR.

Audriene, D. (2017). Sekuritisasi aset jasa marga oversubscribed jadi Rp5 Triliun. *CNN Indonesia*. https://www.Cnnindonesia.com/Ekonomi/20170831092433-92-238564/Sekuritisasi-Aset-Jasa-Marga-Oversubscribed-Jadi-Rp5-Triliun.

Ayotte, K., & Gaon, S. (2011). Asset-backed securities: Costs and benefits of bankruptcy remoteness. *Review of Financial Studies, 24*(4), 1299-1335. https://doi.org/10.1093/rfs/hhq059

Bhattacharya, A. K., & Fabozzi, F. J. (1996). *Asset-backed securities*. Prudential Securities Inc. and Frank J. Fabozzi Associates.

Brown, M., Kirschenmann, K., & Ongena, S. (2014). Bank funding, securitization, and loan terms: Evidence from foreign currency lending. *Journal of Money, Credit and Banking, 46*(7), 1501-1534. https://doi.org/10.1111/jmcb.12147

Buchanan, B. G. (2016). Securitization: A financing vehicle for all seasons? *Journal of Business Ethics, 138*(3), 559-577. https://doi.org/10.1007/s10551-015-2636-y

Campbell, S., Covitz, D., Nelson, W., & Pence, K. (2011). Securitization markets and central banking: An evaluation of the term asset-backed securities loan facility. *Journal of Monetary Economics, 58*(5), 518-531. https://doi.org/10.1016/j.jmoneco.2011.05.003

Carbo-Valverde, S., Degryse, H., & Rodríguez-Fernández, F. (2015). The impact of securitization on credit rationing: Empirical evidence. *Journal of Financial Stability, 20*, 36-50. https://doi.org/10.1016/j.jfs.2015.06.004

Casu, B., Clare, A., Sarkisyan, A., & Thomas, S. (2011). Does securitization reduce credit risk taking? Empirical evidence from US bank holding companies. *The European Journal of Finance, 17*(9-10), 769-788. https://doi.org/10.1080/1351847X.2010.538526

Charmaz, K. (2006). *Constructing grounded theory: A practical guide through qualitative analysis*. SAGE Publications Ltd.

Cheng, M., Dhaliwal, D. S., & Neamtiu, M. (2011). Asset securitization, securitization recourse, and information uncertainty. *The Accounting Review, 86*(2), 541-568. https://doi.org/10.2308/accr.00000020

Committee on The Global Financial System. (2005). The role of ratings in structured finance: Issues and implications. Bank for International Settlements Journal.

Coordinating Ministry for Economic Affairs. (2017). Sekuritisasi Aset, Indonesia Power Terbitkan EBA Danareksa Indonesia Power PLN–1. Https://Ekon.Go.Id/Publikasi/Detail/1928/Sekuritisasi-Aset-Indonesia-Power-Terbitkan-Eba-Danareksa-Indonesia-Power-Pln1.

Coordinating Ministry of Economic Affairs. (2023). Dukung Akselerasi Penyelesaian PSN, Pemerintah Bahas Potensi Kerja Sama dengan AIIB. Https://Www.Ekon.Go.Id/Publikasi/Detail/5015/Dukung-Akselerasi-Penyelesaian-Psn-Pemerintah-Bahas-Potensi-Kerja-Sama-Dengan-Aiib.

Further co

Damayanti, R. A. (2011). Hubungan keagenan pemerintahan daerah dalam konteks anggaran: Sebuah agenda rekonstruksi. *Ekuitas, 15*(2), 149–171.

de Mendonça, H. F., & Barcelos, V. Í. (2015). Securitization and credit risk: Empirical evidence from an emerging economy. *The North American Journal of Economics and Finance, 32*, 12-28. https://doi.org/10.1016/j.najef.2015.01.002

Deku, S. Y., Kara, A., & Zhou, Y. (2019). Securitization, bank behaviour and financial stability: A systematic review of the recent empirical literature. *International Review of Financial Analysis, 61*, 245-254. https://doi.org/10.1016/j.irfa.2018.11.013

Dewi, H. K. (2020). Tips Diversifikasi Investasi untuk Kurangi Risiko saat Kondisi Tidak Pasti. Https://Www.Bareksa.Com/Berita/Belajar-Investasi/2020-10-09/Tips-Diversifikasi-Investasi-Untuk-Kurangi-Risiko-Saat-Kondisi-Tidak-Pasti

DeYoung, R., & Torna, G. (2013). Nontraditional banking activities and bank failures during the financial crisis. *Journal of Financial Intermediation, 22*(3), 397-421. https://doi.org/10.1016/j.jfi.2013.01.001

Diharja, F., & Rossieta, H. (2014). Analisis Pengaruh Kepemilikan Pemerintah dan Kompetisi Pasar Terhadap Kinerja Perusahaan Terbuka di Indonesia. *Jurnal Akuntansi Universitas Indonesia, 1*-22.

Dincecco, M., & Katz, G. (2016). State capacity and long-run economic performance. The Economic Journal, 126(590), 189-218. https://doi.org/10.1111/ecoj.12161

Doherty, N. A., & Schlesinger, H. (2002). Insurance contracts and securitization. *Journal of Risk and Insurance, 69*(1), 45-62. https://doi.org/10.1111/1539-6975.00004

Dong, C., Chen, C., Shi, X., & Ng, C. T. (2021). Operations strategy for supply chain finance with asset-backed securitization: Centralization and blockchain adoption. *International Journal of Production Economics*, 241-108261. https://doi.org/10.1016/j.ijpe.2021.108261

Dou, Y., Liu, Y., Richardson, G., & Vyas, D. (2014). The risk-relevance of securitizations during the recent financial crisis. *Review of Accounting Studies, 19*(2), 839-876. https://doi.org/10.1007/s11142-013-9265-4

Efing, M., & Hau, H. (2015). Structured debt ratings: Evidence on conflicts of interest. *Journal of Financial Economics, 116*(1), 46-60. https://doi.org/10.1016/j.jfineco.2014.11.009

Eviondra, D. (2017). Press Release Pencatatan Perdana Efek Beragun Aset Danareksa Indonesia Power PLN1 – Piutang Usaha (EBA DIPP1). Https://Www.Plnindonesiapower.Co.Id/Id/Komunikasi-Berkelanjutan/Pers/Pages/PRESS-RELEASE-PENCATATAN-PERDANA-EFEK-BERAGUN-ASET--DANAREKSA-INDONESIA-POWER-PLN1-%E2%80%93-PIUTANG-USAHA-(EBA-DIPP1).Aspx.

Fabozzi, F. J., & Kothari, V. (2008). *Introduction to securitization*. John Wiley & Sons.

Farruggio, C., & Uhde, A. (2015). Determinants of loan securitization in European banking. *Journal of Banking & Finance, 56*, 12-27. https://doi.org/10.1016/j.jbankfin.2015.01.015

Financial Services Authority. (2014). Peraturan Otoritas Jasa Keuangan Nomor 23/POJK.04/2014 tentang Pedoman Penerbitan dan Pelaporan Efek Beragun Aset Berbentuk Surat Partisipasi Dalam Rangka Pembiayaan Sekunder Perumahan. Lembaran Negara Republik Indonesia Tahun 2014 Nomor 358.

Firmansyah, A., Jadi, P. H., & Sukarno, R. S. (2021). Bagaimana Respon Investor Terhadap Kepemilikan Saham oleh CEO? *Jurnal Online Insan Akuntan, 6*(1), 15–28.

Fiscal Policy Agency. (2021). *Kembangkan Sekuritisasi Aset sebagai Alternatif Sumber Pembiayaan*. Kementerian Keuangan. https://Fiskal.Kemenkeu.Go.Id/Baca/2021/03/24/202109434257902-Kembangkan-Sekuritisasi-Aset-Sebagai-Alternatif-Sumber-Pembiayaan.

Furfine, C. (2020). The impact of risk retention regulation on the underwriting of securitized mortgages. Journal of Financial Services Research, 58(2-3), 91-114. https://doi.org/10.1007/s10693-019-00308-6

Gorton, G., & Metrick, A. (2012). Securitized banking and the run on repo. Journal of Financial Economics, 104(3), 425-451. https://doi.org/10.1016/j.jfineco.2011.03.016

Indonesia Stock Exchange. (2018). *PT Bursa Efek Indonesia*. http://www.idx.co.id/.

Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. Journal of Financial Economics, 3(4), 305-360. https://doi.org/10.1016/0304-405x(76)90026-x

Johnson, N. D., & Koyama, M. (2016). States and economic growth: Capacity and constraints. *Explorations in Economic History, 64*, 1-20. https://doi.org/10.1016/j.eeh.2016.11.002

Kaniadakis, A., & Constantinides, P. (2014). Innovating financial information infrastructures: The transition of legacy assets to the securitization market. *Journal of the Association for Information Systems, 15*(5), 244-262. https://doi.org/10.17705/1jais.00362

Kara, A., Marques-Ibanez, D., & Ongena, S. (2016). Securitization and lending standards: Evidence from the European wholesale loan market. *Journal of Financial Stability, 26*, 107-127. https://doi.org/10.1016/j.jfs.2016.07.004

Klein, P., Mössinger, C., & Pfingsten, A. (2021). Transparency as a remedy for agency problems in securitization? The case of ECB's loan-level reporting initiative. *Journal of Financial Intermediation, 46*, 100853. https://doi.org/10.1016/j.jfi.2020.100853

Le, H. T. T., Narayanan, R. P., & Van Vo, L. (2016). Has the effect of asset securitization on bank risk-taking behavior changed? Journal of Financial Services Research, 49(1), 39-64. https://doi.org/10.1007/s10693-015-0214-1

Le, T., & Chizema, A. (2011). State ownership and firm performance: Evidence from the Chinese listed firms. *Organizations and Markets in Emerging Economies, 2*(2), 72–90. https://doi.org/10.15388/omee.2011.2.2.14282

Liu, L., Guo, Y., Chen, C., & Martek, I. (2021). Determining critical success factors for public-private partnership asset-backed securitization: A structural equation modeling approach. *Buildings, 11*(5), 199. https://doi.org/10.3390/buildings11050199

Lu, Z., Peña-Mora, F., Wang, S. Q., Liu, T., & Wu, D. (2019). Assessment framework for financing public-private partnership infrastructure projects through asset-backed securitization. *Journal of Management in Engineering, 35*(6). https://doi.org/10.1061/(ASCE)ME.1943-5479.0000708

Lumpkin, S. A. (1999). Trends and developments in securitization. *Financial Market Trends, 74*(7), 25-57.

Martinez-Vazquez, J., & Boex, L. F. J. (1997). *Fiscal capacity: An overview of concepts, measurement issues, and their applicability in the Russian Federation*. Georgia State University.

Miles, M. B., Huberman, A. M., & Saldaña, J. (2014). *Qualitative data analysis: A methods sourcebook* (3th ed.). Sage Publications.

Hu, M., Huang, W., Liu, C., & Zhou, W. (2024). Regulation of Privatized Public Service Systems. Production and Operations Management, 33(4), 979-994. https://doi.org/10.1177/10591478241235005

Nassr, I. K., & Wehinger, G. (2014). Non-bank debt financing for SMEs: The role of securitisation, private placements and bonds. *OECD Journal: Financial Market Trends, 2014*(1), 139-159. https://doi.org/10.1787/fmt-2014-5jxx05svvw34

PT Jasa Marga (Persero) Tbk. (2017). Buku Prospektus Penawaran Umum Efek Beragun Aset Mandiri JSMR01 - Surat Berharga Hak Atas Pendapatan Tol Jagorawi.

PT Jasa Marga (Persero) Tbk. (2017). Prospektus Efek Beragun Aset Mandiri JSMR01-Surat Berharga Hak Atas Pendapatan Tol Jagorawi. PT Jasa Marga (Persero) Tbk.

Regulation of the Minister of Finance Number 169/PMK.010/2015 concerning Determination of the Amount of the Ratio Between Debt and Company Capital for the Purpose of Calculating Income Tax (Peraturan Menteri Keuangan Nomor 169/PMK.010/2015 tentang Penentuan Besarnya Perbandingan Antara Utang dan Modal Perusahaan untuk Keperluan Penghitungan Pajak Penghasilan).

Santoso, W., Soekro, S. R. I., Darmansyah, & Sihaloho, H. D. (2014). Pemanfaatan sekuritisasi aset dalam mendorong sektor riil: Alternatif pembiayaan UMKM. *Buletin Ekonomi Moneter Dan Perbankan, 17*(2).

Saputra, S. (2017). *Future cash flow securitization and project bond from credit rating perspective* [PowerPoint slides]. PT Pemeringkat Efek Indonesia (PEFINDO).

Sari, Y. R., Manullang, N., Khulasoh, L., Oktarina, M., Nashary, R. F., Chalid, D. A., Haikal, S., Ismaeni, F., & Prasetyo, M. B. (2017). *Kajian potensi penerapan sekuritisasi aset kredit UMKM oleh Bank Indonesia*. Departemen Pengembangan UMKM Bank Indonesia.

Saunders, A., & Cornett, M. M. (2011). *Financial institutions management, a risk management approach* (7th ed.). Irwin McGraw-Hill.

Shi, G., & Shang, K. (2021). Land asset securitization: An innovative approach to distinguish between benefit-sharing and compensation in hydropower development. *Impact Assessment and Project Appraisal, 39*(5), 405–416. https://doi.org/10.1080/14615517.2020.1798722

Shleifer, A., & Vishny, R. W. (2000). *The grabbing hand: Government pathologies and their cures*. Bibliovault OAI Repository, the University of Chicago Press.

Sidik, S. (2020, March 5). Cari pendanaan Rp 2,5 T, Jasa Marga sekuritisasi Tol JORR. *CNBC Indonesia*. https://www.cnbcindonesia.com/market/20200305163507-17-142773/cari-pendanaan-rp-25-t-jasa-marga-sekuritisasi-tol-jorr

Sun, Q., Tong, W. H. S., & Tong, J. (2002). How does government ownership affect firm performance? Evidence from China's privatization experience. *Journal of Business Finance & Accounting, 29*(1-2), 1-27. https://doi.org/10.1111/1468-5957.00422

Surachman, E. N. (2022). *Skema penyediaan infrastruktur - penugasan BUMN* [PowerPoint slides]. Mata Kuliah Pembiayaan Pemerintah, Politeknik Keuangan Negara STAN.

Suselo, S. L., Soekro, S. R. I., & Nugraha, R. A. (2013). *Sekuritisasi aset lembaga pembiayaan dan pengembangan pasar secondary mortgage facility dalam rangka pendalaman pasar keuangan Indonesia*. (Working Papers WP/05/2013). Bank Indonesia.

Susilawati, I. (2016). Pengaruh tingkat debt financing dan equity financing terhadap profit expense ratio perbankan syariah (model sequention explanatory research). *Justicia Islamica, 13*(2), 259–282. https://doi.org/10.21154/justicia.v13i2.611

Theodora, A. (2023, Juni 26). Proyek strategis nasional akan dievaluasi ulang. *Kompas.id*. https://www.kompas.id/baca/ekonomi/2023/06/25/proyek-strategis-nasional-dievaluasi-ulang

Tusin, U. (2022). *Saturated market adalah: Jenis dan strategi saturated market*. https://landx.id/blog/saturated-market-adalah-jenis-dan-strategi-saturated-market/.

Wang, Q., Wong, T. J., & Xia, L. (2008). State ownership, the institutional environment, and auditor choice: Evidence from China. *Journal of Accounting and Economics, 46*(1), 112-134. https://doi.org/10.1016/j.jacceco.2008.04.001

Yang, L., Wang, R., Chen, Z., & Luo, X. (2020). What determines the issue price of lease asset-backed securities in China? *International Review of Financial Analysis, 72*, 101583. https://doi.org/10.1016/j.irfa.2020.101583

Yarett, J. E., Berman, E. R., Martin, N. D., Paul, W., Rifkind, W., & Garris LLP. (2021). *Structured finance and securitisation in the United States: Overview*. Thomson Reuters. https://crossborder.practicallaw.com/5-501-4117?source=relatedcontent

Zhou, K. Z., Gao, G. Y., & Zhao, H. (2016). State ownership and firm innovation in china: An integrated view of institutional and efficiency logics. *Administrative Science Quarterly, 62*(2), 375–404. https://doi.org/10.1177/0001839216674457

Selected and Revised Papers from The Public Sector International Conference (PSIC) 2024. (PKN STAN, by 11-12 September 2024) after being peer-reviewed by the Organizing Committee of PSIC and Peer-reviewers of Jurnal Tata Kelola dan Akuntabilitas Keuangan Negara