Optimizing Local Government Budgets For Mandatory Public Service Infrastructure Spending

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Abstract. Over the next three years, all regional governments will be required to allocate at least 40% of their budgets to essential public service infrastructure spending. However, this requirement poses a significant challenge for regional governments as their current average investment in infrastructure falls well below the mandated level. This study aims to identify and analyse strategies for meeting mandatory infrastructure spending obligations through regional budget financing schemes. To achieve this goal, this study employed literature review and descriptive analysis. These findings provide several recommendations for future policy formulation. First, reallocating regional budgets to prioritise essential infrastructure spending is crucial. Second, efficiently utilising unspent funds from the previous fiscal year (known as SILPA) to boost infrastructure investment in the subsequent year can be beneficial. Finally, strategically using debt financing to develop infrastructure that enhances public service coverage and quality stimulates economic growth and potentially increases regional revenue.

Keywords: mandatory spending, infrastructure, local governments budget.

1. Introduction

In the 2015-2019 Medium-Term Development Plan (RPJMN), the total financing requirement for infrastructure provision was IDR 4,796.2 trillion, while the requirement for the 2020-2024 RPJMN is IDR 6,445 trillion. Not all financing needs can be met by central and regional governments within their national (APBN) or regional (APBD) budget. Some financing is expected from state-owned enterprises (BUMN/BUMD) and the private sector. This is illustrated in Figure 1.

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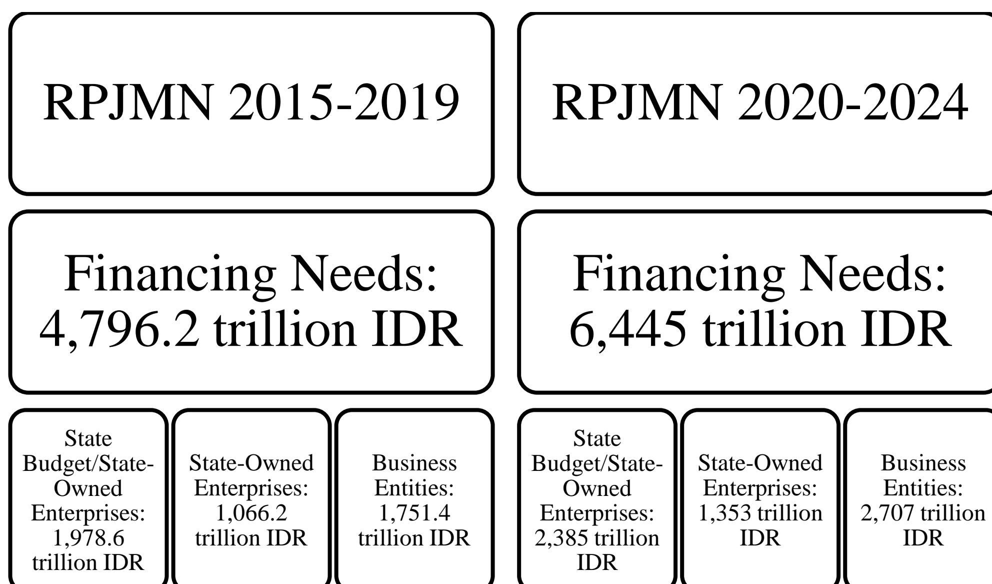

Figure 1 : Sources of Infrastructure Financing in Indonesia
***Source*:** https://kpbu.kemenkeu.go.id/read/1160-1476/umum/kajian-opini-publik/global-infrastructure-hub-gih-dan-penyediaan-infrastruktur

Infrastructure provision is required to improve the coverage and quality of public services, promote significant economic growth, and ensure economic equity in Indonesia. Despite improvements in both the quantity and quality of infrastructure, Indonesia's infrastructure competitiveness needs to be enhanced. According to the Global Competitiveness Report of 2018, Indonesia ranked 71st out of 140 countries in terms of infrastructure competitiveness and 5th among ASEAN countries, following Singapore, Malaysia, Brunei Darussalam, and Thailand.

To accelerate regional infrastructure development, Law No. 1 of 2022 concerning Financial Relations between the Central and Regional Governments (HKPD), Article 147 Paragraph (1), mandates that regional governments allocate at least 40% of their total APBD expenditure, excluding revenue sharing and/or transfers to regions and/or villages, for public service infrastructure spending. Infrastructure encompasses the technical facilities, physical systems, hardware, and software required to deliver services to the public and to support the structural network to ensure smooth economic and social growth.

Infrastructure expenditure refers to spending directly related to accelerating the development of public services and economic facilities to increase employment opportunities, reduce poverty, and reduce public service disparities between regions. This spending is typically budgeted under capital expenditure, although not all capital expenditure is directly allocated for the provision and maintenance of public service infrastructure. Capital expenditure also covers the procurement of fixed assets for regional government operations such as office equipment and machinery, land, and office buildings, which may not always be directly related to public services. In other words, infrastructure spending is a component of capital expenditures.

The current question is the extent to which regional governments allocate their APBD to the

development of the public service infrastructure. Over the last six years (2018-2023), the proportion of capital expenditure in the national APBD, as illustrated in Figure 2, has ranged from 14% to 19% of the total regional expenditure, with a declining trend (DJPK-Kemenkeu, 2024).

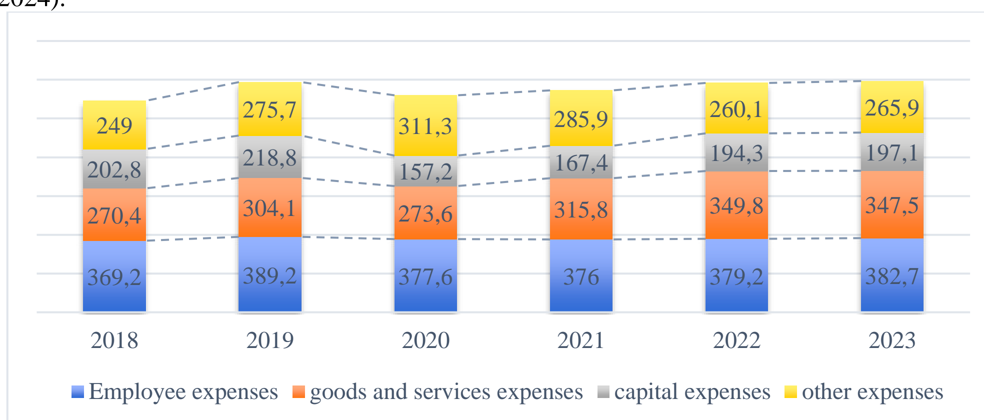

Figure 2 : Composition of Capital Expenditure in Regional Budgets (APBD)
***Source*: DJPK-Kemenkeu 2024).**

Recognising this situation, the HKPD Law (Article 147, Paragraph 3) provides a transition period for the 40% public service infrastructure spending requirement (Article 147, Paragraph 1). If the stipulated percentage has not been reached, regions must adjust their public service infrastructure spending proportions within five years of the enactment date of the law. Capital expenditure, particularly for public service infrastructure allocation, requires attention because of its decreasing trend and small proportion of expenditure components. In 2018, the proportion of capital expenditure was 19%, which declined to 17% by 2023. On the other hand, personnel expenditures had the largest proportion, averaging 33% of all expenditure components, followed by goods and services expenditures (27%), other expenditures (24%), and capital expenditures (16%).

Mandatory spending for public service infrastructure provision and development in regions, as mandated by the HKPD Law, introduces a new "shock effect" for regional governments in financial management after the challenging COVID-19 era. Currently, capital expenditure for infrastructure is only approximately 11.5% of the APBD, and economic recovery post-COVID-19 requires considerable time. This situation necessitates creative approaches to APBD financing to address regional fiscal capacity limitations in meeting the demand for adequately covered and high-quality public services. These efforts are expected to stimulate substantial economic growth and improve community welfare, in line with Golden Indonesia Vision 2045.

Based on the background outlined above, this study analyzes the optimisation of APBD financing sources to meet mandatory spending on regional public service infrastructure. The research scope focuses on optimising the use of APBD financing sources, particularly surplus budget funds (SILPA) and regional debt/loans.

2. Literature Review

A common challenge faced by governments is the disparity between the financing required for infrastructure projects and their fiscal capacity. Fisher (2023) argued that the primary economic rationale for governments or regions borrowing to finance infrastructure (capital expenditure) lies in the substantial upfront costs required to develop infrastructure facilities, which subsequently yield benefits over several years.
To finance such capital expenditures, there are several alternative schemes: allocating funds from tax revenues over multiple periods ("pay as you go"), borrowing funds that will be repaid with interest in the future ("pay as you use"), or a combination of both. Whichever scheme is chosen, governments must allocate revenue to these infrastructure investments (Fisher 2023).

Under the regulatory framework established by Law No. 17 of 2003 on State Finance and Law No. 1 of 2022 on Regional Financial Balance, local governments (Pemda) are granted the right and authority to borrow funds as a source of financing needed to cover budget deficits. Furthermore, the HKPD Law provides facilitative measures in administrative requirements and legal provisions for issuing Sharia-based bonds (sukuk) and encourages creative and sustainable financing through collaborative financing schemes such as Public Private Partnerships (PPP). Consequently, within this regulatory framework, local governments have opportunities to develop alternative financing schemes to bridge the gap between financing needs and fiscal constraints, particularly to meet mandatory spending requirements including the provision of public service infrastructure.

Referring to Article 1, No. 65 of the Ministry of Finance Regulation, No. 112/PMK.07/2017; amended Regulation No. 50/PMK.07/2017 on the Management of Transfers to Regions and Village Funds, infrastructure refers to technical facilities, physical systems, hardware, and software necessary to deliver services to the public and support structural networks for the effective economic and social growth of communities. Infrastructure spending directly supports accelerated development of public service facilities and the economy to enhance employment opportunities, reduce poverty, and narrow the public service gap between regions. Examples of infrastructure include roads, bridges, markets, terminals, energy and electricity, hospitals, schools, dams, clean water and drinking water networks, information technology infrastructure, ports, and airports.

Based on the Minister of Finance Regulation No. 84 of 2023 regarding the Fiscal Capacity Map of Regions, the fiscal capacity of a region is defined as its financial capability reflected through local revenues and specific local financing receipts minus predetermined usage revenues, specific expenditures, and certain local financing expenditures.

Bird (1999) observes that "borrowing is indeed an economically sound way to finance capital expenditures." He further argues that to achieve allocative efficiency and intergenerational balance, it is often preferable to finance long-term investment projects through borrowing rather than solely relying on current public savings or transfers from the central government. In the context of fiscal management in Indonesia (APBN/APBD), public savings are referred to as surpluses from budget financing (SILPA). Bird's argument implicitly justifies the normative theoretical basis for using borrowing or debt as an alternative source of regional fiscal financing (APBD), aiming to expedite economic and/or social benefits for society without increasing the tax burden on future generations.

Due to the potential positive and negative impacts of regional borrowing on local governments,

communities, and the macroeconomy, promoting "good borrowing" is essential, while preventing "bad borrowing" poses a significant challenge in fostering fiscal relations between the central and regional governments. Bird (1999) asserts that stringent and arbitrary central government controls over regional borrowing to prevent "bad borrowing" may not yield favourable outcomes. He further argued that tight controls, such as strict borrowing limits and rigid requirements, could potentially create moral hazards by limiting local governments' ability to adopt disciplined market-oriented approaches.

Before the enactment of the HKPD Law, the regulations governing regional borrowing concerning regional loans were outlined in Government Regulation No. 56, 2018. According to this regulation, regional loans encompassed agreements involving loan agreements and regional bond securities but did not include debt securities such as sukuk. By contrast, under Law No. 1 of 2022, regional borrowing is part of Regional Debt Financing, which includes loan agreements with the central government, other local governments, domestic financial institutions (both bank and non-bank), and the issuance of debt securities in the form of regional bonds and sukuk. Therefore, in this article, the term "regional debt" is used to cover both loans and debt securities (bonds and sukuk).

A local revenue budget smaller than the regional expenditure budget results in deficits in the Regional Budget (APBD), which is covered by Net Financing. Net Financing represents the difference between financing receipts and expenditure. Financing Receipts in the APBD context can include the use of Surplus Budget Funds (SILPA) and Regional Debt Financing.

Regional Debt Financing refers to any receipt that a region must repay, either in the current or subsequent fiscal years. According to the HKPD Law, regional debt financing consists of:

1. Regional Loans are debt financing secured through a loan agreement rather than securities, in which a region receives a specified sum or benefit of monetary value from another party, obligating the region to repay the amount.
2. Regional Bonds are debt securities issued by governments.
3. Regional Sukuk are Islamic securities based on Sharia principles, representing ownership of the assets of Regional Sukuk issued by the Regional Government.

The discourse and opportunities for regional governments to issue regional bonds have been present for quite some time, dating back to the establishment of Government Regulation (PP) No. 107 of 2000 concerning Regional Loans. In terms of regulatory aspects related to regional loans, the central government has continually refined these regulations, most recently with the issuance of Government Regulation No. 56 of 2018 concerning Regional Loans. In addition, for more technical regulations, the Minister of Finance stipulated Regulation No. 180/PMK.07/2015; amended Regulation no. 111/PMK.07/2012 regarding the Procedures for Issuing and Accountability of Regional Bonds. The Financial Services Authority (OJK) issued a set of regulations concerning Regional Bonds and Sukuk.

However, to date, no regional government has issued regional bonds. Generally, the challenges in issuing regional bonds include the financial capacity and readiness of regional governments.

When issuing bonds, considerations extend beyond financial capability alone, and various other aspects play crucial roles in determining the feasibility of bond issuance. These aspects, as highlighted in several previous studies (Okta et al., 2011; Yulianti, 2017; Ambarwati, 2016; Aswari, 2019; cited in Yusesa and Arza, 2020), suggest several factors contributing to regional

reluctance to issue bonds despite the central government's delegation of authority:

1. Human Resource Readiness: The readiness of human resources in the region to effectively manage regional bonds.
2. Lack of a Regulatory Framework: The absence of comprehensive regulations governing the implementation of regional bonds.
3. Effective Development Planning: The need for well-planned utilisation of bond proceeds for development purposes.
4. Institutional Preparedness: The readiness of required institutions to facilitate the issuance and management of regional bonds.
5.

Addressing these factors is crucial for overcoming barriers and encouraging regional governments to engage in regional bond issuance, thereby effectively leveraging this financial instrument for development purposes.

The borrowing of regional debt is a logical consequence of decentralisation. According to the regulations mentioned earlier, regional governments are granted the right to borrow funds to finance their regional budget (APBD). However, when a regional government borrows, it incurs an obligation to repay the debt in accordance with the loan agreement and based on the applicable laws and regulations.

Control of Regional Debt

On the one hand, local government borrowing is strongly justified by the public interest, namely, meeting the public service needs required by the community and accelerating regional development. However, if local debt management lacks discipline, according to the principles of prudent public financial management, it can potentially worsen local financial issues. Therefore, mechanisms are needed to control local debt and prevent overborrowing beyond the region's capacity to manage debt.

Terminassian and Craig (1997) proposed four approaches that a country can adopt to control local government debt: (1) market discipline, (2) cooperation among different levels of government in designing and implementing debt controls, (3) rule-based controls, and (4) administrative controls. Depending on economic and political factors, these approaches can be combined selectively.

Market Discipline-Based Controls

Several conditions must be met for the market discipline mechanism to work effectively (Terminassian and Craig, 1997):

1. Transparent information must be made available through financial intermediaries to identify the government as a typical borrower (debtor).
2. Adequate information regarding local government debt and repayment capacity should be provided to potential lenders (creditors).
3. There should be no expectation of bailouts from lenders in the case of a default.
4. As borrowers, the government must have institutional structures that ensure responsive policies for market signals.

Market discipline is an ideal control mechanism. The market acts as the "judge" determining local government loans and their sustainability. However, fulfilling the necessary conditions for this mechanism is difficult or impossible in many countries, particularly in developing countries. Information on local government finances is often limited in terms of coverage, quality, and

time. Therefore, relying solely on market discipline to control local borrowing is impractical; it must be complemented and guided by other mechanisms.

Intergovernmental-Cooperation Based Controls

This approach is based on negotiation processes between central and local governments. Such practices are common in several European countries, particularly Scandinavia, and more recently, Australia has adopted them. In this approach, local governments actively participate in formulating macroeconomic goals and fiscal parameters that underpin these objectives. Negotiated agreements typically include overall deficit targets for the government, and key guidelines for major revenue and expenditure items.

In some countries, negotiations are conducted bilaterally between central and local governments. Meanwhile, in Australia, negotiations occur multilaterally between the central government and all governments beneath it.

The cooperative approach offers clear advantages by fostering dialogue and information exchange across different levels of the government. Additionally, it promotes awareness, involvement, and understanding among subnational policymakers regarding the macroeconomic implications of their budgetary choices, including the implications of loans taken by the local governments.

Rule-Based Controls

Several federal and unitary countries have adopted a rule-based approach to control local government borrowing, where local borrowing is specified and regulated in the constitution or laws. These rules typically include limits on local government authority, regulations on the use of local borrowing for projects or investments, and borrowing ratios. Control rules for local borrowing may also take the form of prohibit certain types of loans associated with macroeconomic risks.

Rules regarding the limits and purposes of local borrowing are practiced by several countries such as Germany, Switzerland, and many other states in the United States. Countries that allow short-term loans for general liquidity purposes often require repayments at the end of each fiscal year. Requirements for repayment within one fiscal year for short-term loans have been observed in several U.S. states and regional governments in Spain. Meanwhile, the borrowing ratio limits associated with macroeconomic risks are implemented in nearly all developed and developing countries.

This rule-based approach offers the advantages of transparency and certainty. With rules in place, prolonged negotiations between central and local governments, often driven by short-term interests and political factors rather than sound macroeconomic management, can be avoided. However, rule-based approaches are less flexible.

Direct Administrative Controls

In several countries, the central government directly controls local government borrowing. This practice is more common in unitary states than in federal ones. Several considerations support direct control by the central government. First, policies regarding foreign debt are closely intertwined with other aspects of macroeconomic policy (e.g. monetary policy, exchange rate management, and foreign exchange reserve management), which fall under the jurisdiction of the central government and its central bank. Second, a more coordinated approach to

international markets for national loans is likely to result in better terms and conditions than a more fragmented approach. Third, downgrades in foreign ratings for one or more subnational borrowers can have contagion effects on the ratings of public and private borrowers. Consequently, foreign lenders often demand guarantees from the central government regarding local government loans. In this context, the de facto central government assumes primary responsibility for local governments' foreign debt.

3. Methodology

This study employed a qualitative method with literature review and descriptive analysis. The use of qualitative methods allows researchers to analyse the causes of a problem in depth, thereby identifying alternative solutions to address the issue. The research design is illustrated in the following diagram:

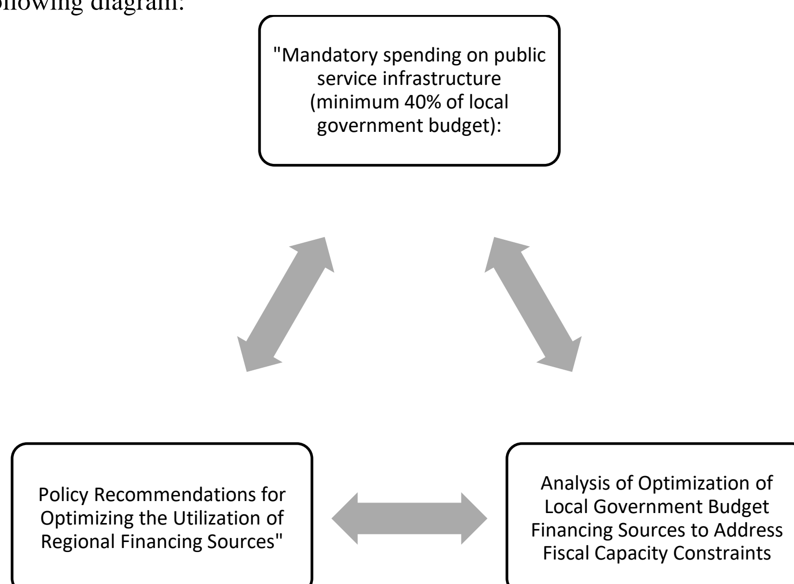

Figure 3 : Research Design
***Source*: Author's property**

4. Results And Discussion

With substantial investment needs in the infrastructure sector, as depicted in Figure 1, there is a critical need to refocus budget allocations within local government budgets (APBD) and optimise financing sources. This quest for financing is crucial not only for the central government but also for local governments. The responsibility for infrastructure provision is shared between the central and local governments, distinguished primarily by their jurisdictional scope, such as geographical coverage. The Covid-19 pandemic has significantly affected local government finances (APBD), leading to decreases in both budgeted revenues and their actual realisation, particularly Own-Source Revenues (PAD), Transfers to Regions and Village Funds (TKDD), and other local revenues.

Based on the above description, the demand for local financing is expected to continue to increase as local governments must continually strive to maintain development continuity and accelerate regional development. Simultaneously, economic recovery post-Covid-19 will require substantial time, posing a significant challenge for local governments to boost revenue. Therefore, relying solely on local revenue is inadequate to meet the escalating financing needs of recent and future APBDs. Thus, alternative financing options are essential, such as optimising the use of Budget Surplus from Previous Years (SiLPA), local government borrowing, Public-Private Partnership (PPP) schemes, or a combination thereof (synergistic financing approaches).

4.1. Analysis of Financing Through SILPA

The Remaining Surplus of Budget Funds (SiLPA) is the amount of money possessed by local governments at the end of the year, resulting from the surplus between the total regional revenue and regional expenditure after the implementation of the APBD each year. This year-end SiLPA then became the beginning of SiLPA (written with a lowercase "i") for the following year. The SiLPA can serve as a source of financing for the current year's APBD.

Referring to Figure 2, the portion of capital expenditure (some of which is used for infrastructure spending) generally remains lower than personnel expenditures and expenditures on goods and services. Meanwhile, based on national APBD realisation data over the past five years, as summarised in Table 1, it is evident that overall APBD realisation consistently shows a surplus (total revenue realisation exceeding total expenditure realisation) each year, despite APBD being consistently planned with a deficit policy, except in FY 2020 during the Covid-19 pandemic.

Table 1: Summary of National Budget (APBN) and Budget Realization FY 2018 to 2022 (Billion Rupiah)

Fiscal Year	Description	Budget	Realization	% Realization
2018	Revenue	1,095,079.40	1,110,964.49	101.45
	Expenditure	1,153,961.32	1,093,892.15	94.79
	Sulus (Deficit)	-58,881.92	17,072.34	
	Net Financing	60,280.37	81,707.50	135.55
	Carryover Sulus	1,398.45	98,779.84	
2019	Revenue	1,192,632.60	1,198,407.26	100.48
	Expenditure	1,242,149.61	1,188,023.28	95.64
	Sulus (Deficit)	-49,517.01	10,383.98	
	Net Financing	50,144.48	89,623.76	178.73
	Carryover Sulus	627.47	100,007.74	
2020	Revenue	1,239,751.05	1,115,490.41	89.98
	Expenditure	1,300,354.25	1,121,957.88	86.28
	Sulus (Deficit)	-60,603.20	-6,467.47	
	Net Financing	61,005.81	101,091.97	165.71
	Carryover Sulus	402.61	94,624.50	
2021	Revenue	1,155,600.89	1,168,216.11	101.09

Fiscal Year	Description	Budget	Realization	% Realization
	Expenditure	1,230,108.25	1,145,087.49	93.09
	Sulus (Deficit)	-74,507.36	23,128.62	
	Net Financing	75,326.90	98,041.86	130.16
	Carryover Sulus	819.54	121,170.48	
2022	Revenue	1,137,851.30	1,190,877.44	104.66
	Expenditure	1,200,873.86	1,187,776.40	98.91
	Sulus (Deficit)	-63,022.56	3,101.04	
	Net Financing	62,316.22	119,993.87	192.56
	Carryover Sulus	-706.34	123,094.91	

Note: Generated from DJPK-Kemenkeu.
* during COVID-19

Based on Table 1, the realisation of APBD over the past five years has shown a surplus, except in FY 2020 (the first year of the Covid-19 pandemic). This indicates that instead of optimising SiLPA to increase capital expenditure, SiLPA has continued to grow annually, except for a decrease in FY 2020 compared to the previous year, although the SiLPA amount remains relatively large.

One of the major contributors to the APBD surplus is budget allocation (estimated) for Contingency Expenditures, which is significantly higher than its actual realisation (overestimation), except in FY 2020 during the Covid-19 pandemic. The data related to this over the past 5 years are summarised in Table 2.

Table 2: Budget and Actual Expenditures for Unexpected Costs in the National Regional Budget Fiscal Years 2018 to 2022 (Billion Rupiah)

Fiscal Year	Budget	Realization	SiLPA	% Realization
2018	2.531,23	759,11	1.772,12	30%
2019	3.822,31	867,34	2.954,97	23%
2020*	3.308,18	36.700,52	-33.392,34	111%
2021*	12.089,40	8.839,35	3.250,05	73%
2022	16.433,40	3.641,24	12.792,16	22%

Note: Generated from DJPK-Kemenkeu. (https://djpk.kemenkeu.go.id/portal/data/apbd)
* during COVID-19

Considering their characteristics, SiLPAs can be categorised into two types: permanent SiLPA (structural SiLPA) and fluctuating SiLPA (cycle SiLPA). The characteristics of national SiLPA for local governments over the past three years are presented in Table 3.

Table 3: Characteristics of Regional Government Surplus (Nationaly Aggregate) Fiscal Years 2018 to 2021

Government level	Structural SiLPA	Clycled SiLPA
Province	97%	3%

Government level	Structural SiLPA	Clycled SiLPA
Province	90%	10%
City	94%	6%

Note: DJPK-Kemenkeu (2024)

Thus, it can be concluded that there is ample opportunity for local governments to optimise the use of SiLPA funds to increase capital expenditure, particularly for public infrastructure. Of course, local governments do not need to allocate all SiLPA funds to expenditures as they must maintain reserve funds to anticipate mismatches between expenditures and expected income sources. This is crucial, especially for recurring monthly expenditures such as salaries and utility bills (electricity, telephone, and water). Nevertheless, the amount of SiLPA retained should be controlled carefully and rationally. For instance, the retained SiLPA could cover salaries and utility bills for the next one–two months, while the remainder can be utilised directly and/or through the establishment of a Reserve Fund to enhance public service infrastructure expenditures.

In the medium-to long-term, relying solely on optimising SiLPA to meet the mandatory spending needs for infrastructure may not suffice. Therefore, it is crucial to consider alternative financing options such as regional borrowing, Public-Private Partnership schemes (KPBU), or a combination of these (SiLPA, borrowing, and KPBU).

However, local governments must continue striving to improve spending efficiency and reallocate or refocus expenditures from nonpriority areas to higher-priority ones. This includes budgeting for Contingency Expenditures more realistically (for instance, based on the average realisation over the past five years) while concurrently enhancing local revenue alongside economic growth. This positive impact can further increase public infrastructure provision.

According to the Regional Autonomy Law, local governments with high fiscal capacity and relatively good public service quality can allocate a portion of the SiLPA to establish a Regional Endowment Fund. The proceeds of managing this fund can then be used to enhance local expenditures that directly benefit the community, such as by improving the coverage and quality of public services. This can be achieved without diminishing the principal fund, making it an option for intergenerational benefits with a broader impact.

4.2. Analysis of Financing Through Local Debt

The use of local debt as an alternative financing source for APBD to meet mandatory spending on public service infrastructure can provide several benefits, including

1. Acceleration of infrastructure development in the region.
2. Expedited provision of public services.
3. Potential increase in local revenue.
4. Potential acceleration of regional economic growth.

Although local borrowing sources are relatively substantial, the government continues to facilitate access through the establishment of PT. Sarana Multi Infrastruktur (SMI), which provides extensive, fast, and measured services for local loans, many local governments have not optimally utilised or even explored this financing potential. The data in Table 1 explains why this is the case: local governments tend to generate surpluses in their APBD implementation, resulting in an increase in SiLPA instead of utilising local borrowing.

With the implementation of the Regional Autonomy Law, it is not sufficient for local governments to merely optimise the use of SiLPA to meet the mandatory spending of at least 40% of APBD on regional public service infrastructure. Therefore, local governments must consider expanding their financing sources through local borrowing to meet these infrastructure-spending requirements.

Based on consolidated National APBD Realization Reports over the past five years, the budget and realisation of debt financing sourced from local borrowing are presented in Table 4.

Table 4: Budget and Realization of Regional Loan Receipts in the APBD (Nationaly Aggregate) Fiscal Year 2018 to 2022 (Billion Rupiah)

Fiscal Year	Budget	Realization	% Loan Receipt Realization	% Loan Receipt Realization to GDP
2018	12,189.71	7,317.51	60%	0.05%
2019	9,388.02	6,754.56	72%	0.04%
2020*	9,998.04	11,597.82	116%	0.08%
2021*	34,583.61	17,977.16	52%	0.11%
2022	18,550.97	15,837.35	85%	0.08%
		Average Realization	77%	0,07%

Note: Generated from DJPK-Kemenkeu.
* during COVID-19

As Table 4 shows, aggregate local borrowing in the form of local loan receipts (gross) remains very low, averaging 0.07% of GDP over the last five years, with the highest being 0.11% of GDP in 2021 (during the Covid-19 period).

Local governments must consider and meet several requirements when seeking local debt financing, as stipulated by the applicable legislation. According to Government Regulation No. 1 of 2024 on the Harmonisation of Fiscal Policies, Article 40, local debt financing must fulfil three requirements: administrative, financial, and feasibility requirements for activities. The financial requirements mentioned in the regulation include the following.

1. The maximum limit of Regional Debt Financing

The maximum limit for Regional Debt Financing is that the remaining amount of Regional Debt Financing plus the amount of Regional Debt Financing to be drawn should not exceed 75% (seventy-five percent) of the previous year's APBD revenue, which is not designated for specific use. Table 5 presents a simulation of the ratio of regional debt financing to regional revenue over the past four years. The results show that this ratio (average of 4.31%) is still well below the maximum limit for regional debt financing, indicating that there is still ample fiscal space for debt financing for regional governments.

Table 5: Ratio of Regional Debt Financing to Regional Budget Revenue (Nationaly Aggregate)
FY 2019 to 2020 (in Billion Rupiah)

Fiscal Year	Ending loan balance from the previous fiscal year and loans to be drawn this year	Revenue realized from the previous fiscal year that is not designated for specific use	Percentage of regional debt financing relative to revenue (maximum 75%)
2019	21.830,33	933.211,02	2,34%
2020	25.998,18	1.010.731,15	2,57%
2021	61.281,69	935.805,42	6,55%
2022	56.693,18	979.861,17	5,79%
	Average		4,31%

Note: Generated from DJPK and DJPB-Kemenkeu.

2. The ratio of a Local Government's financial capacity to repay Regional Debt Financing
The Financial Capacity Ratio of Regional Governments, often referred to as the Debt Coverage Service Ratio (DSCR), was set to a minimum of 2.5. The formula for calculating the DSCR (minimum 2.5) is

$$\frac{\text{Revenue that is not defined by its use* – Employee Expenditure}}{\text{Principal of Debt + Interest + Other costs}}$$

For example, unallocated revenue includes sources such as the General Allocation Fund (DAU) and Revenue Sharing Fund (DBH), which are block grants. Conversely, allocated revenue includes specific items such as Tobacco Excise DBH and Special Allocation Fund (DAK).
Table 6 provides a simulation of the regional governments' DSCR calculations for the past four years. The results indicated that the Regional Government's DSCR ratio was significantly above the minimum DSCR threshold, averaging 150.80.

Table 6: Debt Coverage Service Ratio FY 2018 to 2020 (in Billion Rupiah)

Fiscal Year	Income that is not determined to be used minus Employee Expenditure	Interest Expenditure and Principal Payment	DSCR (minimum 2,5)
2018	564.862,66	3.358,20	168
2019	625.762,13	4.554,09	137
2020	562.505,93	4.204,38	134
2021	603.828,74	4.902,23	123
2022	644.775,61	3.358,20	192
	Average		150,80

Note: Generated from DJPK and DJPB-Kemenkeu.

3. The maximum limit for the APBD deficit was sourced from Regional Debt Financing, calculated at the time of the Regional Debt Financing application.
Based on the provisions of the Ministry of Finance regulation regarding the maximum cumulative deficit of Regional Budgets sourced from Regional Debt Financing and the maximum cumulative amount of Regional Debt Financing,

Table 7 shows the cumulative deficit limits of the Regional Budget against GDP from FY 2014 to FY 2023. The actual percentage of the cumulative deficit financed by Regional Debt Financing relative to the Gross Domestic Product (GDP) during 2014-2023 remains well below the Maximum Cumulative Deficit (BMKD) and Maximum Cumulative Loan limits stipulated

in the Ministry of Finance regulation.

Table 7: Accumulative Regional Budget Deficit to GDP FY 2014 to FY 2022

Year	Loan Amount* (billion Rp)	% BMKD and Cumulative Loan Provision**	BMKD and Cumulative Loan (billion Rp)	GDP (in billion Rp) ***	% Cumulative Deficit to GDP
2014	465,40	0,30%	31.628,10	10.542.700,00	0,00441%
2015	478,43	0,30%	34.622,40	11.540.800,00	0,00415%
2016	373,12	0,30%	37.205,19	12.401.728,50	0,00301%
2017	2.098,14	0,30%	40.769,48	13.589.825,70	0,01544%
2018	6.079,46	0,30%	44.516,27	14.838.756,00	0,04097%
2019	2.298,88	0,30%	47.498,10	15.832.700,00	0,01452%
2020	15.834,15	0,28%	43.226,40	15.438.000,00	0,10257%
2021	15.038,03	0,34%	57.700,72	16.970.800,00	0,08861%
2022	5.006,44	0,32%	62.682,88	19.588.400,00	0,02556%
2023	433,75	0,14%	29.249,36	20.892.400,00	0,00208%
TOTAL	48.105,78				

Note: DJPK and Kemenkeu (2024).

* Based on the Deficit Tolerance Permit data funded by Regional Debt Financing

** Based on the provisions of the Ministry of Finance Regulation on the current Fiscal Year Regional Budget regarding

*** GDP based on current prices

Given the financial conditions outlined above, there are no issues (constraints) for regional governments (Pemda) in accessing and utilising infrastructure financing sourced from debt. Moreover, the available financing sources are sufficiently adequate, whether from the Central Government (APBN), banking institutions, non-banking financial institutions, or the public.

Based on literature studies and public discussions related to regional loans (for example, Public Discussion on Regional Bonds featuring speakers from DJPK, OJK, and academics, published at https://youtu.be/IiyqmUygImU), several challenges and obstacles faced by regional governments in accessing regional loan sources as an alternative to financing Regional Budgets include the following::

i. The requirement for approval from the Regional People's Representative Council (DPRD) remains a significant hurdle for regional governments (pemda) to apply for loans.

ii. Planning for loan utilisation is perceived as relatively weak or inadequately supported by feasibility studies, thus hindering the approval process.

iii. Some regional leaders are still not inclined to utilise regional loans as a financing alternative for psychological reasons toward the public or they perceive themselves as incapable of independently seeking financing.

iv. The practice of managing Regional Budget expenditures often follows a "business as usual" approach, where spending is accelerated in the final quarter, leading to substantial funds remaining parked in banks during earlier quarters.
v. Issuing bonds involves fulfilling numerous requirements with lengthy procedures and significant costs, making it unfeasible for loan amounts below Rp 1 trillion.
vi. Several regional governments interested in Sharia-based bond schemes have been unable to realise them because of the lack of legal frameworks at the implementation level, specifically under Government Regulation No. 56/2018, concerning Regional Loans.

Several of the challenges mentioned above have been addressed by the enactment of the Law on Financial Relations between the Central and Regional Governments (UU HKPD) and its implementation regulations. For instance, procedures for loan approval from the DPRD are now typically discussed concurrently with Regional Budget (RAPBD) deliberations. Regional governments (pemda) interested in issuing Sharia-compliant bonds (sukuk) can now implement these initiatives.

Moving forward, by developing well-planned activities and financing strategies, and concurrently strengthening human resources and regional debt management institutions, regional governments are believed to be capable of meeting the mandatory spending requirements for local public service infrastructure, as mandated by the UU HKPD. In the long term, regional governments are not expected to continually rely on debt issuances to meet these mandatory spending needs because maintaining a healthy and sustainable Regional Budget (APBD) is essential.

Therefore, the UU HKPD encourages regional governments to explore non-APBD creative financing schemes, such as Public-Private Partnerships (PPP) schemes. However, these PPP financing schemes are beyond the scope of the present study.

5. Conclusion

Infrastructure provision is crucial for enhancing the coverage and quality of public services, driving considerable economic growth and promoting economic equity. Investment in the infrastructure sector requires substantial financing. This quest for financing is not limited to the Central Government alone but also involves Regional Governments, as both share responsibility for infrastructure provision.

Over the past six years, the average allocation for capital expenditure has increased by approximately 16%, with approximately 11% of the budget dedicated to new infrastructure development. Meanwhile, the Law on Financial Relations between central and regional governments mandates that local governments allocate a minimum of 40% of their Regional Budget (APBD) to mandatory spending on public service infrastructure. To meet this requirement, local governments must innovate through APBD and non-APBD schemes.

This study focuses on analysing alternative financing schemes within the APBD framework. It recommends that local governments: (1) refocus budget allocations based on priority scales, elevating mandatory public service spending to a 'top priority spending' status; (2) optimise the use of unused budget allocations (SILPA) to augment infrastructure capital expenditure; (3) utilise regional debt financing sources to fund infrastructure projects that have the potential to

enhance public service coverage and quality, stimulate economic growth, and potentially generate local revenue.

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