



Capital Grants For Local Infrastructure Provision In Perspective Of Allocative Efficiency: Evidence From Indonesia

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ABSTRACT

This paper points out reflection on theoretical and empirical literature on the implementation of capital grants or specific purpose transfers as the conceptual basis of *Dana Alokasi Khusus* (DAK) in Indonesia. As one of the types of intergovernmental transfers, DAK plays a significant role in the local infrastructure provision, particularly in basic services such as roads, housing, drinking water, sanitation, education, irrigation, and tourism. This study uses a literature review approach of (and with no limits on) 16 empirical research results. The paper aims to analyze how far capital grant (DAK) is implemented, the challenges and problems that arise, and the dynamics of policy from the perspective of Allocative Efficiency. The study notes some practical suggestions for improving the DAK design and agenda for future research needed, including the adoption of MTEF in DAK planning for local government, reshaping the formula & criteria used in DAK allocation, possibility of giving relaxation on reallocation authority to spending unit, developing evaluation indicators with a focus on the efficiency & effectiveness of DAK, and directing the influence of political actors & process to improve the quality of policy.

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1. Introduction

Infrastructure is the key to successful development and economic growth (Palei, 2015). Quality of infrastructure, especially basic services, also influences other development indicators such as productivity, employment, and inequality (UNEP, 2016). The success or failure of the Sustainable Development Goals (SDGs) and climate change resiliency agenda is also largely influenced by infrastructure (Arndt, et al., 2012; Cumming, et al., 2017; Tauhid & Zawani, 2018; Delanka-Pedige, et al., 2021). Data from Bappenas (2019) explains Indonesia's stock of infrastructure to GDP in 2019 was 43%; still far from the global average of 70% although it has increased compared to 2014 (39%). In some basic service infrastructures such as roads, irrigation, drinking water, sanitation, and housing, the condition is still below the development target both in terms of quality and quantity (Bappenas, 2019).

The implementation of decentralization and regional autonomy has implications for the division of authority to provide basic service infrastructure to local regions. Theoretically, it is believed that through decentralization, regions have the opportunity to align

their policies and development according to their respective local needs, capacities, and preferences (Oates, 1993). However, in practice, local governments face various obstacles, mainly in terms of financing and institutional capacity (Brodjonegoro, 2009; Szulze & Sjahrir, 2014; McCawley, 2015; Sutiyo & Maharjan, 2017). Some researchers say that the regional fiscal dependency has reached an alarming point where more than 70% of its revenue sources come from central government transfers (Silver, Azis, & Schroeder, 2001). A report from the Supreme Audit Agency (*Badan Pemeriksa Keuangan/BPK*) in 2021 showed that the dependency rate reached more than 88%. The phenomenon of this dependency had become a concern for many researchers (Lewis, 2013; Aritenang, 2019). In line with this, a study by Lewis and Oosterman (2011) shows that the quality of infrastructure in the regions has not changed much after decentralization/regional autonomy took effect. Aritenang & Sonn (2018) and Aritenang (2019) studies even show that decentralization has a more positive impact only on developed regions.

Intergovernmental transfers generally consist of 2 (two) types; general purpose transfer and specific

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purpose transfer (Boadway & Shah, 2007). Associated with infrastructure development, specific purpose transfers or capital grants play a significant role (Boadway & Shah, 2007). Some studies related to capital grants show a direct relationship with local government capital expenditure in many countries including Indonesia (Boadway & Shah, 2007; Aritenang, 2019).

Several empirical studies have been conducted so far with a focus on certain things. These studies range from the analysis of whether the allocation is in line with priorities (Bappenas, 2011; Wibowo et al, 2011; Affandi, 2014; Pambudi, 2020, World Bank, 2020), to the effect on regional capital expenditures (Lewis, 2013; Aritenang, 2019; Pambudi, Agnelia & Putri, 2022), influence on regional development (Bappenas, 2011; Nuryadin & Suharsih, 2017; Aritenang, 2019; Sulaeman & Andriyanto, 2021), policy developments (Manshur, 2020), evaluation of regulations and formulas (Bappenas, 2011; Affandi, 2014; Chalil & Roudo, 2020), and governance of its implementation (Bappenas, 2011). Shah (1994) also stated that reform of transfer funds should be directed at developing designs that can bridge the gap between expenditure and revenue and increase the capacity of local governments. In addition, McCawley (2015) stated that some of the challenges and problems of infrastructure governance in Indonesia require clarity and effectiveness of regulatory regulations.

This study seeks not only on capital grant theory and various empirical studies that have been carried out in Indonesia but also to analyze the context of fiscal policy through the theory of allocative efficiency as an integral concept of Public Expenditure Management (PEM).

2. Theory

2.1. Allocative Efficiency

In the realm of public finance, government functions consist of 3 (three) things; allocation, distribution, and stabilization (Musgrave & Musgrave, 1989). To carry out these three functions need strong policies and institutions (Mandl, Dierx, & Ilzkovitz, 2008). One of the approaches that stand out in the management of public finance is Public Expenditure Management (PEM). PEM's comprehensiveness can be seen from its focus which is not only on proper budgeting processes and procedures but also on how the budget is allocated and used efficiently and effectively in achieving the desired policy objectives (Schick, 1998). PEM consists of 3 (three) main elements/objectives, including aggregate fiscal discipline, allocative efficiency, and operational efficiency.

Allocative efficiency talks about how to allocate the budget/expenditure to finance priority programs/activities planned by strategic goals. The urgency of this concept is to prevent budget pathologies such as short-term budgeting, escapist planning, distorted priorities because the budget is spent on

lighthouse projects, to enclave budgeting (Schick, 1998). This condition can occur when budget/policy planning didn't adopt a medium-term approach and the inability to identify spending priorities. Therefore, the creation of a policy environment that encourages reallocation is important (Allen & Tommasi, 2001).

Schick (1998) suggests that allocative efficiency elements consist of allocation based on priorities, Medium Term Expenditure Framework (MTEF), budget reallocation, program evaluation, and Cabinet Review. Hayashi (2001) describes the target framework and the measurement of Allocative Efficiency as illustrated in Table 1.1 below.

Table 1.1. Allocative Efficiency Framework

Element	Target	Measurement
Allocative Efficiency	• Priority based allocation	<ul style="list-style-type: none"> • Ensure accountability through transparency • Adoption of Medium-Term Expenditure Framework (MTEF)
	• Objective criteria as the basis for budget formulation	<ul style="list-style-type: none"> • Clarification and evaluation of program/policy outcomes • Feedback evaluation • Introduction of accrual-based accounting • Empowerment of audit agencies

Source: Hayashi (2001)

One of the main elements of Allocative Efficiency is MTEF which one fiscal year is considered very short compared to the process of achieving strategic goals/development priorities hence MTEF can be a guide to direct budget allocations more strategically according to the priority level of programs (Allen & Tommasi, 2001). ; Madjid, 2004).

To have strong institutions, it is necessary to have institutional governance that encourages the realization of allocation efficiency (Mandl et al, 2008). Institutionally, allocative efficiency includes 3 (three) main aspects; regulation, roles, and information (Schick, 1998). The regulation aspect points out that the sectoral needs are prepared based on evaluative findings mandated by laws and must be carried out by relevant agencies. In terms of role, the Central Government must have strong authority to determine priority agendas and budget needs that must be allocated; while sectoral

ministries must have the technical capacity to implement them. In terms of information, it is necessary to build an information system, transparency, and accountability of the budget allocations and programs implemented in the field.

3. Research Method

This research uses the literature review method conducted by qualitatively analyzing secondary data (books, scientific articles, and research/performance reports) that have been carried out previously. This method is based on the idea that knowledge is accumulated and lessons can be learned through it while building a new idea (Neuman, 2014). These are the stages of systematic literature review according to Neuman (2014).

1. Determine the topic.
2. Design a literature search.
3. Conduct a literature search with the help of search engines on the internet by searching based on the specified keywords.
4. Evaluate search results by reading the title, abstract, content, and conclusion of the article. In writing the results, it is only necessary to raise studies that are considered relevant to the subject being discussed.

Compile the results of the review

Harris (2021) conducted a similar approach that raised the issue of specific purpose grants by comparing practices in 5 countries (Rwanda, Kenya, South Africa, Uganda & India), and then the results of the review were compiled based on conclusions on how to design a good capital grant. The result of that study succeeded in constructing and highlighting an important agenda for improving the design of capital grants. Therefore this study is expected to construct the improvement of capital grant policy at a more contextual level to the conditions of Indonesia.

4. Results

4.1 Overview of DAK Research in Indonesia

Indonesia has implemented DAK since 2003. Table 4.1 below outlines the conclusions of previous studies with a focus on the implementation of DAK in Indonesia.

Table 4.1. Result of Empirical Study Concerning DAK

Researcher	Results
Usman et al, 2008	The existing allocation was low in correlation with physical indicators. The DAK stages are not in sync with the APBD, which made it difficult for local governments to adjust their regional budgeting plans. It is important to align DAK policies with the principles of regional decentralization so that there is no conflict of principles. Low compliance with local government reporting does not encourage the central government to provide sanctions that have been regulated. The capacity of local governments to implement DAK is also still low. The study suggests that DAK management should be decentralized to the provincial government.
Bappenas, GIZ & PGSP, 2011	The allocation bias objectives in DAK make it less effective/significant in its impact on the economy and HDI. The main problem is not the nominal amount but the inefficiency in its allocation and the ineffectiveness of implementing institutions. In addition, DAK is also expected to adopt a medium-term approach like the RPJMN because infrastructure investments are often multi-year in nature.
Wibowo, Dendi & Zulhanif, 2011	The nominal amount and distribution of DAK have not had a significant impact on the achievement of the targets for each sector. The current DAK allocation tends to be biased by specific objectives and is seen as an equalization.
Tedjawati, 2011	The study evaluated the implementation of the DAK Pendidikan in 2010. It found that there were delays due to the change from self-management to auction as well as changes to technical guidelines that were received by the local government at the end of the year. In addition, several corrupt practices were found in the process, reports that had not been evaluated according to the applicable guidelines, technical specifications were not included in the tender documents, and overpaid for several types of work.
Lewis, 2013	DAK has a significant effect on regional capital expenditures. However, for traditional infrastructure, the influence tends to be weak. DAK has not encouraged local governments to increase their capital expenditures and tends to rely on the center to build infrastructure in their jurisdictions rather than building it themselves. Meanwhile, the role of Parliament is very weak in promoting DAK reform; they tend to influence allocations only but do not promote a substantive policy improvement agenda.

Affandi, 2014	The implementation of DAK in Indonesia does not yet reflect specificity but tends to be equalization. There are regions with high Net Fiscal Index with high DAK allocations. DAK allocations are less prioritized for regions with low GDRP. In addition, there is still a mismatch of priorities between the central and the local govt, one of which is due to the absence of a medium-term approach as the basis for planning. The position of the proposed K/L tends to be weak in determining DAK allocations.
Nuryadin & Suharsih, 2014	DAK has an insignificant effect on the achievement of goals in each sector as well as on regional GRDP. Therefore, DAK has not had a significant impact on public services. This is due to the low quality of the allocation in terms of the nominal amount, the target area, and the focus on the direction of its use.
Aritenang, 2019	There is a flypaper effect on regional capital expenditures. Areas with a high degree of urbanization, population density, and access to infrastructure tend to have low capital expenditures compared to areas with high infrastructure backlogs. The distribution of the allocation of transfer funds, mainly DAK, should be based on more detailed regional characteristics.
Manshur, 2020	Weak consistency between DAK allocations and development targets where DAK is more seen as alternative funding for any project that is not included in the RKP. The dynamics of changing the DAK menu each year are not supported by a comprehensive study/evaluative criteria.
Pambudi, 2020	DAK Allocation to Environmental Program has not been in line with the priority of watersheds & lakes as mandated. This can be seen in the regions that receive large allocations with low urgency/priority, and vice versa. In addition, there are still unintegrated activity menus in the RKP that are not in sync with the RKP
Chalil & Roudo, 2020	This study provides a formula approach for DAK Educational Infrastructure through the calculation of the level of infrastructure needs seen from the gap in conditions and needs by taking into account the time scenario.
Sulaeman & Andriyanto, 2020	DAK for SMEs, Health and Family Planning as well as Transportation have positive and significant impacts on regional development, and DAK for Agriculture has positive but not significant effects. DAK for Maritime & Fisheries, Education, Housing, Drinking Water, and Sanitation have negative and significant impacts on regional development.
Bank Dunia, 2020	The DAK reform in Indonesia has not had an effective impact on achieving national priorities, which is reflected in the increasing number of fields and menus that obscure national priorities, as well as in the nominal allocation that does not reflect priorities. The correlation between DAK Allocations and local government needs in 2016-2018 tends to be low. Determination based on regional proposals also makes it difficult for regions to draw up investment plans on a multi-year basis. Reforms on how LGs can efficiently use their transfer funds and capital expenditures are also needed.
Pambudi et al, 2021	The study focused on the evaluation of the Physical DAK Assigned for Education in 2019. There are problems such as allocations that do not reflect the level of need, lack of transparency & public audits, low capacity of human resources in preparing proposals, not yet optimal utilization of the Student Practice Room, and differences in access to information between vocational schools in urban and rural areas.
Pambudi, Agnelia & Putri, 2022	Spatial mapping provides an overview of the distribution of allocations and the level of influence of the Thematic DAK on Sustainable Infrastructure in the Provincial Budget. The study emphasizes the importance of developing policies to reduce regional dependence on transfer funds, especially DAK through increasing their respective OSR.
KOMPAK, 2022	The study resulted in recommendations in the form of the implementation of the Physical DAK immediate outcome. The indicator should be adopted in the Physical DAK planning which is regulated in related regulations, appears in the monitoring and evaluation system, and becomes a consideration in the performance assessment of DAK implementation by the regional government to be one of the considerations in determining the allocation in the next year.

Source: Conducted by Authors (2022)

Previous studies have reflected a fairly broad area of focus related to DAK, from the planning and allocation determination processes to implementation in local

governments. However, research that focuses on each area or menu of DAK is still rarely done.

4.2 The Relation to Allocative Efficiency Theory

Table 3 below provides an overview of the relationship/relevancy between the PEM allocative efficiency theory and the topic/focus of the study on DAK in Indonesia. According to the matrix created, it can be seen that the majority of topics are relevant to the analysis of priority-based allocation and programs/policies evaluation. This can be seen from the 16 studies that were sampled, 11 of which raised questions about whether the allocation of Physical DAK has been directed at development priorities and issues that overshadow it, such as the dissonance of

development priorities between the central and regional governments. The program/policy evaluation analysis was also carried out in 11 studies. The topic that has not become a concern for the study is the Cabinet Review aspect, considering that this analysis usually requires informants with high positions and access to them tends to be difficult. The MTEF analysis and Budget Reallocation have also only been mentioned in 4 studies, although both have crucial roles in realizing the allocative efficiency of public finance policies.

Table 4.2. The Relevancy Between Empirical Studies and the Perspective of Allocative Efficiency

	Priority Based Allocation	MTEF	Reallocation	Program Evaluation	Cabinet Review
Usman et al, 2008	√			√	
Wibowo, Dendi & Zulhanif, 2011	√				
Bappenas, GIZ & PGSP, 2011	√	√		√	
Tedjawati, 2011				√	
Lewis, 2013	√			√	
Affandi, 2014	√	√	√	√	
Nuryadin & Suharsih, 2017				√	
Aritenang, 2019	√		√		
Pambudi, 2020	√		√		
Manshur, 2020	√	√		√	
Chalil & Roudo, 2020	√			√	
World Bank, 2020	√	√	√	√	
Sulaeman & Andriyanto, 2021				√	
Pambudi et al, 2021	√			√	
Pambudi, Agnelia & Putri, 2022	√			√	
KOMPAK, 2022				√	

Source: Authors

fiscal year found allocations that were not suitable with the mandate of Presidential Decree No. 141 of 2018 so many regions receive large nominal allocations which are not included in Priority Watersheds and Lakes. Not much different from these findings, Affandi's study (2014) which evaluated the fulfillment of the definition, mandate, and policy direction of DAK refers to Law no. 33 of 2004, Govt. Regulation No. 55 of 2005 and Presidential Decree No. 5 of 2010 found irregularities in the determination of DAK recipient areas. These discrepancies, for example, are regional governments receiving DAK that have not been prioritized by regional governments with low fiscal capacity, between the amount of the allocation set and the one proposed by the ministry or LG, as well as differences in perceptions of development priorities between local and central governments.

4.3 Evaluation Based on Allocative Efficiency Perspective

Priority Based Allocation

Determining the allocation, both from the nominal amount to the recipient area still seems to be the toughest problem for DAK implementation in Indonesia. Almost all of the literature reviews presented in Table 2 include an element of testing allocations against the established development priorities. This is in line with Schick (1998) who stated that the core of allocative efficiency testing is not in the procedure, but in the allocation itself.

The study by Pambudi (2020) that tested the DAK Assignment for Environment and Forestry in the 2019

The study by Wibowo et al (2011) also found about 93% of local governments receive DAK so that DAK allocations no longer reflect specificity criteria. The World Bank (2020) in the Indonesia Public Expenditure Review (PER) found a low correlation between DAK allocations and regional needs.

There are several reasons why the above phenomena could happen. First, the determination formula with general, technical, and specific criteria is implemented not as a filter for recipient areas but is carried out in stages that increase the recipient area (Bappenas, 2011; Wibowo et al, 2011; Affandi, 2014). Second, there are differences in priorities between the central government and regional governments, one of which is the result of the APBD stages being out of sync with the DAK stages (Bappenas, 2011; Manshur, 2020; World Bank, 2020). This weak synchronization is reflected, for example, in the Pambudi study (2020) which examines the suitability of the Provincial Annual Planning (RKPD) with the central government's Annual Planning (RKP) whereas in the Environment and Forestry Sector the level of conformity of regional priorities with the RKP is only 8.3% to 41.6%.

Therefore, integrating the DAK stages with regional development priority planning will greatly determine the success of DAK policies which simultaneously increase local government ownership of national policies (World Bank, 2020; Pambudi et al, 2022). Third, is the unclear direction of allocation priorities (Affandi, 2014). The bias in this allocation is evident in the tension between regional financial capacity and infrastructure needs. Affandi (2014) gave an example of the case in Bogor Regency which received a high allocation where Bogor Regency has a bid technical index of education is the largest because it has a large number of schools even though in terms of the financial capacity of Kab. Bogor is one of the high. The Ministry of Finance (2022) reasoned that for 2021, the allocation of Regular and Assigned DAK is accepted by almost all local governments because it is aimed to meet the minimum standard of service (*Standar Pelayanan Minimal/SPM*) target.

DAK as a type of transfer fund in theory can indeed distort regional development priorities (Boadway & Shah, 2007). Therefore, further studies on the implementation of DAK from the perspective of local governments within the decentralization framework are needed to describe whether these distortions occur, to what extent the tension is, and what are the implications for the implementation of regional autonomy.

Medium Term Expenditure Framework (MTEF)

The results of the mapping of 16 articles show that only 4 bring up the subject of MTEF. The Chalil & Roudo (2020) study does not explicitly discuss MTEF but they place a medium-term perspective (years 2021-2024) as the basis for the formula they propose for DAK Education. The absence of a medium-term approach in both planning and forward estimates makes it difficult for local governments to predict how much allocation they will receive. In addition, because DAK allocation is

directed to development priorities as set out in the National Medium-Term Development Plan (RPJMN), DAK should also adopt a medium-term approach in its policy framework (Bappenas, 2011; Manshur, 2020; World Bank, 2020). The implementation of MTEF itself does not require details up to the nominal allocation to be received each year, but in the form of an indicative minimum ceiling of funds to be transferred, forward estimates, and various macroeconomic considerations regarding the balance of receipts (Hayashi, 2001; Schick, 2003). This will prevent inconsistencies and policy changes that are counterproductive to the achievement of national priority targets such as the results of the study by Manshur (2020).

MTEF itself is a framework that can provide a baseline for measuring the impact of financing on a policy by considering the aggregate fiscal discipline (Schick, 1998). The importance of MTEF is based on the fact that development priorities in developing countries usually change slowly because they tend to be multidimensional and targeting aspects of basic services. Through MTEF, budget pathology such as short-term budgeting, distorted priorities, or escapist planning can be prevented and minimized. The implementation of DAK in Indonesia has not yet adopted this approach comprehensively, therefore changes in the DAK fields and menus that occur every year are often unfounded and counterproductive (Manshur, 2020).

The Ministry of Public Works and Housing (MPWH) has introduced and mandated local governments to develop medium-term infrastructure investment plans and programs as contained in each DAK technical guideline such as in MPWH Ministerial Regulation No. 5 of 2022 concerning Operational Guidelines for the Management of DAK Physical Infrastructure for Fiscal Year 2022. However, there is no transparency on the extent to which local governments fulfill this mandate. In addition, a similar arrangement is not mandated by a higher regulation, namely in Perpres No. 7 of 2022 concerning Technical Guidelines for Physical DAK for Fiscal Year 2022. Local governments also find it difficult to implement this considering the stages of DAK are not in sync with the formulation of the local annual budget planning (APBD) as described previously. In addition, human resources in LG have limited capacity in planning, design, and project management (Lewis & Oosterman, 2011). Therefore, considering that MTEF has not been adopted and implemented in DAK technical and sectoral planning, studies are needed on how to adopt this approach, the change needed for the formula in determining allocations so that they can be more predictable by local governments, as well as increasing the capacity of human resources.

Budget Reallocation

Schick (1998) emphasizes that an important aspect that cannot be separated from allocative efficiency is the environment that allows budget reallocation from low priority to higher priority through decentralization of authority to spending units. The implementation of

DAK in Indonesia does not seem to have adopted this because the LG and sectoral Ministries such as the MPWH do not have the authority to do so, but rather the Ministry of Finance. This is based on the argument that the central government through the Ministry of Finance is considered to have a more comprehensive and strategic view of government priorities broadly than certain sectoral ministries in addition to having authority with the Ministry of Finance, the agenda of ensuring aggregate fiscal discipline can be maintained (Schick, 1998).

One example of a policy that encourages reallocation that has been carried out by Indonesia is the response to the Covid-19 pandemic with Presidential Decree No. 123 of 2020 concerning DAK Technical Guidelines and Minister of Finance Regulation No. 17 of 2021 concerning the Management of Transfers to Regions and Village Funds for the 2021 Fiscal Year to Support the Handling of the Covid-19 Pandemic and Its Impacts. Through these regulations, the GoI seeks to use fiscal instruments in this case Transfer Funds such as DAK, DBH, and DAU to be allocated to handling the impact of the Covid-19 pandemic.

Until 2022, the gap between local government proposals still reaches 6 to 9 times compared to the stipulated allocation (Ministry of Finance, 2022). This reflects the high level of local government need for DAK while the proposal is expected to be more rational and in line with national priorities. Concerning the possibility of an allocation set that is not appropriate or does not meet the needs of the local government, further studies are therefore needed on whether the reallocation authority by the local government and sectoral/technical ministries can be made possible.

Program Evaluation

Schick (1998) explains that in implementing the concept of allocative efficiency, the implementation of public financial management must be based on evaluative findings with relevant and substantive indicators for improving policy quality. In Indonesia, the government annually evaluates the implementation of DAK policies and projects. This can be seen in various DAK policy socialization documents which are carried out every year. For example, the evaluation of the implementation of the DAK in 2021 noted several things, such as the allocations received by almost all regions causing the nominal allocation per sector to be insignificant and not showing priorities, local government proposals are not significant/focused, there is no visible spirit of specificity so that DAK has not been integrated into planning documents (Bappenas, 2021).

However, this evaluation approach is considered to be less substantial and it has not been supported by a comprehensive academic study on the substance and direction of the DAK policy itself (Manshur, 2020). Furthermore, Manshur (2019) concludes that the consistency of DAK policies in 2015-2019 is very low where the policy direction does not reflect the academic-empirical argument regarding effectiveness in achieving

national priority targets. This is due to policy changes, such as the addition of the DAK menu, which tends to be misleading in planning and fiscal terms, and makes DAK to be seen as an alternative basket of project funding as long as it is relevant to the RKP.

In response to this situation, the government through the Ministry of National Development Planning/Bappenas together with KOMPAK took the initiative to develop objective indicators as one of the tools to evaluate the implementation of DAK, namely by compiling short-term outcome indicators (KOMPAK, 2022). The study is based on Presidential Decree No. 123 of 2020 which mandates performance indicators in the implementation of DAK such as output indicators, short-term outcomes, and long-term outcomes/impacts. One of the findings that emerged was that there were differences in the types and units of immediate outcome indicators between those stipulated in Presidential Regulation No. 123 of 2020 with the Minister of PUPR Regulation No. 5 of 2021 for DAK Physical for Drinking Water, Sanitation, Housing and Settlements and Roads.

Evaluating the formula used in determining the allocation is also very important in realizing allocative efficiency in the implementation of DAK. Several studies have described the problems in the formula as one of the reasons why the allocation has not been according to priorities (Wibowo et al, 2011; Bappenas, 2011; Affandi, 2014). One of the efforts to evaluate and introduce a new formula approach is carried out by Chalil & Roudo (2020) which focuses on the Physical DAK in the Education Sector by estimating the need for education infrastructure that requires handling per region, developing scenarios based on time, fiscal space conditions and other technical indicators. Through this approach, the area will be divided into 4 quadrants; stimulant, incentive, focus, and disincentive. Meanwhile, Affandi (2014) emphasizes the improvements to the currently used formula, namely by changing the general-specific-technical criteria into one index. On the other hand, a comprehensive study is also needed of the extent to which DAK as an outcome contributes to the achievement of multi-sectoral national development priorities.

Cabinet Review

Schick (1998) states that the Cabinet Review focuses on the policy change/improvement agenda; not on separate expenditure/items. To date, there have not been many studies that have attempted to examine the extent to which the DAK policy change agenda is discussed in cabinet forums and whether policy changes occur. The study of Manshur (2020) who conducted a study of DAK policies from 2015-2019 concluded that there were inconsistencies in the direction of policies each year. Tobing & Brodjonegoro (2013) conducted a study discussing the political environment factors that influence the allocation of transfer funds, although it did not focus specifically on DAK. The study concluded that there was a significant effect of the proportion of DPR members from the Golkar Party on the allocation

of the Co-Administration Fund, considering that at that time Golkar had a majority of votes/representations.

Political actors such as parliament have a strong influence on the determination of budget allocations with the assumption that they tend to satisfy/based on the preferences of constituents in their regions (Campos & Pradhan, 1996; Fozzard, 2001). In practice in Indonesia, the DAK process is also carried out together with the House of Representatives (DPR). The study by Bappenas & GIZ (2011) even mentions that changes in the field of DAK in addition to accommodation of ideas/proposals from sectoral ministries are also a way of compromising the political process in the DPR. The role of the DPR is stated in the APBN Law which is passed every year. As in Law no. 9 of 2020 concerning the State Budget for the 2021 Fiscal Year, Article 12 paragraph (2) states that the allocation of Physical DAK is determined based on the proposals of the Regional Government and/or the aspirations of the DPR members

5. Discussion and conclusion

The development of the DAK policy as a capital grant for the provision of infrastructure in the local regions according to national priorities in Indonesia has been going on dynamically. A literature study of various articles, including research results, policy reports, and theoretical books, is carried out to provide in-depth and comprehensive knowledge about the implementation of DAK in Indonesia and the gaps in the study required. The results of the study conclude that the implementation of DAK allocations in Indonesia has not been fully directed at achieving the national priority agenda because the formula used does not reflect the level of need/priority-based allocation. This is reflected in almost all regions receiving allocations and the nominal allocation does not reflect the level of regional needs in terms of technical indicators and fiscal capacity. The changes to the menu and fields of DAK are not based on in-depth academic studies, so it seems that they were born out of a political process. In addition, the medium-term infrastructure investment planning approach to local governments has not yet been adopted, the gap between the proposal and the allocation received by the regional government is still high, program evaluation has not led to an impact assessment and there have not been many studies that have examined the influence of the political process in the allocation of DAK.

This study provides recommendations in the form of an overview of the need for further studies to push the DAK reform agenda in Indonesia so that its contribution is more effective in achieving the priority targets of national infrastructure development. DAK in Indonesia has a unique contextual characteristic considering the geographical challenges and institutional capacities of local governments make it different from implementing capital grant policies in other countries. Some of the study developments needed are regarding reform of the formula used in determining allocations, how to build integration of development priorities between the central

government and local governments, and to what extent the tension between central govt. priorities meet the interests of local governments which had the local autonomy, how to adopt the MTEF approach in DAK planning for local governments, the extent to which relaxation of reallocation authority on spending units is needed, and to what extent and how to direct political influence towards improving the quality of DAK policies. Some good practices in Indonesia can also be a lesson for other countries in designing their capital grant policies

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