Analysis of the Effects of Transition from Categorical Grant to Block Grant
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December 2017

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Introduction

The block grant system has been operated for over 10 years since its introduction in 2005, and a number of studies on reform plans for the whole categorical grant system, including block grants, have been conducted. The scale of categorical grants of most countries, including South Korea, is on a steadily rising trend. Such an increase in total categorical grants starts with an increase of welfare expenses, and this trend is expected to continue for a while. As categorical grants account for a large part of national finance and the function and ripple effect of such grants are growing, the increase in diversity of research on categorical grants is very encouraging. However, there is not much research on the block grant system itself that has been operated for over 10 years as one type of categorical grant, and the depth of discussion on it does not go much beyond discussing the existing categorical grant.

More surprisingly, the block grant system, which is suggested as an alternative and improvement over most categorical grants in research and the “regional development special account” of South Korea are sometimes discussed as different things. The reason is, first, as block grants are calculated through an integration with categorical grants and the allocation by region is not disclosed, quantitative research is fundamentally limited. Second, block grants have institutional characteristics that are complex and difficult to objectify. The significance of the block grant system is emphasized in the process of comparing its system design and policy application with those of the categorical grant system, monitoring, and differentiating them, rather than when it is discussed alone. However, the overall categorical grant system and block grant system
have their own characteristics, and there are differences between them. And such differences can be explained only when they are based on objectivity. There have been no such efforts in terms of policy research and also in the academic circle, in fact. Therefore, the present study aims to work on objectification using materials related to block grants, and it is hoped that many characteristics and issues of the system will surface in the process. The research process itself is the purpose and significance of this study.

The present study aims to utilize and analyze allocation data and materials about policy changes to investigate the changes in behavior of the central government and local governments regarding the block grant system since 2005. Developed countries are using department block grants widely, and the Ministry of Health and Welfare of South Korea has also attempted a form of block grant. Therefore, studying and assessing the regional development special account, which is a multi-department block grant and a one-step advanced block grant, is expected to be interesting.
Block Grant System and its Operational Status

1 Background of Introduction of Block Grants and its Basic Structure

A. Introduction and characteristics of balanced development special account through the reform of categorical grants

The current regional development special account” in 2016 started with the “balanced development special account” based on the Special Act on Balanced National Development of the Roh Moo-Hyun administration in 2005. The reform of categorical grants at the time was led by the Presidential Committee on Government Innovation and Decentralization and Ministry of Planning and Budget and the following criteria were applied to divide the categorical grants into three types. First, for decentralization, welfare and education-related projects in the strong nature of local affairs were mainly selected, and welfare, agriculture and forestry, and environment-related projects that were strongly connected with national policies were retained through the categorical grants. The balanced development special account project consisted of the industries related to SOC, agriculture and forestry, and culture and tourism.1) Afterwards, since the

1) The Special Account for Balanced National Development was established to push forward regional development and innovative advances by integrating balanced development projects that had been carried out separately by several departments and effectively support policies for balanced national
decentralization allocation tax was incorporated into the local grant tax in 2014, the regional development special account is the only multi.departmental block grant as of now.

To this day, and not only before 2005, the regional development special account has been the only grant in which a ceiling is fixed for categorical grant projects, and self-governing bodies choose interdepartmental projects within the ceiling.2) The report “Regional Development Policies in OECD Countries” (2010), which analyzed the regional development-related governance structures and control towers of OECD countries, whether there were mid- and long-term regional policies and if so, what their contents were, assessment of outcomes of those regional policies, and regional development-related grant systems, found cases of regional development block grants like regional development special accounts only in the UK (the RDA’s “Single Pot”) and in South Korea since 2005, excluding the EU structural funds.

At the time of its introduction, the balanced development special account was a blocking of regional SOC projects related to balanced development, and the block grants were in contrast to the decentralization allocation tax, the welfare project for the purpose of decentralization. “Blocking” here means that various categorical grant projects are managed within one account and not managed individually, so that the government secures the flexibility of the previous finances in the allocation stage and allows local governments to exert their autonomy in the stage of using the finances.3)

Compared with the past categorical grants, block grants extended the authority of finance consumers by allowing the blocking of projects to be conducted in the unit of self-governing bodies, the user of finance, and not in a top-down way, even though the same amount of finances is allocated to the same project.4) As such, local residents, the actual beneficiaries of the finances,
can request a necessary project, and based on this, local governments can choose projects. In other words, this enabled the allocation of finances between the budgetary authority and self-governing bodies, which was an important change for fiscal decentralization.

The current block grants that have been made by covering the part of the past categorical grants are different from the existing categorical grants both for the budgetary authority that allocates finances and local governments that receive and use the finances. First, the recipients of finances, local governments, can select from among similar projects for the purpose of SOC of various departments within the regional development special account (the life base account). The donor, the budgetary authority that allocates finances, can secure the flexibility of finance allocation and manage the project results by allocating finances directly to self-governing bodies, unlike categorical grant projects that are allocated to the departments. Therefore, as a great change of the fiscal relationship between the central and local governments, this change from categorical grants to block grants is an important institutional reform that shows an empowering of local governments by the central government which started with the introduction of a local education tax in 2001, and the move toward expansion of local autonomy.

Early after its introduction, although the abolishment of the balanced development special account and the demand for the return of categorical grants had been raised by the budgeting staff, project operators and department officials, there were very few cases of abolishment or returns except for the reduction of the development account since the Lee Myung-bak administration. The reason can be considered that the political cause of the balanced development special account was clear. Textbooks on finance commonly explain that a block grant means the budgeting authority’s granting of the right of choice for public goods to users.5) In other words, a bottom-up right of choice for projects, not a top-down

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4) “Indeed, categorical grants in the United States had long been criticized as being administratively burdensome, too restrictive to allow for tailoring to specific regional conditions, producing duplication and overlap among grant programs, and provoking a propagation of grants at work in a similar geographic area, yet administered by different federal agencies without coordination” (Spahn (OECD), pp. 11)

way, which is the cause of fiscal decentralization, embeds the decentralization factors beyond practical criticism and cumbersomeness.

The regional development special account, at least, has been designed 1) in order for local governments to have the authority to organize SOC projects according to a departmental project menu, and 2) for the heads of local governments to express their political will whether the scale is big or small. Although innovative accounts were implemented with the purpose of balanced development under the Special Act on Balanced National Development in the process of the introduction of the institution, a “local government budgeting system” was specified with an emphasis. Therefore, it’s difficult for budgeting departments, project departments, self-governing bodies, related policy makers and the academic circle to raise an objection. In particular, the budgeting staff, project staff, and heads of local governments can raise issues about an excessive administrative burden for project planning and selection due to the lack of competence of local governments and about the reduction of project execution rates due to poor project management by departments. But still, the ground for opposing is too weak to abolish the block grant system itself. This is because the political cause is strong, as the authorities that local governments have under the block grant system are clear.

Lastly, 3) the most crucial difference between the regional development special account and categorical grants is that the life base account (former regional development account), a ceiling finance, is excluded from being subject to budget increase/decrease by the National Assembly. The blocked ceiling finance is organized as the budget for projects, and it is technically impossible to accept a demand for budget increase/decrease for a specific project, whoever requests it. Therefore, the ceiling finance is a safeguard for finance securement of local residents. As the finances are operated for the projects that self-governing bodies have selected autonomously to be protected in the National Assembly as well as departments, it can be considered to be the “local government budgeting system” at least in terms of its formality and cause. Such

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6) “The second argument is more political. Transforming categorical grants can reduce the role of the Congress, federal bureaucrats, and lobbyists representing program beneficiaries in shaping these programs, ...” (Brookings Institution 2005), p. 3 cited.
characteristics of ceiling finance are controversial from the perspective of a national budget that should reflect the will of the people.

A study introducing the block grant system of the United States is as follows. Dilger and Boyd (2014) explain that the sharpest conflict between advocates and opponents of the block grants was over the interpretation of “requests for the increase/decrease of grants in the National Assembly (credit claiming).” This is about whether such requests are a “reflection of people’s positions” or “political pressure.”

The current South Korean regional development special account has many problems that need to be addressed, such as fundamental limits from the process of categorical grant reform and vulnerability of the execution process. The most representative cases are not disclosing allocation by region of ceiling finance and the ambiguousness of the operation of the economic development account. There is harsh political criticism of operational issues rather than the aim of the institution itself. In the case of the economic development account, not ceiling finance, for example, it is condemned for causing problems such as an increase of civil engineering and construction budgets because it is actually included in the categorical grants.

B. Basic Structure of Regional Development Special Account

The subject of this study is “si/do autonomous budgeting project” and “si/gun/gu autonomous budgeting project,” which are the “life base account” of four accounts of the regional development special account, and this falls under the “ceiling allocation” project. Budgeting explanatory materials explain the regional development special account with the “subject of block grant project” and “expense limit of block grant project (ceiling).” Each local government (si/do or si/gun/gu) chooses block grant projects within an autonomous budgeting limit.

7) “Block grant advocates have often found it difficult to gain congressional approval for block grants because their arguments have been superseded by political considerations...Unlike block grants, the categorical grants give politicians more opportunities for credit claiming....” (p. 7)

8) Finance News, “Categorical Grant Project that the Ministry of Security and Public Administration Does Not Know” (http://www.narasalim.net/926, 2014.4)
and autonomously designs the details by project, but mutual adjustment between the limits of si/do and si gun/gu is impossible. From 2011, local governments must explain the “association with the regional development plan” when they apply a project, and they must specifically construct projects by associating them with the 5-year regional development plan and suggest its necessity. 9) And with respect to si gun/gu autonomous budgeting projects, the Park Geun-hye administration is pushing forward the “regional happy life zone cooperation project,” which supports multi-department cooperation projects between si gun by constituting 63 village unit life zones.10)

At the time of the block grant system’s introduction in 2005, there was the “regional development account,” which was the ceiling finance, and “regional innovative accounts” (hereinafter referred to as “innovative account”), which was in the form of categorical grants. The innovative account was changed to the economic development account” through the “multi-regional account.” The economic development account consists of projects with high national priority such as si and do connection projects and projects related to limited development districts for a department’s support of the right of economic cooperation. For this, each department draws up a budget upon the request of local government based on a si/do development plan and mid- and long-term investment plan. Also, although the economic development account is included in the regional development special account as a departmental budgeting project, its operational method is the same as categorical grants. The economic development accounting project, its operational method is the same as categorical grants. The economic development account’s budget scale is determined in the expense limit by department after budget deliberation and the department allocates the budget to local governments. And the account is included in the subject of the general

9) From 2005 to 2010, it was mandatory to explain the association with the balanced national development plan and regional innovative development plan under the Special Act on Balanced National Development. (Ministry of Strategy and Finance, "2017 Regional Development Special Account Budgeting Guideline," p. 103).

10) The “regional happy life zone cooperation project,” which is mainly composed of a “connection cooperation project” and “vulnerable community living condition improvement project,” is in the process of new project selection as of 2016, and the 2017 budget expense limit will be separately notified. (Ministry of Strategy and Finance (2016), p. 71).
categorical grant project during the assessment of projects. It can be said that there is no operational difference from the categorical grant system from the view of allocating agent and project operation.11)

The economic development account originally corresponded with the former innovative account in the balanced development special account at the time of its introduction. This was reorganized as the “multi-regional development account” within the multi-regional/regional development special account under the Lee administration, and its purpose was to intensively support “regional connection cooperation projects.” Although the characteristics of the economic development account project were similar to those of previous account projects, it aimed to resolve the problem of regional units of dispersed duplicate investment and promote the increase of project effects through multi-regional connections. Therefore, the projects of the economic development account were composed of the vitalization of the right of economic cooperation, increase of the transportation supply chain and projects related to the improvement of competitiveness of local universities and the promotion of regional scientific technology, which are rooted in the past innovative account, and the difference from general categorical grant projects is said to be in these project contents.12)

The Ministry of Strategy and Finance, the block grant allocator, operates continuous projects and new projects differently considering that priority adjustment among projects was somewhat unfavorable to new projects in the stage of project application. A “new project” is applied regardless of application limit and departments adjust appropriate expenses within the spending limit and make a request to the budget office, and this can be considered to be a special protection device.

11) The Regional Development Special Account Budgeting Guideline of the Ministry of Strategy and Finance explains the budget application of departmental budgeting projects as “budget application considering development demand and required finance by regions with the procedure same as other categorical grant projects,” (Ministry of Strategy and Finance (2016), p. 61)
2 Characteristics of Block Grant System

A. Merger of Projects through Multi-regional/Regional Development Special Accounts

The balanced development special account was reorganized into the multi-regional/regional development special account” in 2009 under the Lee administration and the key contents of the 2010 revised multi-regional/regional development special account was “multi-regionalization” and “regional blocking” in which one department takes responsibility for similar projects in the unit of local government.13) Multi-regionalization attempted the vitalization of connection investment between si/do in multi-regional economic zones and expected synergy effects and economies of scale between regions with this. However, due to the setting of multi-regional economic zones which did not coincide with administrative districts, which are the practical finance allocation units, the application of project, the agent of budgeting and project management was not clear, and this led to the failure of proper project implementation.14)

Blocking of regions was a new method which had not been used in categorical grant operation. Underdeveloped area projects were merged into four basic settlement areas (general farming/mountain/fishing areas, acceleration of growth, special situation, and revitalizing urban area), duplicate investment by regions and departments was prevented, and allocation was made considering regional demand and comparative advantage. In particular, “living zone unit block grants” were implemented where projects that had similar functions were integrated and divided into two to four projects considering the characteristics of the basic

13) “In 2005, fiscal reform was enacted by establishing the ‘Special Account for National Balanced Development’ which transformed many specific-purpose grants into integrated national grants for regional development that were otherwise scattered in the central government’s accounts. The Special Account for National Development Special Account was established in 2009 to expand fiscal spending for local municipalities. Two hundred projects were integrated into 24 comprehensive projects and a block grant was adopted to give local municipalities the authority to autonomously design the projects.”(p. 184)

settlement area, and the competent authority became the allocator of living settlement area units. Filtering similar duplicate projects of village units through the department’s generalizing regional units is an important improvement of the si/gun/gu block grant project.

B. Introduction of Block Grants based on Formula Basis Allocation

The political meaning of formula basis grant allocation, one of the conditions of block grants, resides in “objectification” and “simplification.”15) The U.S. GAO and the EU’s Agreement of Budgetary Discipline and Sound Financial Management explain how the allocation formula is used in various ways for the securement of “conditional funding (block grants, etc.)” as well as unconditional funding. The allocation formula that is applied to South Korean regional development special account uses five variables (fiscal capacity index, population, income-proportional resident tax, area, and aging population rate). This is the way to determine allocation scale by region of the current year by applying the average trend of a regression equation based on a base where the allocation scale of the previous year and budget increase trend of the current year are considered.

Connecting the ceiling scale of self-governing bodies with the allocation scale of the previous year has an advantage of securing the stability of existing projects but has a limit in fundamentally blocking the planning intention of new projects. However, existing project composition was based on past categorical grant projects and new projects are protected as “out-of-limit” projects. In this way, continuous efforts such as the preparation of an institutional strategy to minimize the problems caused by dogmatic application of the allocation formula are made.

The fundamental disadvantage that had been pointed out from the time of introduction was the fact that hundreds of projects (based on detailed projects) depended on only five variables. Allocation based on average trend value has less precision of allocation compared to categorical grants that structurally

15) “Where such criteria are objective and not manipulable (e.g., population, area size, portion of pensioners, standardized taxes, etc.)” Spahn (2012)
allocate according to each demand for finance because there are areas for which allocation is excessive or lacking. However, block grant allocation does not focus on individual projects and the precision of allocation scale for specific areas, but on the supply of the same grant scale with low expenses. The results of a survey in the previous study showed support for the blocking of categorical grants and budgeting staff clearly replied that the regional development special account was “our money” in several in-depth interviews. Judging from this, 10 years later, while there is a discussion about whether or not the scale of categorical grants should be increased, the issue of non-precision doesn’t seem to be a consideration any more.

Also, as the application of an allocation formula can be favorable or unfavorable to a specific area according to the characteristics of the variables used, the budgeting staff of each province still continuously request to use variables that are favorable to the relevant area. The inter-regional argument over “underdevelopment” and “finance demand” that started at the time of the system’s introduction still continues. However, as this is a rather political requirement, the weight can differ according to the strength of the demand of people. However, it should be emphasized again that underdevelopment could not be the absolute allocation criterion despite the regional development special account aimed for “balanced development” because the balanced development special account at the time was based on the existing categorical grant project. There is a need to remember that although allocation based only on underdevelopment could be made if the regional development special account was composed of new projects with new finances, it was realistically impossible because the current regional development special account was composed of more than 10 existing departmental projects. This is because an allocation formula aimed to explain the previous allocation distribution as much as possible as the balanced development special account was created with the purpose of blocking several individual project grants rather than being a completely new plan.

16) In in-depth interviews about deteriorated local waterworks in 2016, the budgeting staff of each province raised the need for an application of variables that was favorable to their area.
The U.S. GAO report applied a formula with various variables to secure objectivity and introduced efforts to overcome the limits of the formula with various control devices.\(^{17}\) It shows the evidence of 1) the application of the allocation base of the previous year (hold harmless provisions/caps), 2) setting of a yearly increase/reduction rate limit (floors and ceilings),\(^{18}\) and 3) consideration of underdevelopment (small state minimums), which are being carried out by the life base account. It is an explanation of the basic concept of the allocation formula when the federal government allocates block grants to put out finances, and this is not much different from the basic concept of the application of the allocation formula of the South Korean regional development special account.\(^{19}\)

C. Bottom-up Monitoring Unit for Project Duplication/Overlap

One of the important differences between conditional block grants and categorical grants (specific grants) is competition between projects within a ceiling. The U.S. Congress report explains the system structure to reduce program duplication/overlap through such a competitive composition. As self-governing bodies, the finance user, not the budget office which provides finance or department which provides projects, competes through the process of adjusting priorities within designated finances at the stage of project application, and project duplication/overlap is reduced by this process.\(^{20}\) Given that South Korea’s regional development special account has an “interdepartmental project competition system” on top of this, its effect of reducing project duplication/

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17) GAO(2009), pp. 10~11.

18) "...No state’s allocation is to exceed the amount the state received under this section for the preceding fiscal year multiplied by the sum of 1.5 percent and the percentage increase in the amount appropriated under this section from the preceding fiscal year” (Dilger and Boyd (2014), p. 10).

19) One difference is that while the homogeneity of projects is high, balanced allocation by region is low because the range of projects to which the allocation formula of the U.S. is applied is just one department’s grants.

20) "They believe that block grants eliminate these duplications and waste by consolidating categorical grant activities, and by providing states and localities the ability to set their own priorities and allocate funds accordingly...” (Dilger and Boyd (2014), p. 8)
overlap is more extensive.

In 2005, the first year of the system’s introduction, there was an integration of project duplication/overlap by department through a project validation program in departments. Of course, detailed projects within unit projects are still being operated as separate projects, and its budget application is available at the project application stage with the connection with a department being different from other categorical grants.

Efforts to reduce project duplication/overlap through competition between departments, as well as competition between projects within departments, was made in the process of “blocking of regions” under the Lee administration and the regional development special account maintains it. If a similar-content project is duplicated, the regions can adjust the priority of the project on their own under this institution.

However, the U.S., which has introduced various block grants and has been operating them since 1966, is not able to present clear results in performance assessments.21) As in South Korea, there is still no quantitative assessment showing a clear reduction of project duplication with the filtering of similar projects between departments since the system’s introduction in 2005. Therefore, although it is difficult to clearly conclude that the aim of reduction of project duplication/overlap has been achieved, it is encouraging in that a system has been established where similar projects are structurally filtered in the process of decision making on project priority by local governments after reviewing a project menu when they choose a project for the projects within SOC block grants, in other words, projects within a ceiling between departments. In addition, the establishment of an overlap system in the bottom-up process from the finance user, and not in the top-down monitoring process from the donor of finances, is one of the advantages of South Korean’s block grants.

21) Although it began in 1966, there had been active discussion on the introduction of block grants among experts in academic circle from the 1940s (“Block grants: Flexibility vs. Stability in Social service,” Policy Brief, Center on Children and Families #34, Brookings Institution, (December 2005)), p. 1 cited
D. Importance of Block Grant Project Composition

As aforementioned, the decentralization allocation tax and balanced development special account were introduced for block grants at the time of reorganization of categorical grants in 2005. In the decentralization allocation tax, welfare and non-welfare projects were classified as local empowerment projects with the name “allocation tax.” And some decentralized allocation tax projects that had been empowered to local projects were returned to categorical grant projects in 2014. In order to understand the “regional SOC block grants,” in other words, the regional development special account, more clearly, there is a need to identify the importance of the subject of a “blocking project” by comparison with the decentralized allocation tax. To emphasize the fact that blocked project composition is important to satisfy the meaning of ‘blocking,’ the process of returning the decentralized allocation tax to categorical grants will be investigated.

Autonomy of project selection, which is the most important thing in the operation of block grants, depends on the flexible operation of projects in a block basket. Blocking only has significance when projects can be protected from termination or delay as local governments can adjust the subject, period and supply cost autonomously. As welfare projects account for over 70% of decentralized tax allocation, operating costs account for a substantial part. Because the beneficiaries of grants were individuals and private groups and the “costs” were decided by them, most of the grants were not for projects that could be clearly decided in the unit of self-governing bodies. In particular, continuous problems were raised as the grants could not meet the requirements of initial block grant projects such as the “operation of living facilities for the disabled” and “mental health care facility,” and in the end it was restored to categorical grants in the process of the abolishment of the decentralized allocation tax in 2014. Also, in the case of non-welfare projects (e.g., a regional specialization project by the Ministry of Culture, Sports and Tourism or bicycle path maintenance by the Ministry of the Interior), they could not help but become eroded due to an increase of welfare projects, even though, unlike welfare projects, they included autonomous project contents by self-governing bodies.

Blocking does not aim to reduce the scale of finance. It aims at a reflection
of priorities by reflecting the opinions of grant beneficiaries at the same scale of finance, and this is the most political cause. The projects whose cost and subject must be operated by guidelines, and accordingly the connection with a department continues, should be operated as categorical grants, in principle.

Kappeler et al. (2013) showed that areas with high SOC investment (sub-national infrastructure investment, e.g., road construction and maintenance, urban transit, water supply and waste management) among 20 local governments of European countries tended to have fiscal decentralization in revenue. The result of one study by positive analysis showed that the SOC investment of European countries, which has been continuously decreasing for the last 30 years, will have a negative effect on (local revenue) decentralization. On the contrary, it saw that welfare expense grants had no correlation with decentralization and concluded that the autonomy of self-governing bodies is revealed as a portion of SOC investment. In the case of welfare expense, as the central government’s intervention cannot help being strong due to the redistribution factor, a connection to the expansion of the finance authority of local governments cannot be made.

E. Block Grants Characterized by Uncertainty

The fundamental weak point of block grants that have been introduced under theoretical cause and are used now is that there is uncertainty about their institutional operation and assessment. The discussion on uncertainty about the block grant project is also continuing even in the United States, which has been operating it for 60 years. The reasons are first, an increased administrative burden, second, poor project management, and third, low induction of planning by local governments. In addition, poor performance management is pointed out as the last limitation. The U.S. explained it with the example that the lower tier

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22) "Flexibility provided by block grants as a means to produce both better programmatic outcomes and at a lower cost" (Dilger and Boyd (2014), p. 7).

"Block grants are less restrictive, funding broader categories of activities, such as community development or public health, and generally give greater discretion to recipients in identifying problems and designing programs to address those problems" (GAO, 2012, p. 3).
projects in PART fall under block grants.\textsuperscript{23} And regardless of the limits of performance management itself, difficulties in measuring specific performance with the “autonomy of management decisions and funding” are indeed a fundamental limitation.

\textsuperscript{23} About this, advocates of block grants claim that there is a limit to the performance index and raise the problem of PART itself which is calculated excessively focusing on results. (Dilger and Boyd (2014), p. 12)
Finance Scale Status of Regional Development Special Account

1 Finance between Governments and Regional Development Special Account

A. Finance scale and relationship between governments

[Figure III-1] Expenditure scale of local governments and correlation between governmental expenditure and GDP

3.1. Subnational government expenditure as a percentage of GDP and total public expenditure, 2014

Source: OECD Regions at a Glance 2016, p. 97, Figure 3.1 cited
In the figure above, for OECD countries, local government expenditure to total governmental expenditure and that to GDP show a positive correlation. As GDP increases, governmental expenditure increases, and local governments account for a large portion of this.

The expenditure of local governments to GDP in South Korea is less than 15%, and among the countries whose local government expenditure to GDP is lower than South Korea, notable ones are the UK and France. In most other developed countries, local government expenditure to GDP is more than 15%. On the other hand, local government expenditure to total governmental expenditure in South Korea was found to be somewhat high. Except for federal nations such as Canada and the USA and Nordic countries such as Denmark, where a local self-governing system has traditionally been very settled, the local government expenditure of South Korea shows the highest portion.

When looking at a comparison by nations based on the average values above, the proportion of local government expenditure in the total economic scale of South Korea falls short of OECD countries, while a quite portion of governmental expenditure is put into regional areas. Also, about 70% of public investment spending in South Korea is found to be executed by local governments, confirming the high economic activities of local governments compared to governmental expenditure.
B. Changes in Scale of Block Grants and Regional Development Special Account

The finances that local governments use for expenditures include “local revenue” and “local subsidies,” and “categorical grants” are the representative transfer revenue that are transferred from the central government. The subject of this analysis, “categorical grants” and the “regional development special account” are the project grants that are transferred by designating use with the purpose of project support. The scale of the regional development special account as of 2016 was approximately 10 trillion KRW, or less than 1% of GDP. This scale has been maintained at about 10 trillion KRW since 2011. The regional development special account decreased in 2016 from the previous year, and this is due to the reduction of total scale caused by a reduction of SOC projects (△0.48 trillion KRW) because of the completion of some infrastructure projects.

The scale of the life base account, block grants within the regional development special account, the focus of this study, increased to approximately 6.5 trillion KRW in 2009, declined to about 3.5 trillion KRW since 2011 and increased a little again to about 4.5 trillion KRW in 2015 and 2016. The life base account increased by about 83.2 billion KRW compared to the previous
year and the economic development account decreased by about 451.1 billion KRW.\textsuperscript{24)} In terms of the concept of block grants, the “Jeju account” and “Sejong account” can be included in the life base account since they are also calculated within the ceiling.

\textbf{Table III-1: Budget Scale of Regional Development Special Account for the Most Recent 10 Years (100 million KRW)}

<table>
<thead>
<tr>
<th>Classification</th>
<th>'07</th>
<th>'09</th>
<th>'11</th>
<th>'12</th>
<th>'13</th>
<th>'14</th>
<th>'15</th>
<th>'16</th>
</tr>
</thead>
<tbody>
<tr>
<td>{ Total}</td>
<td>67,928</td>
<td>90,769</td>
<td>99,584</td>
<td>94,085</td>
<td>99,728</td>
<td>93,613</td>
<td>103,389</td>
<td>99,739</td>
</tr>
<tr>
<td>Life Base Account</td>
<td>49,114</td>
<td>65,668</td>
<td>36,332</td>
<td>34,707</td>
<td>34,737</td>
<td>34,773</td>
<td>44,981</td>
<td>45,901</td>
</tr>
<tr>
<td>Economic Development Account</td>
<td>15,338</td>
<td>20,672</td>
<td>58,264</td>
<td>55,538</td>
<td>61,452</td>
<td>55,398</td>
<td>53,686</td>
<td>49,184</td>
</tr>
<tr>
<td>Sejong Account</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>1,022</td>
<td>1,037</td>
</tr>
</tbody>
</table>

Source: Inside Data of Presidential Committee on Regional Development (“Opinion on investment direction and budget preparation of 2017 regional development policies” 2016.5.24.), p. 17.

The scale of the regional development special account above is somewhat different in the National Finance Institute and “Summary of local budget for the fiscal year.” This is identified to be due to blurred boundaries between the “economic development account” and general account categorical grants. As the economic development account is not distinguished from the general account project during calculation by department at the working level, the data calculated from the “Summary of local budget for the fiscal year” and National Finance Institute show different figures according to investigators. However, in both statistical data, the scale of the life base account, which is part of the block grant project (budget ceiling), is found to be the same.

Moreover, as the figures of “categorical grants,” which have a complicated system and a lot of stakeholders, vary by data, it is difficult to grasp the nature of the grant scale and it should be selected according to the definition of

\textsuperscript{24)} Agenda Data of Expert Committee of Presidential Committee on Regional Development (2016.5.24)
categorical grants to be used. Therefore, the scale of categorical grants by department and region should be identified by experts, and this fundamentally hinders quantitative research on finance relationships between governments. And one of the biggest problems is that the research results can vary depending on the intention of the researcher, and caution needs to be paid to the interpretation of quantitative research.

Based on the table below, the scale of categorical grants the in 「2015 categorical grant project operational assessment report」 of the Ministry of Strategy and Finance is approximately 58.3 trillion KRW. The annual mean increase since 2011 is about 7.5%, which is an increase of more than 1.5 times the total governmental expenditure of 4.8%. Here, categorical grants are the sum of self-governing body grants and private grants. Private grants are not shown in the self-governing body budget as they are distributed directly by departments to organizations. Therefore, only 45.1 trillion KRW is the subject of categorical grants in the “Summary of local governmental integrated finance.” The annual mean increase of categorical grants, grants that departments distribute to self-governing bodies, is about 8.7%, which is higher than the increase in total categorical grants. Based on this, the increase of categorical grants can be said to be caused by an increase of grants for self-governing bodies (expansion of the national basic livelihood security system and rather than the increase of private grants.

<table>
<thead>
<tr>
<th>Classification</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>Increase rate of annual mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scale of Grants (trillion KRW)</td>
<td>43.7</td>
<td>46.5</td>
<td>50.5</td>
<td>52.5</td>
<td>58.3</td>
<td>7.5%</td>
</tr>
<tr>
<td>Self-governing Body Grant</td>
<td>32.3</td>
<td>34.2</td>
<td>37.8</td>
<td>40.0</td>
<td>45.1</td>
<td>8.7%</td>
</tr>
<tr>
<td>Private Grant</td>
<td>11.4</td>
<td>12.3</td>
<td>12.7</td>
<td>12.5</td>
<td>13.2</td>
<td>3.7%</td>
</tr>
<tr>
<td>Number of Grant Projects (Case)</td>
<td>2,053</td>
<td>2,035</td>
<td>2,080</td>
<td>2,031</td>
<td>2,055</td>
<td>0.02%</td>
</tr>
<tr>
<td>Total Governmental Expenditure (trillion KRW)</td>
<td>310.9</td>
<td>325.4</td>
<td>349.2</td>
<td>355.8</td>
<td>375.4</td>
<td>4.8%</td>
</tr>
</tbody>
</table>

Source: Ministry of Strategy and Finance
It is appropriate to look at “self-governing body grants” among the total categorical grants to investigate behavioral changes between the central government (donor) and local governments (recipient). Therefore, the scale of the categorical grant that becomes a reference is 45.1 trillion KRE as of 2015. Then, the percentage of block grant projects to categorical grants in 2015 is about 10%. The proportion of block grants, which was about 30% in 2005, declined to 10% in 2015. The scale of block grant projects decreased from 4 trillion KRW to 3 trillion KRW, and the reason for a sharp reduction is found to be due to a large increase in the range of welfare-related grants.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Categorical Grants</td>
<td>153,502</td>
<td>290,631</td>
<td>323,289</td>
<td>341,965</td>
<td>367,551</td>
<td>400,097</td>
<td>450,978</td>
</tr>
<tr>
<td>General Account</td>
<td>221,587</td>
<td>174,253</td>
<td>189,324</td>
<td>211,817</td>
<td>246,017</td>
<td>276,851</td>
<td></td>
</tr>
<tr>
<td>Regional Development Special Account</td>
<td>54,930</td>
<td>58,517</td>
<td>62,003</td>
<td>59,532</td>
<td>63,084</td>
<td>58,668</td>
<td>66,182</td>
</tr>
<tr>
<td>Block Grant Project</td>
<td>42,058</td>
<td>36,282</td>
<td>36,332</td>
<td>34,707</td>
<td>34,737</td>
<td>34,773</td>
<td>44,981</td>
</tr>
<tr>
<td>Other Special Account</td>
<td>68,060</td>
<td>72,218</td>
<td>67,442</td>
<td>67,199</td>
<td>67,227</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fund</td>
<td>10,527</td>
<td>18,973</td>
<td>20,891</td>
<td>25,208</td>
<td>28,212</td>
<td>40,720</td>
<td></td>
</tr>
</tbody>
</table>

Source: Summary of local budget for fiscal year (each year), Summary of local integrated finances for fiscal year (each year), National Finance Institute (each year)

Looking at grant increases since 2006, the increase in total categorical grants hovers over block grant increases except for 2008 and 2015 compared to the previous year respectively. These two times are right before an economic crisis or a SOC block grant project was used as means to expand finances in these times.
As the increase rate of welfare-related grants was high, which had nothing to do with the decision making of self-governing bodies, some point out that it is reasonable to compare similar projects excluding welfare-related areas for a comparison of total block grant projects to identify changes in proportion.\(^{25}\) Therefore, when compared excluding welfare, the proportion since 2005 was found to have declined from 40% to 25%.

It can be said that both political and economic factors worked for the radical change of proportion of block grant projects. The multi-regional account was more active than block grant projects under the Lee Myung-bak administration, and since then, increasing trend of SOC slowed down more due to an increase in welfare-related grants.

In conclusion, the regional development special account is part of categorical grants in terms of finance scale and accounts for about 10%. As the increase rate of welfare expenditure will go up if low growth continues and the role of redistribution is emphasized, it is expected that the increase of proportion of the regional development special account, which means regional SOC project

\(^{25}\) This issue was raised during an experts’ conference related to regional budget and deteriorated waterworks finance support system project. (2016.5)
support through central finance, will be difficult. However, since the current regional development special account is a “budget ceiling” where the budgeting department directly distributes to local governments, it can partially lead regional economic growth through finance. The stimulus during the 2008 economic crisis was such, and it is also expected to play the role of financial resources to relieve financial shocks, relative to the scale. The increase in regional development special account projects includes the transfer of a social welfare project in 2015 and a project to be reflected from 2017 as an “out-of-limit project” within the budget ceiling (e.g., local deteriorated waterworks support project).

C. Local Government’s Functional Expenditure and Regional Development Special Account

In the case of functional governmental expenditures, “economic affairs,” which includes SOC, is higher than the mean expenditure of OECD countries along with “housing” and “public administration.” And in particular, the expenditure for “education” is high. It can be assumed that financial grants for local education are included in local government expenditure. On the other hand, “health” and “social protection” were found to fall short of the average of the countries compared.

Looking at changes in global economic trends, the functional expenditure of economic affairs in 2012 showed an increasing trend compared to 2000. In the case of OECD countries, the welfare expenditure has already entered a maturity stage and medical and environmental expenditures were somewhat reduced at the stage of finance execution by central and local governments, and the expenditure for “economic affairs” including SOC increased, while the role of finance execution was emphasized due to economic crisis, etc. And attention needs to be paid to the fact that a considerable portion of it is executed by local governments.

For reference, one report on regional disparity in OECD countries showed that the greatest disparity between urban and rural areas over the five years was in roads, followed by the educational environment, economic development-related infrastructure, culture and the environment. On the other hand, in the fields of energy, water supply and waste treatment, the gap between urban and
rural areas was found to have narrowed. Therefore, there is a need to remember that the fields of expenditure that are a priority in underdeveloped areas to narrow the gap between urban and rural areas in OECD countries are roads and economic infrastructure, although there is difference by country. As such, most of the life base account projects for the support of underdeveloped areas fall under the expenditures in these fields and can be interpreted as financial expenses for relieving the disparities between urban and rural areas.

[Figure III-3] Proportion of (Local) Governmental Expenditure of OECD Countries by Field (2013)

Source: OECD National Account (2013)
[Figure III-4] Changes in proportion of functional expenditure of central and local governments in 2012 compared to 2000


Status of Regional Development Special Account and Categorical Grants of Related Departments

A. Changes in Yearly Scale of Regional Development Special Account by Department

The figure below shows changes in the scale of allocation by department and proportion of categorical grant project, respectively. The departments whose block grant projects reached more than 1 trillion KRW in 2005 were in the Ministry of Land, Transport and Maritime Affairs and the Ministry of Agriculture and Forestry. Although a representative SOC project for government-funded provincial roads was at a level of 0.5 trillion KRW in 2005, it was transferred...
to the economic development account after 2009. Also, a river disaster prevention project, which had been at a level of 0.2 trillion KRW, was also excluded from the block grant project in the process of departmental integration (Ministry of Oceans and Fisheries, Ministry of Construction & Transportation -> Ministry of Land, Transport and Maritime Affairs) in the sub-project unit. For these reasons, the total regional development special account of the Ministry of Land, Transport and Maritime Affairs was decreased by half compared to 2005.

Figure III-5 Changes in Block Grant Projects by Department

(Unit: 100 million KRW)

26) The allocation scale by department in this analysis is targeted at the "local government capital subsidy" and "local government financial operation subsidy." The operating costs for corresponding projects such as labor cost were not included.
The proportion of block grant projects by the Ministry of Land, Transport and Maritime Affairs has decreased since 2009, while the proportion for the Ministry of Agriculture and Forestry, the Ministry of Culture, Sports and Tourism, and the Ministry of Environment increased. With a development account of approximately 1.4 trillion KRW in 2005, which was 34% of the total amount of 4.2 trillion KRW, the Ministry of Land, Transport and Maritime Affairs had the highest scale, and the trend lasted to 2009, maintaining about 34% of a total of 6.2 trillion KRW with 2.2 trillion KRW. However, in 2010, the scale of that ministry’s development account decreased to approximately 660 billion KRW, or 18% of 3.6 trillion KRW, the total scale of the regional development special account. The second-largest account, that of the Ministry of Agriculture and Forestry, reached about 26% in 2005 with approximately 1.1 trillion KRW. Also, the projects of the Ministry of Culture, Sports and Tourism, the Ministry of Environment, the Ministry of Land, Transport and Maritime Affairs and the Ministry of Agriculture and Forestry constituted a “Regional Development Special Account Big 4” in the proportion of block grants as well as finance scale.
The scale of block grant projects of the Ministry of Land, Transport and Maritime Affairs had steadily increased by 2009 and reached approximately 2.2 trillion KRW in 2008 and 2009, but has declined to 0.6 trillion KRW since 2010. With the introduction of the multi-regional development special account, a large portion of the ministry’s existing development accounts projects was transferred to the multi-regional account (current economic development account, e.g., government-funded provincial roads) and the project scale was reduced after a road project for special regions was completed. As of 2015, the block grant projects of the Ministry of Land, Transport and Maritime Affairs comprised about 14% (=505.7 billion/3.611 trillion KRW) of the ministry’s total categorical grants, showing a reduction in scale and proportion compared to 16% (=661.9 billion/4.1196 trillion KRW) in 2010.

The 1.3 trillion KRW in projects of the Ministry of Agriculture and Forestry as of 2015 accounted for about 30% of the total scale of block grant projects for the year, 4.5 trillion KRW. It showed a steadily increasing trend compared to 26% at the time of introduction. The proportion of block grant projects of the ministry to total categorical grants was about 50% (=1.4199/2.7121 trillion KRW) in 2010, but it has recently shown a decreasing trend.

The scale of the regional development special account of the Ministry of Culture, Sports and Tourism was approximately 362 billion KRW in 2005 and has been increasing every year, maintaining a level of 0.5 trillion KRW since 2011. The proportion of block grant projects to total scale was about 8% (=362 billion/4.2058 trillion KRW) in 2005, and it has been steadily increasing up to 11% of total block grant projects in 2015. As for the proportion of block grant introduction in the departments, the Ministry of Culture, Sports and Tourism was the highest with 465 billion KRW, or 53% (=465 billion/870.2 billion KRW). And this proportion has declined to 33% (=498.5 billion/1.5081 trillion KRW) as of 2015.

The scale of block grant projects of the Ministry of Environment was 165.4 billion KRW in 2005, about 4% of total block grant projects. However, this increased to 6% in 2008, 11% in 2011 and 15% in 2015. The proportion of block grants to total categorical grants of the ministry was 12% in 2005 and increased to 15% in 2015.

In summary, the proportion of block grant projects by department has
changed in a comparatively free manner, and when a project finishes after a certain period of time it has the characteristic of being replaced by other field projects due to the nature of SOC projects.

[Figure III-7] Changes in Proportion of Block Grant Projects by Department

Note: The author has calculated it based on the source.
Source: Summary of local budget for fiscal year (each year), Summary of local integrated finances for fiscal year (each year), National Finance Institute (each year)
The proportion of block grant projects to total scale by department has been investigated. The changes in the proportion can be regarded as a management subject index from the perspective of the allocator, the budgeting department. The major stakeholders of block grants are local governments which operate projects as well as project departments and budget office. To look into the behavioral changes of departments, the finance sources for categorical grants and block grants in departments will be identified first.

Regarding the proportion of the regional development special account (block grant projects) to total categorical grant projects in the corresponding departments, as aforementioned, the Ministry of Culture, Sports and Tourism and Ministry of Agriculture and Forestry of the “Big 4,” whose block grant project scale is relatively large, accounted for 50% of their total categorical grants in 2010. On the other hand, they were reduced to 30% in 2015. This was caused by fund projects and other special accounts rather than the reduction
of block grant projects. Nevertheless, as shown in [Figure III-9], the Korea Forest Service and the Ministry of Environment were found to steadily try to raise the proportion of the regional development special account to total categorical grants, in other words, to transfer the categorical grants to block grants. The Korea Forest Service’s proportion of the regional development special account increased from 16.4% in 2010 to about 27.3% in 2015, and the Ministry of Environment also reached about 15% in 2015 with a slight increase every year. In the case of the Korea Forest Service, the number of block grant projects increased by including a project for forest trail facilities, except for national forests. This project originally belonged to a block grant project but was transferred to the multi-regional account and was then included in the block grant project again. Meanwhile, in the case of the Small and Medium Business Administration, most of its categorical grants (88.6%) were from the regional development special account. However, the proportion of block grant projects was found to have declined after a “modernization of traditional market facility” project was transferred to a fund project in 2015.

27) The scale of fund projects of the Ministry of Culture, Sports and Tourism increased from KRW 237.2 billion in 2010 to KRW 463.5 billion in 2011. (*Summary of local budget for fiscal year*, each year, based on the finalized amount of national support by department).
Analysis of the Effects of Transition from Categorical Grant to Block Grant

The author has calculated it based on the source.
Source: Summary of local budget for fiscal year (each year), Summary of local integrated finances for fiscal year (each year), National Finance Institute (each year)

B. Identification of Categorical Grants and Block Grants by Region

The behavior of budgeting departments and project departments have been looked at so far. However, the fundamental aim of the operation of block grant projects is ultimately to change the behavior of local governments, which carry out the projects, and success depends on whether they have a system to do so. Unless the efforts of budgeting departments and project departments are accepted by local governments or a connection with local residents is made, the achievements of block grant projects must be unclear. To identify these, there is need to look at the project expenditure details by item on the budget statements of local governments.

This study investigates the details and allocation scale of projects received from the department of categorical grants and budget office (regional
development special account, block grants) out of the details of project departments of local governments based on budget statements of local governments since 2006 announced on the homepages of local governments since government 3.0. Based on this data, yearly changes by project will be identified using the data in the next chapter.

3 Block Grant Operation Cases of Major Countries

A. Composition and Scale of OECD Intergovernmental Transfers\textsuperscript{28}

In the 2016 “fiscal federalism” report that analyzed the status and trends of grants of OECD countries, the average level of expenditure decentralization was about 33%, while that of revenue decentralization was 19%, showing that expenditure decentralization was slightly higher than revenue decentralization. This is because it is difficult for local governments to get tax revenue on their own and the transfer payments of central governments are expected to increase due to low growth and polarization. The difference between the proportions of revenue and expenditures of local governments means the grants, the transfer payments of the upper government. As for the revenue of local governments, local taxes, transfer payments from the central government, and fees and commissions account for 42%, 44% and 14%, respectively.

Grants, which account for much of the revenue of local governments in OECD countries, are about 44%. And the changes in scale and composition of the grants are as follows. In 2000, the scale of intergovernmental transfers in OECD countries was 6% compared to GDP and showed a similar level of 7% in 2010. Governmental expenditure was also maintained stably from 11% to 12%. Overall, non-earmarked grants, which were allocated without use designation in multi-regional and primary units, were found to be about 42% while earmarked grants, which were allocated with use designation, were found

\textsuperscript{28} This is a reorganized summary based on the OECD and the KIPF (2016, pp. 23~25).
to be about 57%.

Between 2000 and 2010, the percentage of earmarked grants was found to have increased a little. Among them, “current account” had a higher proportion than “capital account,” and this means the proportion of welfare expenditure. The changes between 2010 compared to 2000 shows that the rate of grant increase through the current account, especially in the case of the “mandatory and matching” type, was about 9% in the state unit (multi-area). Also, in the case of discretionary expenditures, current expenditures through non-matching were found to have increased by about 7%, showing that the increase rate change of earmarked grants through current accounts was the most outstanding. On the other hand, capital accounts were found to have been decreasing. This is because the reduction of the capital account is inevitable when the current account increases within limited financial resources.

The increase of the mandatory type current account, in other words, welfare expenditure, is made through beneficiaries and price adjustment. As this has the characteristic of redistribution, the central government and National Assembly make political decisions for most of them. It can be said that the procurement of matching financial resources is important, while special efforts by local governments such as project contents or planning are not very important. On the other hand, most capital account projects are earmarked grants, and as allocations are made in the form of random expenditures, local governments can exert efforts for project planning and finance saving. As welfare expenditure is expected to continuously increase worldwide, the scale of grants in the capital account is predicted to gradually decrease. Because South Korea’s regional development special account has had a scale of approximately KRW 10 trillion as a representative capital account project for several years, the proportion of financial resources show a decreasing trend.

B. Japan (Regional Autonomous Strategic Grants)29)

In its manifesto for a general election in Japan, the Democratic Party proposed

29) Refer to http://www.cao.go.jp/bunken-suishin/ayumi/chiki-shuken/jishukofukin/jishukofukin.html
to abolish the conditional grants that the nation gives to local governments and adopt block grants that local governments could use freely, appealing to the enhancement of regional sovereignty. And when it was elected, the Democratic Party implemented a block grant system starting from 2011 to expand autonomous discretion. It was a move\textsuperscript{30}) to expand the autonomous credit of provinces and transfer financial resources to local ones as a reform of the existing grants and subsidies, and was a block grant system for the appropriate and efficient execution of projects that were suitable for the conditions of the regions rather than just the nation’s granting. However, the regional autonomous strategic grant system was abolished at the end of 2012, and each department has been implementing grants.

1) System Design\textsuperscript{31)}

The grants of the block grant system are designed to be permitted as earmarked grants after the indispensability of national policy is reviewed and the time limit of 3~5 years is set from a zero base. Also, free from the use of each department, the block grants were divided according to policy purpose so that their use could be reviewed and decided.

The reformed procedure was made for the provinces to smoothly provide administrative services. Also, to increase the autonomy of the provinces, intervention in individual self-governing bodies such as the abolishment of the nation’s designation of use was reduced and the system was improved to put an emphasis on follow-up inspection. And, with this, the work of both the nation and the provinces was simplified.

Local governments put an emphasis on follow-up evaluations, and to improve the system, the nation inspects the implementation status of block grants with

\textsuperscript{30}) Refer to the Japanese Ministry of Internal Affairs and Communications guidelines on the regional autonomous strategic grant system (2011).
\textsuperscript{31}) Refer to the Japanese Ministry of Internal Affairs and Communications guidelines on regional sovereignty implementation (2012).
accounting inspectors. They considered the needs of regional projects and reduced the intervention of the nation in the allocation of block grants. In addition, they used an allocation method with a structure that considers areas with unfavorable current conditions.

2) System Enforcement Procedure

The procedure for the enforcement of block grants is as follows. The prefectures of Japan and cities designated by government ordinance freely select project subjects without being limited on the form of each department and submit

project enforcement plans to the Cabinet Office. The grants that have been transferred from the Cabinet Office to each department are allocated to the prefectures and cities designated by government ordinance and they can freely select projects and implement them with the grants.

3) Evaluation

The block grant system is a transfer of revenue which the United States and Scandinavian countries use in various forms. The grant system of a country is decided by various socioeconomic factors such as political situation, economic level, financial relationship between central and local governments from the past, and population distribution. Therefore, the case of other countries may not be directly helpful to Korea. Viewed in such a way, there is a need to look at the system of Japan, which has an intergovernmental financial relationship similar to Korea’s. This is because the South Korean revenue transfer system is similar to that of Japan.

The introduction of regional autonomous strategic grants has a similar political background as the introduction of the balanced national development special account during the Roh Moo-hyun administration. They are similar in that the need for the reorganization of categorical grants and the will for decentralization of power were combined to block categorical grants according to regional autonomous strategic purposes under the new leftist administration. Although there is a similarity in aim between the two countries in that block grants were introduced in the process of reform of existing categorical grants, their progress after introduction in Japan is quite different from the regional development special account of South Korea. While the balanced national development special account has been maintained since the Lee Myung-bak administration in South Korea, the regional autonomous strategic grants of Japan were abolished with the change of government, and this seems to be because the separate revenue of Japan’s Cabinet Office was stronger than the political cause of the introduction of block grants as a reform of categorical grants.

The difference with South Korea is that as the submission of budget applications and business plans are handled by the Cabinet Office and not by the budgeting department, part of the existing projects became categorical grant
projects of the Cabinet Office. There should have been an increase of autonomy for local governments in selecting projects in the process of weakening the connection with departments. However, after the Cabinet Office had a new staff and the connection with the existing project departments also could not be cut, it was difficult to expect a substantive role for block grants. As for the aim of blocking, the relevant local governments should be able to monitor project contents and achievements and their autonomous will can be expressed by weakening the connection with departments through direct allocation based on this. However, in the case of regional autonomous strategic grants of Japan, although a part of allocation uses an objective method and sets a limit, the limit of local governments is reallocated as each department’s grants, which is still nothing but the department grants. Therefore, this is hardly a block grant in the strict sense because it is difficult to filter similar duplicated projects in the blocking process and competition between projects is impossible as the procedure of local governments’ prioritizing projects within the set limit on their own does not appear. Previous domestic research (Sun-yeong Choi, Im-gon Jo (2014)) evaluates the attempt of block grants of Japan as desirable from the viewpoint of fiscal decentralization. However, it cannot identify the structural difference between categorical grants and block grants such as introduction background, project composition and grounds for abolishment.

In the results of analysis of this case, in terms of policy design for blocking, this study evaluates that the regional development special account of South Korea is closer to the theoretical approach of categorical grants than the regional autonomous strategic grants of Japan and has a high expandability in the range of working-level application.

C. USA

The structure or operational method of grants differs by country. In particular, in the method of distributing grants in the United States, the autonomy of state governments is prioritized and there is a separate support system from the federal government, which is very different from South Korea and European countries. When grants in the U.S., a federal country, are compared with those in the EU, an alliance of countries, grants for individuals and companies in the U.S.
were about 63.9% (grants for capital, 15.9%, etc.) as of 2011, while that of the EU was about 20%.33) Currently, 90% of the grants in the U.S. are categorical grants (specific grants).34)

The U.S. has been using the categorical grant system by subdividing it into block grant form for longer than other countries. The “Catalog of Federal Domestic Assistance” (CFDA), which provides a list of U.S. federal grants classifies the grants into 15 types, and formula grants include block grants.35)

A brief history of the introduction of block grants in the U.S. is as follows. Block grants that were introduced in the Public Welfare Act, a revision of the Social Security Act (H.R. 5686) in 1946, and this is known to be the first efforts for the introduction of block grants. This means that the autonomy to select and design projects such as support for senior citizens, dependent children, or the visually handicapped was given to state governments. Since then, the awareness for the concept of block grants was generated through the Hoover Commission in 1949 and the block grants were introduced in 1966 in the Partnership for Public Health Act. Two years later, in 1968, the Omnibus Crime Control and Safe Streets Act was introduced as the second block grants. A total of three block grants were adopted under the Nixon administration. Of them, the Title XX Social Services Block Grant program is a representative block grant.

The substantive and not symbolic meaning of block grants was vitalized during the presidency of Ronald Reagan, and block grants were used as active policy means. At the time, it was suggested to integrate the existing 85 categorical grants such as ones for primary and secondary education, health, social services, emergency aid (low-income bracket, energy and emergency welfare support),

34) In reference, the total amount of grants in the U.S. as of 2011 accounted for 4.1% of GDP, while state and local expenditures accounted for 27.5% of GDP. (Cited from data provided by the Catalog of Federal Domestic Assistance (CFDA), Spahn (2012), p. 9)
35) Meanwhile, according to analysis of the GAO (2012, p.14), the list of grants in the CFDA can be inexact, and the reason is explained (https://www.cfda.gov). Therefore, although it is appropriate to look at the details of the status of grants of each department based on the CFDA, which is widely known as baseline data on the status of grants in the U.S., as it is an enormous work beyond the range of this study, the CFDA was used as a broad-brush introduction.
and the development of local communities into seven block grants (two programs for primary and secondary education, two programs for health, and one each for social services, emergency aid, and the development of local communities). Therefore, in 1981, Congress introduced nine block grants by integrating 75 categorical grants and two existing block grants. After that, 12 block grants accounted for about 15% in 1984. As of 1995, four of the 23 existing block grants in the U.S. were eliminated and another four were converted into other block grants, leaving 15 block grants, and there were 618 categorical grants. Consequently, block grants accounted for about 14% of the total grants of the federal government at the time.

In 1996, the open-ended entitlement categorical grant Temporary Assistance to Needy Families (TANF) was converted into block grants. Every year, 1.67 billion USD is invested in TANF, putting it on a par with the Surface Transportation Program, which makes up the largest percentage of block grants. The TANF grants are a hybrid program through which the federal government tries to adjust mutual balance by responding to the flexibility of state governments with strict criteria like other block grants.

In this way, block grants were generated to comply with new policies pushed by the governments according to the times. In 1998, projects, services and education for adolescents were supported with the Juvenile Accountability Block Grant program. Also, the federal government introduced three block grants for homeland security before the terrorist attacks on September 11, 2001 and the establishment of the United States Department of Homeland Security. In 2005, programs for police, prosecution, courts, prevention and education, corrections, drug treatment, plans, evaluation, technical improvements, and crime victims and witnesses were supported with the Edward Byrne Memorial Justice Assistance Grant program. And 2009, the American Recovery and Reinvestment Act of 2009 (ARRA) supported additional funds for various block grants, including 320 million billion USD for the Energy Efficiency and Conservation Block Grant (EECBG). Also, the ARRA approved 5.36 billion USD for a block grant program for the Government Services State Fiscal Stabilization Fund and the United States Department of Education supported 4.86 billion USD.

Block grants in the U.S. are divided into two types. The grants with federal funding discretion are categorical grants, and the grants allocated by formula
have a low level of federal funding discretion for revenue scale. Grant users can use common tax revenue sharing like general grants most freely, followed by block grants and categorical grants. On the other hand, categorical grants, grants for specific projects, were found to have the highest possibility of performance measurement.

As of 2014, 23 block grants were given to state governments (21 grants that supported funds and two that did not, although they had the authority to do so). The total amount of block grants was approximately 50.8 billion USD as of 2014, and the block grant that accounted for the highest amount was Temporary Assistance to Needy Families (TANF) from the U.S. Department of Health and Human Services, which accounted for 34% with 17.3 billion USD. And social welfare accounted for more than 65% of the total block grants.

The second-largest block grant was the Surface Transportation Program of the Department of Transportation, which accounted for about 20% with approximately 10 billion USD. Out of the other block grants, the Urban Area Security Initiative Grant, Community Development Block Grant (CDBG), HOME Investment Partnerships Program, etc. are given to local governments through direct or indirect methods, and the Emergency Solutions Grant Program is only given to local governments. The CDBG, which is similar to the regional development special account of South Korea, makes up only about 5.9% of the total block grants.

In conclusion, when the block grants of South Korea are compared to those of the U.S., the ones that connect multi-department regional development projects and focus on regional SOC are similar. On the other hand, the U.S. gives block grants for single department projects and uses them in various ways as social welfare-related grants.

In institutional terms, it’s been 50 years since the block grants were introduced in the U.S. in 1966, and the grant system has evolved along with changes in the financial situation and demand according to the economic situation, and it could be confirmed that this issue was being actively discussed. Meanwhile, in terms of performance evaluation based on the GAO, it is difficult to connect block grants with the PART index and performance is also unclear, which were pointed out as disadvantages.36)

In legal terms, it is difficult to explain the superiority of block grants to
other grants, and in particular, the responsibility of local governments is pointed out as a weak point. Block grants have the characteristics of autonomy of project selection, autonomy from Congress, and are also a finance control device for Congress, and each characteristic has pros and cons. The surest achievement seen in the results so far is the federal government’s control of local government spending. This is because it cannot clearly present quantitative outcomes such as the autonomy of project selection or reduction of budget intervention by interest groups or outside groups. Therefore, Waller (2005) has pointed out that unless the things mentioned above are presented clearly, it will be difficult to maintain block grants. However, even recent data since 2015 cannot clearly explain the quantitative outcomes of the block grants.

From a political standpoint, the application of block grants in the U.S. has different characteristics according to the administration. The Reagan administration expanded block grants, the Clinton government maintained them, the Bush Administration only expanded block grants related to regional development, and the Obama administration cut the CDBG and block grants related to housing support because it preferred categorical grants that had clear connections to performance. Like this, political decisions about block grants differed depending on the administration. Meanwhile, block grants in South Korea started as the balanced national development special account under the Roh Moo-Hyun administration, expanded to the multi-regional development special account under the Lee Myung-bak administration, and changed to the regional development special account under the Park Geun-hye administration. However, the larger framework has been maintained due to the characteristic of connecting the existing categorical grant projects of several departments.

39) The Bush administration expanded block grants despite of the low performance of PART, while the Obama administration cut them because of the low performance, (Dilger and Boyd (2014), p. 12~16).
D. The Netherlands and Norway

Nordic countries experienced a financial crisis before South Korea and the reorganization work of transferring revenue between central and local governments started in the 1980s and is still under way. This is because those countries had more advanced fiscal decentralization than the U.S., Japan and South Korea, and that is also why the empowerment of local governments and operation of the block grants with a fiscal decentralization factor are active. For this reason, there is a need to pay attention to the cases of countries such as the Netherlands and Norway for the management of block grants in individual project units.

In summary, in the case of Nordic countries, large-scale block grants were introduced in the mid-1980s. This was due to a lack of finances caused by economic crisis and increase of welfare expenditures. In the case of Norway, although many categorical grants were converted to block grants since the 1980s, some projects have started to return to categorical grants (projects related to kindergartens and the aged population). What was learned in the process of such changes is that despite categorical grants having a lot of disadvantages such as high administrative costs and arbitrary allocation, there was a high preference for them because they can be controlled by the central government, and also for local governments, revenue can be protected and thus financial pressure factors are reduced. At the time in 2012 when the previous research was conducted, the case of Norway showed that when finances were divided into categorical grants and block grants, the important thing was the contents of projects. In the case of most welfare projects, once beneficiaries and price are designated, they cannot help being conducted as continuous projects and a certain part of project restructuring is inevitable.

Meanwhile, the Netherlands has converted welfare-related categorical grants into block grants since 2005 and showed that local governments were using revenue efficiently by adjusting the supply of public goods after the introduction

40) Borge and Lilleschulstad (2009)
of the block grants. Although it is a very rare case of positive analysis related to block grants, there is a limit to drawing an implication for overall block grant projects with only the analysis results of specific welfare-related projects. Also, as the cases of conversion into block grants in Nordic countries were mostly welfare-related grants, it is difficult to see if there is autonomy in the use of finances due to the nature of the projects.

However, a more fundamental difference rests in the autonomy and responsibility of revenue decisions by local governments. In the case of Nordic countries, which have a high proportion of local tax revenue, as the conversion into block grants mean taking on projects locally, it can be seen that financial responsibility is high. In the case of South Korea, the current block grants are not clearly recognized yet because it is perceived that block grants are a part of categorical grants and that they are also the local governments’ own revenue. To realize the autonomy of block grants, the perception that block grants are the local governments’ own revenue seems to be required first.

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42) Kattenberg and Vermeulen (2015)
Analysis of Effects of Conversion into Block Grants

1 Evaluation of Project Efficiency of Block Grants

A. Behavioral Changes of Departments and Local Governments

The situation described in the previous section showed that the number of block grant projects of departments is gradually decreasing. This point, therefore, needs to be looked at in depth. Of course, it can be seen that central government’s reduction of budget ceiling by policy was the biggest effect. However, if the reason is analyzed, it can be considered that the incentive structure for project departments or local governments works better in general account categorical grant projects than in block grant projects.

In most cases, the departments that manage projects do not want carry out the projects as a block grant projects whether they are existing projects or new ones. The reason is the reduction of departmental authority, one of the characteristics of block grant projects. Departments can take the lead in carrying out general account categorical grant projects. However, block grant projects should be selected by local governments and departmental authority is reduced because the budgeting department has an allocation authority. And block grants are regarded to be fragile in budget allocation and project management due to the weakening of the connection with local governments.

If departments and local governments want to obtain the benefits of block grants, an additional administrative burden and efforts are required. Actually,
the receptiveness toward block grants is interpreted very differently depending on project contents, the capability of local governments, and the person in charge of the project and budgeting staff. Then, there is a need to identify how local governments respond to the regional development special account and the general categorical grants project. If local governments, the party that carries out projects, have different responses to the regional development special account and categorical grant projects, an investigation is required to see if these different responses come from the will of local governments (change in finance demand according to residents’ need) or is due to effects from above (budget office and departments). That is the focus of the present study. Here, the opinions of local governments should be classified into those from budgeting departments and the project departments of local governments and the opinions of residents. There is an opinion gap between budgeting departments and project departments within local governments, and the opinions of residents are also different. Therefore, local governments have various responses according to each position.

According to the results of in-depth interviews with budgeting departments and project departments in 2016, if local governments are asked about specific projects, they replied that they preferred categorical grants to the regional development special account, with few exceptions. However, when asked what they thought about reducing the total scale of the regional development special account, the responses varied depending on the local government (special metropolitan city, do, si, gun, gu) or budgeting department and project department within local governments. Based on a specific project alone, both the budgeting departments and project departments of local governments saw a low administrative burden with categorical grants. However, based on the total scale of the regional development special account, the budgeting departments of local governments thought that the regional development special account should not be reduced because it was autonomous revenue, while project departments took a neutral position, thinking that if it was reduced, categorical grants would be increased because governmental expenditure projects are fixed.

43) Referenced from an interview during the implementation of the "Establishment of financial support system for improvement of deteriorated local waterworks" project (2016.7)
There is previous research that explains such a complicated stance by local governments. The perception of central departments and local government officials about the expansion of block grants was investigated in a study by Sun-yeong Choi and Im-gon Jo (2014, p. 433), and central administrative organizations mostly had neutral or negative opinions while local governments showed a high level of agreement. In other words, it is assumed that while departments had an objective opinion about the increase of block grants, the opinion of local governments came from budgeting departments that had a strong recognition of autonomous revenue. In addition, they replied that the autonomy of using revenue was highest in the block grant system in the regional development field, followed in order by the environment, agriculture and forestry, and welfare fields.44)

It is not easy to explain such complicated interests of local governments with an objective index. However, it is clear that the advantages and disadvantages of the system are mixed and it is the purpose and significance of this study to see if the contents are expressed through data. The purpose of this study is 1) to investigate the will for project implementation and its performance using the project execution rate of local governments and 2) to identify any difference between block grant projects and the regional development special account by comparison with other categorical grant projects.

B. Analysis of DB of Project Execution Rate45)

Project execution rate means budget efficiency, and can be seen as the final public service delivery rate of finance allocation. The problem of the execution rate of block grant projects being lower than that of categorical grant projects has been continuously raised from the introduction of the balanced national

44) On the other hand, as local governmental officials showed a positive response to the increase of general categorical grants, it is more appropriate to see it as just a perception of block grants without considering substitutability or priority between the two types of grants.

45) The data on the regional development special account execution rate that was used in this study is the internal data of the Korea Institute of Public Finance (KIPF), and the contents related to the execution rate in the analysis hereinafter are the results of analysis based on this data.
development special account, and previous research has showed a gradual reduction of the execution rate of block grants by 2011. This study aims to investigate the execution rate problem due to the characteristics of the regional development special account along with the problem related to the execution rate of general finance projects.46)

Although there are opinions that the execution rate of regional development special projects is low due to the nature of the projects compared to general categorical grant projects and that leads to a low incentive for local governments, there is no data or research on this. There is a limit in explaining the details of the execution rate with the execution rate index alone, which is presented as the average of local governments. As regional development special projects are formed by the accumulated performance of phased detail projects of multiple regions of various departments, si, do and si, gun, gu, determining the cause and resolving problems is possible when only the projects of regions, si do, and si, gun, gu are investigated. Therefore, this study aims to investigate the difference in execution rate between categorical grant projects and regional development special projects by departments and the execution rate itself of categorical grant projects and regional development special projects.

1) Change in Execution Rate of Regional Development Special Projects of All Local Governments

The mean execution rate of block grant projects of local governments declined from 81% in 2009 to 72% in 2011. Although it increased again to 76.7% in 2012, it finally showed a decreasing trend with 76.7%, 75.4%, 75.4% and 74.6% in order by 2015. The mean execution rate of general account categorical grant projects in 2013 and 2014 was 80.8% and 84.8%, respectively, showing a higher level than that of the regional development special account.47)

46) The institutional improvement measures for the efficiency of finance execution mentioned in the study by Noh–uk Park and Yeong–min Oh (2013) analyzed the case of the reduction of the execution rate of the regional development special account in total finance projects.

47) This is the data on the status of issue-execution of categorical grants of the Ministry of the Interior (by self-governing bodies) and "Financial information system announcement data, disclosure of financial information > Local fiscal performance > Detailed local fiscal performance" was used. As the data of
Therefore, based on the total average figure alone, the execution rate of the regional development special account was lower than that of general account categorical grant projects.

Although the execution rate of the regional development special account itself is low, the decreasing trend of the rate is more problematic. The first reason why the execution rate of the regional development special account is low is the characteristics of “capital expenditure” projects. For example, in the case of cash transfers, the execution rate is almost 100% due to the transfer structure of grants. However, for capital expenditure projects, which need various procedures such as whether the relevant site has been secured, conducting of feasibility surveys, selection of constructor and operation agency, and in the case of project for constructing and operating facilities, there is fundamental limit because phased execution is not easy. For example, among the projects of the Ministry of Agriculture and Forestry, while a rice subsidy project has been almost 100% executed, the execution rate of a distribution center construction project decreased due to uncertainty that occurred in the procedure of each execution step.

Considering such limitations, regulations related to Article 43 (Carry-Over of Budget) and Article 44 (Exclusion from Application of other Acts to Subsidies) of the “Special Act on Balanced National Development” were revised to improve the execution rate during the reorganization of balanced national development special accounts to the multi-regional development special account in 2009. The key point of the revision was a partial limitation of the guarantee of autonomy of budget planning and execution of local governments in order to make the transfer and carry-over of the existing budget possible. The detailed, revised contents limit the maximum carry-over period of the expenditure budget to two fiscal years, and local governments must send a detailed statement of the carried-over budget to each department agency by January 15 of the following year when they carry over the expenditure budget.48
Also, when the budget for new projects is drawn up, whether “pre-procedure execution” has been carried out should be written. And here, various impact evaluations such as the securement of a site, a feasibility survey, and local government investment appraisal procedure proof details should be indicated. For the projects whose actual execution rate to the current budget amount is 60% or less, the reason for poor budget execution performance and difficulties should be specified.49)

Another reason for the low execution rate of the regional development special account can be the low incentives for the project staff of local governments due to a loose connection with departments compared to categorical grant projects. In the case of categorical grant projects, project management and matters related to budget planning are made through discussion between the project staff of local governments and those in the relevant department. On the other hand, the project staff of local governments for the regional development special account has autonomy because they should carry out the projects as if they were their own without a connection to a department after the budgeting staff of the local government allocates a budget, but the execution incentive can be low. These points are characteristics of block grant projects and can also be pointed to as a disadvantage in project operation and management.

2) Changes and Differences in Regional Development Special Account Projects and General Account Categorical Grant Projects by Department

The execution rate of regional development special account projects by year and department shows different performances depending on project characteristics by department. The departments that showed a relatively high execution rate with a level of 80% were the Rural Development Administration, Ministry of

48) "A budget that carried over to the following year but was not executed yet by the following year shall be returned to national treasury. However, the balance remaining after execution of the project can be used for other block grants and the projects, the purpose of which is similar to the one of the relevant subsidization according to Article 44–2 and 44–3," (Ministry of Strategy and Finance, "2017 Fiscal Guidance on Regional Development Special Account, 2016.4, p. 64)

Agriculture and Forestry, and Ministry of Environment, while the Korea Forest Service, Ministry of the Interior, and Ministry of Land, Transport and Maritime Affairs showed a level of 70%. The Ministry of Culture, Sports and Tourism, Small and Medium Business Administration, and Cultural Heritage Administration showed execution rates of 60%, 50% and 40%, respectively.

In the case of the Cultural Heritage Administration, as the uncertainty of its projects is the highest due to various civil complaints in the process of finding cultural assets, the execution performance stays at about 45% every year and moreover shows a decreasing trend. The Small and Medium Business Administration maintained about 60% since 2012, and the rate has recently decreased to 52.5%. After them, the projects with a low execution rate are the ones by the Ministry of Culture, Sports and Tourism, and the rate has steadily stayed at the level of 62–64% since 2012. The contents of the regional development special account of the Ministry of Culture, Sports and Tourism are the projects of constructing cultural facilities such as culture centers, and they are a representative capital expenditure project. And in the case of these capital expenditure projects, civil complaints related to site purchase generally cause the delays in execution.

<table>
<thead>
<tr>
<th>Table IV-1</th>
<th>Execution Rate of Block Grants by Year and Department</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2012</td>
</tr>
<tr>
<td>Rural Development Administration</td>
<td>82.29%</td>
</tr>
<tr>
<td>Ministry of Agriculture and Forestry</td>
<td>82.12%</td>
</tr>
<tr>
<td>Ministry of Environment</td>
<td>82.35%</td>
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<tr>
<td>Korea Forest Service</td>
<td>78.21%</td>
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<tr>
<td>Ministry of the Interior</td>
<td>74.43%</td>
</tr>
<tr>
<td>Ministry of Land, Transport and Maritime Affairs</td>
<td>75.68%</td>
</tr>
<tr>
<td>Ministry of Culture, Sports and Tourism</td>
<td>64.42%</td>
</tr>
<tr>
<td>Small and Medium Business Administration</td>
<td>60.85%</td>
</tr>
<tr>
<td>Cultural Heritage Administration</td>
<td>48.09%</td>
</tr>
</tbody>
</table>
Also, a previous study by Noh-uk Park and Yeong-min Oh (2013) looked at the problem of the poor execution of a multi-regional tourism resources development project and pointed out the problem of the autonomous discretion of the regional development special account project during a field inspection. The research explained that the regional development account project had this side effect due to frequent plan changes caused by the change of heads of local governments and pork-barrel budget planning.50)

To identify differences in the execution rate between the regional development special account and categorical grants, they were compared with the execution performance of categorical grants of the Ministry of the Interior (reflecting carry-over, unused and budget-executed amount, etc.) As the scale of categorical grants of this data includes the regional development special account, the execution rate is the one of categorical grants that include the execution rate of the regional development special account that was examined above.

<table>
<thead>
<tr>
<th>Department</th>
<th>Execution Rate of Grants</th>
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</thead>
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<td></td>
<td>2013</td>
</tr>
<tr>
<td>National Police Agency</td>
<td>56.30</td>
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<tr>
<td>Ministry of Employment &amp; Labor</td>
<td>92.40</td>
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<tr>
<td>Korea Fair Trade Commission</td>
<td>100.00</td>
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<td>Ministry of Education</td>
<td>88.51</td>
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<tr>
<td>Ministry of Patriots and Veterans Affairs</td>
<td>30.41</td>
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<tr>
<td>Ministry of National Defense</td>
<td>100.00</td>
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<tr>
<td>Ministry of Land, Infrastructure, and Transport</td>
<td>65.23</td>
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<tr>
<td>Ministry of Strategy and Finance</td>
<td>73.54</td>
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<tr>
<td>Ministry of Agriculture, Food and Rural Affairs</td>
<td>79.40</td>
</tr>
<tr>
<td>Rural Development Administration</td>
<td>87.97</td>
</tr>
<tr>
<td>Supreme Court of Korea</td>
<td>98.33</td>
</tr>
</tbody>
</table>

### Table IV-2: Continue

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<tr>
<th>Department</th>
<th>Execution Rate of Grants</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>2013</td>
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<tr>
<td>Cultural Heritage Administration</td>
<td>59.44</td>
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<td>Ministry of Culture, Sports and Tourism</td>
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<td>Ministry of Science, ICT and Future Planning</td>
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<td>Ministry of Justice</td>
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<td>Ministry of Health and Welfare</td>
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<td>Korea Forest Service</td>
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<td>Ministry of Trade, Industry and Energy</td>
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<td>National Emergency Management Agency</td>
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<td>Ministry of Food and Drug Safety</td>
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<td>Ministry of Security and Public Administration</td>
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<td>Ministry of the Interior</td>
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<td>Ministry of the Gender Equality &amp; Family</td>
<td>93.58</td>
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<td>Ministry of Foreign Affairs</td>
<td>96.28</td>
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<tr>
<td>Small and Medium Business Administration</td>
<td>50.77</td>
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<tr>
<td>Ministry of Unification</td>
<td>92.42</td>
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<tr>
<td>Ministry of Oceans and Fisheries</td>
<td>60.31</td>
</tr>
<tr>
<td>Ministry of Environment</td>
<td>63.10</td>
</tr>
<tr>
<td>Korea Intellectual Property Office</td>
<td>100.00</td>
</tr>
<tr>
<td>National Agency for Administrative City Construction</td>
<td>77.63</td>
</tr>
<tr>
<td><strong>Average</strong></td>
<td><strong>80.86</strong></td>
</tr>
</tbody>
</table>

* Execution Rate of Grants = Sum of Execution Amount (national finance + local governments’ finance) / Final sum of budget of local governments * 100

Source: Status of issue / execution of categorical grants (by local governments)
Financial information system announcement data, disclosure of financial information ) Local fiscal performance > Detailed local fiscal performance
For the data of the Local Finance Cooperation Division and Local Finance Policy Division of the Ministry of the Interior, the source is indicated as the data from central government offices and local governments.

First, the average execution rate of categorical grant projects by the Ministry of Culture, Sports and Tourism in 2013 and 2014 was 54.3% and 52.1%,
respectively. Therefore, this shows that the Ministry of Culture, Sports and Tourism had a high execution rate of the regional development special account. The execution rate of the regional development special account of the Ministry of Land, Transport and Maritime Affairs was 70%, while that of the categorical grant project was about 60%. The 80% execution rate of the regional development special account of the Ministry of Environment was also higher than that of the categorical grant project. The Small and Medium Business Administration also showed a higher execution rate of the regional development special account than that of the categorical grant project, which was less than 50%.

On the other hand, the Cultural Heritage Administration had an execution rate for the regional development special accounts and the categorical grant project of 40% and 50%, respectively, showing that the categorical grant project is higher than the regional development special account. The Korea Forest Service also had a higher execution rate of general account projects with 84% in 2013 and 87% in 2014, compared to 70% for the regional development special account.

Although the execution rate of the regional development special accounts is a little low based on overall average figures, if the execution rate by department is looked at, the difference in execution according to characteristics of a project is a more fundamental reason. Therefore, it was confirmed that the execution rate of the regional development special accounts cannot be assumed to be clearly low compared to that of the categorical grant project within the same department.

3) Changes in Execution Rate of the Regional Development Special Account by Region

The difference in execution rate by department, in other words, the difference in execution rate according to characteristics of a project, influences the execution rate by regions. The execution rate of the regional development special accounts also varies depending on the region, and the reason for this is that the proportion of project composition by region is different. The execution rate of the regional development special account project in provinces is usually higher than that in metropolitan cities. This is because the department proportion of the regional development special accounts between provinces and metropolitan cities is different. Overall, in the case of provinces, the proportion of projects by the
Ministry of Agriculture and Forestry and Ministry of Environment, the departments whose execution rate is relatively high, is high while that of the Ministry of Culture, Sports and Tourism and Small and Medium Business Administration is high in metropolitan cities. For example, the proportion of the regional development special account block grant project in L-do accounted for 34% for the Ministry of Agriculture and Forestry and 24% for the Ministry of Environment. On the other hand, it accounted for 20% and 23.3% for the Ministry of Culture, Sports and Tourism and the Ministry of Gender Equality and Family, respectively, in metropolitan city B.

When compared with the total execution rate of categorical grant projects in N-do, it was about 76.3% and 80% in 2013 and 2014, respectively, while that of the regional development special accounts was about 89.2% and 88.6% in 2013 and 2014, respectively, showing a higher execution rate of the regional development special accounts. Besides N-do, the regions where the execution rate of the regional development special accounts was higher than that of categorical grant project included L-do, M-do and K-DO in 2013 and 2014. And in the other 12 regions (except for Sejong Metropolitan Autonomous City), the execution rate of general accounts was high.
Analysis of the Effects of Transition from Categorical Grant to Block Grant

[Figure IV-1] Proportion of Allocation of Regional Development Special Account Block Grant Projects in L-do

[Figure IV-2] Proportion of Allocation of Regional Development Special Account Block Grant Projects in Metropolitan City B
In particular, the execution rate of the regional development special accounts in metropolitan cities shows a significant difference from that of the categorical grant project. For example, the execution rate of the regional development special account and that of the categorical grant project in metropolitan city D showed a difference of about 20%p with 67.3% and 64.9% in 2013 and 2014 and 84.6% and 88.4% in the same years, respectively. The metropolitan cities C and B also showed a greater difference than that of metropolitan city D. There are three reasons why metropolitan cities have a greater difference in execution rates between the regional development special account and categorical accounts than general provincial regions. First, these are large cities with a high population density that have a high share of capital facility projects such as ones by the Ministry of Culture, Sports and Tourism and the Small and Medium Business Administration. Also, as there are more project delays such as site purchase, construction delays, and the time required for the settlement of civil complaints than in provincial regions, the execution rate is lower than in general provincial regions where agriculture, forest, and environment proportions are high. Second, it is because the execution rate of total categorical grants accounts for a majority as the scale of total categorical accounts with the characteristic of current transfer is absolutely higher than that of the regional development special accounts due to the large populations in metropolitan cities. It can be seen that the difference in execution rates is larger because metropolitan cities have the majority rate of categorical grants while general provincial regions ease the proportional difference from categorical grants as the proportion of the regional development special accounts is relatively high.

Lastly, there is the possibility of poor project management of the regional development special accounts compared to the categorical grants in metropolitan cities. However, it was difficult to grasp that with quantitative figures alone. However, it could be confirmed that regional development special account projects had a lower priority than welfare projects in interviews with budgeting staff in provincial regions.

In conclusion, this study found that a marginal effect of the execution rate due to the characteristics of a project (current transfer vs. capital expenditure, self-governing body grants vs. private grants) was an important factor in the low execution rate of the regional development special accounts. And the
differences in execution rates by the regions is also interpreted as the difference in project share between current project and capital expenditure.

In the case of regional development special accounts, the claim that execution could be neglected because of poor project management by self-governing bodies due to a loose connection between local governments and departments could not be confirmed with just a comparison of figures. However, the regions where the proportion of the regional development special accounts is relatively high can have a high execution rate as there is a priority in the project budget or execution because a categorical grant project is major business. These characteristics derive from the fact that the high finance demand of the region for the relevant regional development special account rather than the logic of connection between local governments and departments of the regional development special account. Therefore, it shows that the execution rate of relevant local governments is influenced by various factors such as project characteristics, project management based on connections with departments, and finance demand of local residents.

4) Changes in Execution Rate of Regional Development Special Account Projects by Region and Structural Problems

The specific case of a decreased execution rate, which is pointed out as a limitation of the regional development special projects, can be found in the changes in the execution rate after the categorical grants were converted to regional development special account projects. In the process of conversion from balanced national development special accounts to multi-regional development special accounts in 2009, some regional development account projects within the multi-regional development special accounts were transferred to categorical grants and other accounts. Among them, project B of department A had an execution rate 50.1% and 28.9% in 2007 (budget scale 6.3 billion KRW) and 2008 (budget scale 5.1 billion KRW), respectively, within the balanced development special accounts before they were transferred to the categorical grants.51) Meanwhile, the “project explanation materials (8.2 billion KRW

51) Figures calculated by the author based on inside data of the KIPF.
transferred to local governments in 2015)" on the webpage of department A showed the execution rate of “capital grants for local governments” as 28% in 2008, 59% in 2009, and 61% in 2010.\(^{52}\) Based on the open data of the websites of relevant departments, there is not much difference in the execution rate between the block grant project and the categorical grant project.

Although it is difficult to generalize the above case because there are few execution rates with project details that can be investigated, the cases where the budget scale was increased after the conversion to categorical grants and the execution rate improved were investigated. However, when the project explanation materials for the relevant departments (such as “drainage improvement” or “water development against drought”) were looked into, it was difficult to find clear changes in execution rate after the conversion of the regional development special accounts to categorical grants.

Also, despite the same data, the data investigated by the Ministry of the Interior show a great difference from the categorical grants of the relevant department. To check out the actual execution rate of projects, the execution rate data by the offices of the central government which have been investigated by the Ministry of the Interior usually show results that are closer to the actual project execution rate. As the categorical grants of the relevant department only show the “government expenditure” supported for local governments, it is difficult to grasp the total project execution rate that reflects the finances of local governments and amount transferred.

In this study, with an expert group interview as well as data analysis, it was confirmed that the “autonomy of budget planning,” the inherent characteristics of the regional development special account, is the reason for the decrease in the execution rate. This means that the non-operation expense caused by the exertion of autonomy is expressed as an increase of the grant rate or project delay, as shown in the case of the Netherlands studied by Faber and Koning (2013). The persons in charge of the regional development special account budget and projects

\(^{52}\) These are the figures calculated by the author based on “budget resources vs. execution amount executed” specified in the project explanation materials on the webpage of the relevant department. (*2015 Budget and Fund Management Plan Explanation (2015.1), pp. 176~178*)

(\text{http://www.cha.go.kr/cop/bbs/selectBoardArticle.do?h笠id=230063&bbsid=6BBSNSTR_1027&mr=NS_05_02_06})
in each “do” region said that the reason for project delays was that they should autonomously decide overall project contents including the project implementation period as decisions on the budget amount and period of the regional development special account and block grants is more flexible than those of the categorical grants. This can be another side of autonomy of local governments and means that there is a burden of time and administrative cost needed in the decision-making process when local governments decide on projects on their own.

As for categorical grants, the project scale is predictable when the year-on-year increase is considered and the budget scale is constant, so launching a project can be done relatively earlier and there is less policy confusion. However, as each provincial assembly recognizes that the regional development special accounts are an autonomous budgeting process, a connection with the project planning of the province itself is needed and detailed project deliberation is required in the process of project decision, which is the difference from the categorical grant project.53)

2 Analysis of Expansion of Autonomy of Project Selection

A. Significance of Analysis of Grant Rate (Budgeting Office vs. Departments vs. Local Governments)

A subsidy rate means the proportion of the national financial burden to local governments. The national subsidy rate is high because the supply of public goods will not be smooth as the subsidy intention of local governments is low when the nation does not support it. On the other hand, a low national subsidy rate assumes that the subsidy intention of local governments is high. As such, it can be seen that a project has a high subsidy rate when there is a need to induce the project because the subsidy intention of local governments is low. A previous study stated that the subsidy rate is the result of matching conditions by region and the regulation forcing “Maintenance of Effort” (MOE).54)

53) The contents hereinafter are in accordance with the summary of the FGI, a budgeting expert group.
This analysis used the “(national) subsidy rate” to identify the autonomy of project selection of the relevant local governments. The application of the subsidy rate of block grants follows the application of the basic subsidy rate and differential subsidy rate of Articles 9 and 10, respectively, of the 「Subsidy Management Act」 and Article 13 of the same Act presents the local government's obligation to bear costs.

However, legal application of the subsidy rate is based on unit project, and this can vary depending on donor by project in do, si or gun units. Therefore, the subsidy rate presented by detailed project can be flexibly applied in a certain range. This analysis regarded the project will and capability that can be estimated qualitatively as the performance of the finances of local governments (a local government’s finance rate and categorical grant rate).}\footnote{Spahn (2012), p. 12.}{55)\footnote{In the case of Special Accounts for Environmental Improvement, which is allocated directly by the Ministry of Environment in the unit of si and gun, the subsidy rate within the unit project of si and gun is not.}

According to budget planning in 2017, the subsidy rate of unit projects for the “increase and operation of cultural facilities” was 30–70%, while the subsidy rate of three to four individual detailed projects can be tuned within the projects and the application method of the subsidy rate by province (do) can be freely suggested with the four methods above, etc. This means that the local governments’ finance allocation rate can be applied flexibly as such. Therefore, this analysis regarded the subsidy rate (local governments’ finance allocation rate) as the project execution autonomy index of local governments.

B. Analysis of Subsidy Rate using DB Analysis

As explained above, the subsidy rate by unit project based on department is presented in the Enforcement of Decree of the Subsidy Management Act, and the subsidy rate of the block grant program is as shown in the table below. The problem is how to identify the subsidy rate by project and local government. Except for the 「Summary of local budget for fiscal year」 that only shows the general finances of national and local governments out of the total categorical
grants, the subsidy rate, in other words, local governments’ finance allocation cannot be calculated on a consistent basis.

| Table IV-4: Status of Yearly Categorical Grants and Local Governments’ Finance Allocation |
|---------------------------------------------|---------------------------------------------|
|                                            | (Unit: 100 million KRW, %)                  |
| Categorical Grant Project                  |                                             |
| 2011                                        | 2012                                        |
| 486,182                                     | 526,125                                     |
| Proportion 100                              | 100                                         |
| 567,164                                     | 100                                         |
| 610,786                                     | 100                                         |
| 644,322                                     | 100                                         |
| Categorical Grants                          |                                             |
| 300,883                                     | 320,606                                     |
| 61.9                                        | 60.9                                        |
| 340,347                                     | 60.0                                        |
| 377,463                                     | 61.8                                        |
| 414,078                                     | 64.0                                        |
| Local Governments’ Finance Allocation       |                                             |
| 185,299                                     | 205,519                                     |
| 38.1                                        | 39.1                                        |
| 226,817                                     | 40.0                                        |
| 233,323                                     | 38.2                                        |
| 230,244                                     | 36.0                                        |
| Note: The amount a local government allocated as its budget the first time |

Therefore, this analysis used the “Status of Grant Execution” in the attached balance sheets of each fiscal year, which was opened in the corresponding local governments from 2009 to 2014, and the subject area was the 10 regions of Seoul, Busan, Daegu, Incheon, Gwangju, Daejeon, Ulsan, Gyeonggi, Chungnam, and Chungbuk. The data was composed of the execution amount of each categorical grant by department (i = Ministry of Culture, Sports and Tourism, Ministry of Agriculture and Forestry, Ministry of Environment, Ministry of Land, Transport and Maritime Affairs, Ministry of Gender Equality and Family, Small and Medium Business Administration, Korea Forest Service, etc.) of the corresponding local government (Seoul, Busan ……… Gyeonggi, Chungnam, Chungbuk) by year (t = 2009, 2010, 2011, 2012, 2013, 2014), national finance, and finance for si and do. The total observed value is 409.

1) Changes in Categorical Grant by Year

The average of the categorical grants by department input by corresponding local governments and projects that this data presented was found to be 67%. Regarding yearly results, there was a distribution between 66% and 69% from 2009 to 2014. For reference, the average of grant rates between 2009 and 2015
in the summary of local budget for the fiscal year was about 62%, indicating a difference of about 5%p.

〈Table IV-5: Comparison of Grant Rate of National Finance

<table>
<thead>
<tr>
<th>Year</th>
<th>Results of KIPF Analysis</th>
<th>Summary of local budget for fiscal year</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>66.3</td>
<td>63.5</td>
</tr>
<tr>
<td>2010</td>
<td>69.1</td>
<td>62.5</td>
</tr>
<tr>
<td>2011</td>
<td>69.3</td>
<td>61.9</td>
</tr>
<tr>
<td>2012</td>
<td>66.5</td>
<td>60.9</td>
</tr>
<tr>
<td>2013</td>
<td>67.6</td>
<td>60.0</td>
</tr>
<tr>
<td>2014</td>
<td>68.9</td>
<td>61.9</td>
</tr>
</tbody>
</table>

Note: The amount the local government allocated as a budget the first time
Data: Data created by the author (KIPF data) and Summary of Integrated Finance of Local Governments by year of the Ministry of the Interior

2) Distribution of Categorical Grants by Department

The average grant rate by department (i) of the corresponding local government (j) between 2009 and 2014 (t) was 55% for the Ministry of Culture, Sports and Tourism, and the values were found to be distributed between 22% and 85%. For the Ministry of Agriculture and Forestry, the average value was 73%, with distribution between 30% and 93%. And the Ministry of Environment had an average value of 68%, with distribution between 8% and 93%, while the Ministry of Land, Transport and Maritime Affairs had an average of 62%, with distribution between 21% and 87%. The categorical grant rates above are almost similar to those presented in the table below.

Looking at the distribution of grant rates by department, the Ministry of Culture, Sports and Tourism and the Ministry of Land, Transport and Maritime Affairs used the finances of local governments matching freely compared to the Ministry of Agriculture and Forestry and the Ministry of Environment. It seems that the standard grant rate by the Ministry of Agriculture and Forestry and the Ministry of Environment was relatively high, whereas the range of grant rates of the Ministry of Culture, Sports and Tourism and the Ministry of Land, Transport and Maritime Affairs was relatively wide.
Analysis of the Effects of Transition from Categorical Grant to Block Grant

[Figure IV-3] Distribution of Categorical Grants of the Ministry of Culture, Sports and Tourism

[Figure IV-4] Distribution of Categorical Grants of the Ministry of Agriculture and Forestry

Note: Distribution of Categorical Grants of the Ministry of Culture, Sports and Tourism and the Ministry of Agriculture and Forestry Classified by Region between 2009 and 2014.
Analysis of Effects of Conversion into Block Grants

[Figure IV-5] Distribution of Categorical Grants of the Ministry of Environment

3) Differences in Categorical Grants by Region (Financial Burden of Local Governments)

This analysis considered that the relevant local governments expressed the will to select projects on their own with the financial burden of local governments during the execution of categorical grant projects. The difference in the burden rate of the finances of local governments between regions comes from the difference in preference of each project. However, as the present data on categorical grant rates do not present the data of Gangwon, Jeonnam, Jeonbuk, Gyeongnam, and Gyeongbuk, there is a limitation in comparison between regions. If the application of differentiated grant rate and distribution of projects with high grants are higher in provincial regions than in metropolitan cities, the comparison of grant rates between individual regions, except Gangwon, Jeonnam and Gyeongbuk, does not have significance in the analysis.

However, the categorical grant rates by region shown by this data is 40% for metropolitan area G, 83% for metropolitan city F, 66% for metropolitan city E, 65% for metropolitan city D, 61% for metropolitan city C, 55% for metropolitan city B, 58% for metropolitan city A, 83% for H-do and 82% for each of K-do and J-do. The categorical grant rate was looked into to see why the rate of metropolitan city F was high. The categorical grant rate by department of region F was found to be 76% for the Ministry of Land, Transport and Maritime Affairs, 73% for the Ministry of Culture, Sports and Tourism, 97% for the Small and Medium Business Administration, 88% for the Ministry of Agriculture and Forestry, and 82% for the Ministry of Environment, showing a high rate by department. Meanwhile, the categorical grant rate of region G was about 31% for the Ministry of Culture, Sports and Tourism and about 49% for the Small and Medium Business Administration.

In the state that the categorical grant rate of projects (rate of financial burden of local governments) is fixed for a certain section, the differences in the financial burdens of local governments come from the differences in local financial conditions. In particular, the low financial burden of local governments in certain regions is assumed to be because the local governments finances for SOC projects are lacking as the financial burden of local governments for welfare expenditure projects such as mandatory expenditure.
[Figure IV-7] Distribution of Categorical Grants in Metropolitan City G

[Figure IV-8] Distribution of Categorical Grants in Metropolitan City F

Note: Distribution of categorical grants in metropolitan city G and metropolitan city F classified by department unit based on KIPF analysis data between 2009 and 2014.
[Figure IV-9] Distribution of Categorical Grants in H-do

Note: Distribution of categorical grants in H-do and K-do classified by department unit between 2009 and 2014.
A. Increase and Decrease Effects of Budget Scale of Regional Development Special Account and Budget Scale of Departments

One major function of block grants is the regulation of financial support of the central government. This is implied by the operation cases or previous research of the U.S. reporting that the time of conversion from categorical grants to block grants was a period of economic decline and when welfare expenditures increased. There is a need to investigate what relationship the financing of categorical grants in South Korea over the last 10 years had with economic indicators and financial indicators.

As for total finances, the major economic indicator, GDP size, increased about 1.7 times from about 920 trillion KRW in 2005 to 1,558 trillion KRW. The total expenditure size of the central government increased about 1.81 times from about 208 trillion KRW to 375 trillion KRW. The total amount of regional development special accounts during the same period increased 1.88 times from 5.5 trillion KRW to 10.34 trillion KRW, and the block grant projects among them was found to have increased 1.07 times from 4.2 trillion KRW to 4.5 trillion KRW. Although the amount became 4.5 trillion KRW in 2015 after the block grant project was expanded to the social welfare area and partial projects of the Ministry of Environment were added, it showed an absolute decreasing trend by 2014 of about 3.5 trillion KRW compared to 2005. On the other hand, the social welfare expenditure in 2013 increased 2.33 times from 2005. The yearly mean elasticity value based on the GDP growth rate between 2005 and 2015 was found to be 1.34 for the total expenditure size of central government, 2.26 for legal spending in the welfare field, 2.30 for social welfare expenditure, 1.22 for the total amount of the regional development special account, and about 0.16 for block grant projects.

Based on the rate of increase between 2005 and 2015, the yearly average increase rate of GDP, total expenditure of the central government, and social welfare expenditure were found to have increased by about 5.4%, 6.2% and 11.2%, respectively. And the yearly mean of the total regional development
special account and block grant projects increased by 6.9% and 2%, respectively, between 2005 and 2015. The yearly change rate is as shown in the figure below. It shows they are similar to the increase rate of major indicators between 2005 and 2008, while the rate of change of block grant projects has been low since 2009.

To sum up, based on GDP increase rate, while the increase rate of government expenditure and welfare expenditure was high, that of SOC-related department grants was lower than the GDP increase rate and in particular, the rate of increase of block grant projects was much lower. Through this, it can be considered that the budget increase rate of regional development special account projects was consistently maintained low compared to that of all the departments.

[Figure IV-11] Major Financial Variables and Rate of Change in Regional Development Special Accounts

Note: The author has calculated it based on the source.
B. Increase Rate of Budget Amount of SOC-related Department and Regional Development Special Accounts

The rate of increase of the budget amount of departments related to regional development special account and block grant projects differs according to the department. The budget amount of the Ministry of Agriculture and Forestry in 2015 increased about 1.04 times from 2005, while block grant projects increased about 1.17 times. In the case of the Ministry of Environment, it increased about 2.5 times from about 1.53 trillion KRW to 3.85 trillion KRW, while block grant projects increased by about 4.2 times to 0.69 trillion KRW after the “ecological river” project was included in 2015.

On the other hand, the while total budget size of the Ministry of Land, Transport and Maritime Affairs (including Ministry of Oceans and Fisheries) increased about 1.3 times, block grant projects decreased 0.45 times from 1.6 trillion KRW to 0.73 trillion KRW, which is less than half. Also in the case of the Ministry of Culture, Sports and Tourism, while total regional development special account projects increased about 2.2 times to 1.83 trillion KRW from 0.84 trillion KRW in 2005, block grant projects increased only about 1.4 times from 0.36 trillion KRW to 0.5 trillion KRW. Therefore, the increase rate of block grant projects by the Ministry of Agriculture and Forestry and the Ministry of Environment was higher than total categorical grants, whereas the Ministry of Land, Transport and Maritime Affairs and the Ministry of Culture, Sports and Tourism showed the opposite.

When looked at based on yearly mean increase rate between 2005 and 2015, while the rate of increase of the budget of the Ministry of Agriculture and Forestry climbed, that of regional development special accounts was low with 2.3%, and in the case of the Ministry of Land, Transport and Maritime Affairs, while the increase rate of the budget was 3.1%, regional development special accounts decreased by -2.0%. The Ministry of Culture, Sports and Tourism also showed a yearly mean increase rate of regional development special accounts that was lower by 4.6%p than the total budget increase rate of the department. The increase rate of categorical grants and block grant projects of all these major departments were also examined. Except for 2010 and 2015, the rate of increase of categorical grants was higher than that of block grants, on average.
Analysis of the Effects of Transition from Categorical Grant to Block Grant

[Figure IV-12] Yearly Mean Budget Percentages by Department and Change Rate of Regional Development Special Accounts between 2005 and 2015

Note: The author has it calculated based on the source.
If GDP elasticity is calculated based on rate of increase during the same period, the only regional development special accounts department with a score over 1 was the Ministry of Environment (3.18) while the Ministry of Agriculture and Forestry, the Ministry of Land, Transport and Maritime Affairs, and the Ministry of Culture, Sports and Tourism were 0.33, 0.37 and 0.75, respectively. The elasticity was examined with the increase rate of categorical grants and block grants in four major departments. The elasticity of block grants between 2006 and 2016 was smaller than that of the categorical grants of the relevant departments except for 2008 and 2015.
Analysis of the Effects of Transition from Categorical Grant to Block Grant

[Figure IV-14] Elasticity of Categorical Grant and Block Grants of Major Regional Development Special Account Department as a Proportion of GDP

[Figure IV-15] Elasticity of Categorical Grants and Block Grants by Department as a Proportion of GDP
In the results of examining the increase rate of the regional development special account and budget and categorical grants of departments related to the regional development special account, there was the decreasing effect of SOC finances through the regional development special account. Although the budget increase rate of major regional development special accounts was lower than that of categorical grants or regional development special accounts, the increase rate of categorical grants was found to be higher than that of block grants.

4 Positive Analysis of Execution Rate and Grant Rate of Block Grant Projects

A. Materials and Analytic Frame

The data related to the regional development special accounts used in this analysis are the inside data of the KIPF between 2009 and 2015. The data are composed of a total of seven years (t) and 16 local governments (j) and 11 ~ 12 project departments (i) by each local government. The mean value of the allocation amount of the regional development special account ($B_{ijt}$, national finance scale of the regional development special accounts) is approximately 19 billion KRW. For example, the allocation amount of the Ministry of Culture, Sports and Tourism given to Busan in 2012 can be seen as approximately 19 billion KRW. The proportion $(B_{ijt}/\sum B_{ijt})$ of the regional development special accounts of project department A to total regional development special accounts is about 11.3%. As the number of project departments related to the regional development special accounts is about 10, the proportion of each department to total regional development special accounts is about 10%. The average of the regional development special accounts by department unit ($S_{ijt}$) of local governments during the same period was 74.4%.

The data on categorical grants used in this analysis are two data sets that were input by the KIPF of 1) material on categorical grants by regional department unit ($C_{ijt}$) and 2) material on categorical grants by region ($T_{ijt}$). The material on categorical grants by regional department unit was written by
inputting national finance and local governments of categorical grant projects by departmental unit project based on the open data of the corresponding local government’s homepage, as explained before. The corresponding department is the department related to the regional development special accounts and the total number of data items is 490. Based on this, “categorical grants ($N_{ij}$)” and “categorical grant rate ($C_{ij}$)” were calculated. The average value of categorical grants by department unit of local governments between 2009 and 2014 was approximately 90 billion KRW, and the average of the categorical grant rate ($N_{ij}$=national finance/(national finance + local governments)) was 67%, as shown in the figure below.

---

56) Materials on categorical grants by department and by region were all the amounts including the regional development special accounts. The budget statements of local governments do not distinguish categorical grants from block grants.
Regarding other variables used, financial information revenue-net-settlement data were used for total revenue, local governments (property tax, acquisition tax), total scale of categorical grants of local governments \( T_{ijt} \), and the proportion of welfare expenditure. “Registered population status” of the Ministry of the Interior and “GRDP” of the Korea National Statistical Office were used for the region-specific variables used as control variables.\(^{57}\)

Pooled OLS was used as an analysis model. Although a fixed effect model was considered as it was a panel model composed of 7 years and 16 data items, a basic linear regression model was used as it was found not to be greatly different from the OLS model because the Hausman test result value was not sufficiently high.\(^{58}\) However, a year-dummy variable was used, taking time sequential characteristics into consideration. A variance inflation factors (VIF) value was used to verify the presence or absence of multicollinearity caused by the use of macroscopic variables. When the VIF is over 10, it is usually seen that there is the problem of multicollinearity, and this analysis showed about 16.\(^{59}\) This was because an ad hoc method which did not use variables whose correlation value was 0.3 or more was used and the correlation (0.01~0.1) between block grants variables, which is the focus of this analysis, was not high. For model specification, an “omitted variable test” and “link test” were performed and the range of variable choice was decided. The positive analysis model and variables of this analysis are as follows. The dependent variables are categorical grants of department unit by region, execution rate of block grant projects, and grant rate of categorical grants, which is \( y_{ijt} \).

\[
y_{ijt} = [C_{ijt}, S_{ijt}, N_{ijt}]
\]

\(^{57}\) Registered population status of the Ministry of the Interior
(http://kosis.kr/statHtml/statHtml.do?orgId=101&tblId=DT_1B040A3&conn_path=I2) (Date of Search: 2016.10.)

\(^{58}\) Hausman statistics ⇒ \( \chi^2(8) = (b-B)[(V_b-V_B)^{-1}](b-B) = -7.22 \)

Analysis of the Effects of Transition
from Categorical Grant to Block Grant

\[ y_{ijt} = \alpha + Blockdummy + \beta_{ijt} \Gamma + \gamma_{ijt} X + I_{jt} + R_{jt} + \epsilon_{ijt}, \]
\[ i = 1 \sim 12, \ j = 1 \sim 16, \ t = 2009 \sim 2015 \]
\[ \Gamma = \Gamma \left[ \sum B_{ijt}, C_{ijt}, \frac{B_{ijt}}{B_{ijt} + T_{jt}}, \frac{B_{ijt}}{B_{ijt} + C_{ijt}} \right] \]
\[ B_{jt} = \sum_{i}^{12} B_{ijt} \]
\[ C_{ijt} = \alpha C_{ijt} + (1 - \alpha) C_{ijt}, \ \alpha = \text{categorical grants}, \ N_{ijt} = \alpha_{ijt} \]
\[ X = \text{Localtaxes, Gross Revenue, T, Proportion of Welfare Expenditure} \]
\[ I = \text{Ministry of Culture, Sports and Tourism, Ministry of Agriculture and Forestry, Ministry of Land, Transport and Maritime Affairs, Ministry of Environment...Small and Medium Business Administration}_{jt} \]
\[ J = \text{Seoul, Busan,... Jeonnam, Jeonbuk} \]

B. Increase Effect of Block Grants on Categorical Grants

South Korean block grants refer to the national finances that local governments receive and are allocated to conduct projects. This analysis wondered if the scale of financial expenditure of all projects could be different according to the input of national finances by the Ministry of Strategy and Finance and departments although the project departments of local governments carry out the block grant projects and general categorical grant projects as the same ones. The dependent variable is the scale of categorical grants by department of local governments (\( C_{ijt} \)) and in the case of departments that have allocated block grants in a corresponding region, the effect of the introduction of block grants was examined using a dummy variable.

(Hypothesis 1) The introduction of block grants will not have an effect on the increase trend of the categorical grants of related projects as existing categorical grants went directly to local governments as separate finances.
(Hypothesis 2) Block grants will increase the expenditure of categorical grants of related whole unit projects because it is an autonomous finance which causes its own national finance saving.

Taking previous domestic research and the opinions of experts together, as block grant projects are limited in the finances of total categorical grants, many people think that just the financial sources are different. Therefore, the view that the introduction of block grants does not influence the expenditures of related projects is predominant. (Hypothesis 1) supports this. If there is a block grant of department A of local government, the categorical grant was found to increase by about 0.4% than would otherwise be the case.

On the other hand, (Hypothesis 2) explains the effect of the introduction of block grants in a different way based on the positive analysis in previous research in the Netherlands. Based on the research, since the system that had been gradually introduced since 2005 was converted to block grants, the administrative cost of the corresponding projects was reduced and more financial expenditures for related projects were available with the same finances due to the reinforced discretion of projects.\(^60\)

This analysis also showed the increase of expenditure of categorical grants in the case of related departments if it had a block grant in the pertinent year. This analysis excluded the effect of the scale of block grants on the scale of categorical grants by using a “block grants dummy.” Given that for the management of categorical grants in South Korea, as the financing of block grants itself means an increase in the input of national finances of categorical grants of the corresponding department, it can be seen to have influenced the increase of related financial expenditures. Even though a related control variable was changed, the effect of the block grant dummy was found to be very robust. This result can be seen to mean redundancy. Theoretically, as block grants can be prepared autonomously by the corresponding region, and thus the projects that cannot be carried out through categorical grant projects or own projects are available, it can be assumed that they can have a complementary relationship.

\(^{60}\) Kattenberg and Vermeulen (2015)
with categorical grants. However, from the results that block grant projects led to a significant increase in categorical grant projects of corresponding departments, it seems to have a rather duplicable nature to be used additionally with existing categorical grant project, without functioning properly at the management stage of the local autonomy system. They are important results that reflect one side of the management of the block grants of local governments.

In the results of examining the contents of this analysis with the same explanatory variable with the “financial burden of local governments” of categorical grants as a dependent variable to see it more specifically, it was found that the allocation of block grants did not have an influence.

For the control variables that influenced categorical grants, “population” and “aging,” which explain the demand of financial expenditure, were used, while “proportion of welfare expenditure” and “local subsidy” were used as the variables that explain the financial conditions of local government. Population growth (Model 3) was found to increase the categorical grants of SOC-related departments, whereas the increase of welfare expenditure itself was found not to influence the categorical grants of SOC-related departments. Local subsidies (Models 2 and 3) were found to influence categorical grants. Increases in local subsidies can be seen to have influenced the financial burden of local governments for categorical grants by functioning for the securement of revenue.

As for effect by department, it was found that the expenditures on categorical grants by the Ministry of Culture, Sports and Tourism, the Ministry of Agriculture and Forestry, the Ministry of Environment, the Ministry of Land, Transport and Maritime Affairs, and the Ministry of the Interior increased when there were block grants. On the other hand, in the case of the Ministry of Commerce, Industry and Energy, the Cultural Heritage Administration, the Rural Development Administration and the Small and Medium Business Administration, even though there was input of block grants, the total amount of categorical grants by them was found to decrease.

As for effect by region, there was rarely a characteristic effect by an individual region, and it was confirmed to significantly influence the province dummy variable.
C. Execution Rate of Block Grants

This analysis used “execution rate” to measure the performance of block grants. In the previous status analysis, the execution rate of block grant projects of corresponding local governments was assumed to be influenced by the characteristics of department projects rather than regional characteristics or the will by local governments to do projects. Therefore, it was confirmed that there was a high or low execution rate of the regional development special accounts according to region. It was investigated if the execution rate as an indication of the effect of block grant projects differed according to the financial condition of local governments, will by local governments to do projects, and local characteristics, with the characteristics of execution rate by department being controlled. The hypotheses that were tested through analysis are as follows. The dependent variable is the execution rate ($S_{ijt}$) of block grant projects by the departments of corresponding local governments.

(Hypothesis 1) A higher amount of block grants by department as the result of project selection by the corresponding local governments will increase the project execution rate.

(Hypothesis 2) The execution rate of the corresponding block grant projects can increase together when the average input rate of national finances of the corresponding department, in other words, categorical grant rate, increases.

(Hypothesis 2-1) The execution rate of the corresponding block grant projects can decrease due to financial pressure factors when the input rate of national finances of other projects of corresponding department increases.

To conclude, the results of positive analysis only explains hypothesis 1. For example, it showed that when the absolute scale of block grant ($B_{ijt}$) allocation of the Ministry of Culture, Sports and Tourism in Seoul was high, the execution rate of block grant projects could increase a little. Also, it was difficult to assume that the percentage ($\left(\frac{B_{ijt}}{\sum_i B_{ijt}}\right)$ to total amount of the regional development
special accounts had a significant effect on the execution rate. (Hypothesis 2) and (Hypothesis 2-1) were made in order to confirm that the high average categorical grant rate of the corresponding department could influence the execution rate of a block grant project that was part of it and the possibility of an increase in the categorical grant rate of other department projects to have a negative effect on the execution of the block grant project itself, and neither of them provided a significant explanation.

(Hypothesis 3) The increase or decrease of the rate of financial burden of local governments of the corresponding categorical grants can influence the execution rate of block grants.

The purpose of (Model 3) was to investigate 1) if the financial burden of local governments in block grant projects can increase and 2) if the burden of an increase of general categorical grant projects can decrease the financial burden of local governments in block grant projects and thus influence the execution rate when the financial burden of local governments in categorical grant projects by department of the corresponding local governments increases. However, the analysis results could not explain (Hypothesis 3). Also, the total categorical grants of corresponding local governments, in other words, the proportion \( \frac{B_{ij}}{T_{ij}} \) of block grants to categorical grants that include the welfare area, did not have a statistically significant effect on the execution rate of block grants of the corresponding local governments.

(Hypothesis 4) A high increase in the welfare expenditure of corresponding local governments can decrease the execution rate of block grants because the pressure of the burden on local governments’ finances as usable resources is high.

In addition, the results of this analysis supported (Hypothesis 4). Although support of national finance and local governments’ finance matching are important for the execution rate of corresponding projects, an increase of mandatory expenditure for welfare projects can make inroads into the finances
of local governments and thus hinder the promotion of SOC projects. The analysis results showed statistically significant support for the hypothesis. In other words, the results imply that the expenditure of welfare-related categorical grants exacerbates the condition of local finances, and this can have a structural effect on the execution rate of local SOC projects.

As for regional characteristics, the execution rate of block grants was found to be low in Gwangju and Chungnam and high in Ulsan in (Model 2). Considering other conditions, Gyeonggi, Chungnam and Chungbuk have generally shown somewhat low results. As this analysis did not have the data for Gangwon, Jeonnam, Jeonbuk, Gyeongnam, and Gyeongbuk, the analysis results of the region dummy can have a limitation in interpretation.

Also, the analysis results of the department dummy, which is the indicator of project characteristics that have a fundamental effect on the execution rate, showed that the execution rate in the Ministry of Culture, Sports and Tourism, the Ministry of Land, Transport and Maritime Affairs and the Small and Medium Business Administration was significantly lower than that in other departments. This shows that the status analysis results still reflect the department characteristics even after considering block grants, categorical grants and the financial condition of relevant regions. To conclude, the positive analysis showed that the project characteristics of departments had a consistent effect on the execution rate.61)

D. Block Grants and Grant Rate

(Hypothesis 1) As the allocation results of block grant projects are the results of autonomous selection by local governments, if the proportion of block grants to total categorical grants is high, the intention to pay the local governments’ finances can be high. Or, block grant projects will increase the financial burden of local governments due to the characteristics of project performance, which are autonomy and uncertainty.

61) The result of “omitted variable test” in this analysis was F value 0.23 and P-value 0.87, and this result could not reject the null hypothesis of “the model did not have omitted variables.”
(Hypothesis 2) As grant rate means the price of supplying the corresponding public goods, the corresponding local governments have an incentive to carry out projects with a high grant rate when they select block grant projects.

(Hypothesis 3) When the pressure of the financial burden of local governments is high, such as an increase in welfare expenditure, the categorical grant rate of SOC department projects will be high as the corresponding local governments have a low ability to pay for them.

In other words, (Hypothesis 1), the hypothesis that the financial burden of local governments for block grant projects could be high cannot be supported. The results of analysis of block grants in South Korea could not confirm that the financial burden of local governments was high due to the increase effect of indirect expenses of block grants which was suggested by the study of Faber and Koning (2013).

The burden rate (grant rate) of local governments means the most active project intention of local governments. The above is also a result suggesting that block grant projects cannot be used differently from categorical grant projects. In other words, local governments cannot show changes in financial management through the rate of the financial burden of local governments.

(Hypothesis 2) explains that, in (Model 1), when the proportion of categorical grants to grants by department unit related to the regional development special accounts is high, the grant rate can be high at the .05 significance level. This means that the categorical grant rate of block grant projects can be a little higher when compared to total categorical grant projects. In other words, it means that when local governments select a block grant project, they can have an incentive to select projects with a high grant rate, if possible. The fixed grant rate of block grant projects influences prior selection of projects with a high grant rate when local governments construct block grant projects. Theoretically, an explicitly fixed grant rate like an existing categorical grant project can be seen as undesirable because the local governments’ preference for the project and the will to conduct the project can be realized only when the construction of a block grant project is autonomous. It seems that constructing the grant rate more autonomously than for categorical grant projects is needed.
for the differentiation from existing categorical grants for the aim of block grants.

Also, positive analysis suggests the results that support (Hypothesis 3) in (Model 1), (Model 2) and (Model 3). The population and scale of welfare expenditure (proportion of welfare expenditure) of corresponding local governments were used as an index of condition of local governments’ finances. This means that when the welfare expenditure increases or population (local taxes) decreases, in other words, when the factors that pressure local finances increase, the categorical grant rate can increase a little during an SOC project support.

Characteristics by department support the contents of status analysis in (Model 1), (Model 2) and (Model 3). Even though the various factors above were considered, the grant rate of the Ministry of Culture, Sports and Tourism was significantly low and that of the Small and Medium Business Administration was high. In terms of region, provincial regions were found to have a higher grant rate than metropolitan regions. In terms of time series, the grant rate decreases in (Model 1) and (Model 2), and this can be a pressure factor of local finances as it means the increase of the burden rate of local governments’ financing of SOC-related department projects. The change in the trend of the burden rate of interdepartmental categorical grant projects according to changes in economic condition needs to be noted.62)

E. Sub-conclusion: Block Grants vs. Categorical Grants

The scientific contribution of this analysis is to examine the difference in management between block grants and categorical grants. In other words, the purpose of this analysis was to examine if there is a structural difference in management between block grant projects and categorical grant projects in the same department from different angles.

(Execution Rate) Wald Statistics: F(1, 346)=7.19, Prob > F = 0.0017
(Grant Rate) Wald Statistics: F(1, 368)=2.16, Prob > F= 0.14

62) The result of the “omitted variable test” in this analysis was F value 1.57 and P-value 0.19, and this result could not reject the null hypothesis of “the model did not have omitted variables.”
The Wald test, which was a post-estimation method of analysis of execution rate (Model 1) was used to confirm a structural difference between two variables, “block grants” and “categorical grants” through a comparison of coefficient values. The result was found to reject the hypothesis “coefficient values of block grants and categorical grants are the same” at the <1% significance level. Therefore, in view of the execution rate management, there is a slight difference between block grants and categorical grants.

However, analysis using the proportion of block grants and categorical grants in the analysis of the grant rate could not statistically explain the difference between the two variable values. And the Wald test with “GRDP” being a dependent variable also could not show structural changes of block grant and categorical grants.

To sum up this positive analysis, 1) carrying out block grant projects increased the expenditure of categorical grants of related departments. 2) In the case of “execution rate,” only when the scale of block grants was large could the execution rate of the corresponding block grant projects increase and the proportion within other block grant projects could not have an influence. 3) The “grant rate” implied the high possibility of selecting block grant projects with a high categorical grant rate. Each analysis concluded that it was difficult to explain the structural differences between the two grants with Wald test results, although the test was referable.
Conclusion and Policy Implications

1 Evaluation of Budget Management of Regional SOC Block Grant Projects through Positive Analysis

The analysis of the grants of a block grant project is not just research on transfer revenue items, a type of categorical grant. The current rapidly aging society and unstable economy suggest a huge future increase in welfare expenditure. Therefore, as for “the proportion of finances for individual redistribution” to total transfer revenue, its increasing speed is the key and it is predicted to be more rapidly increasing than the present regardless of any kind of form. A certain decrease in the SOC budget is predictable with the assumption that financial soundness is maintained and the financing of block grant projects is also included in the decrease as a representative regional SOC budget that local governments prepare and use.

This analysis is the first research that attempted a discussion about the quantitative performance assessment of “regional SOC finances,” which is discretionary spending among “interregional redistribution finances.” This is a baseline data for judgment about which side, between the method of delivering regional SOC finances from budget offices to department projects through departments (categorical grants) and supporting a budget directly for local governments (block grants), will have what significance on the financial state of South Korea. In other words, this is a discussion about direct support by departments versus a top-down approach by local governments among the
allocation methods for regional SOC finances. Of course, as each method has its advantages and disadvantages, there is a need to appropriately allocate finances according to the intergovernmental financial situation, demand of regional residents, and effectiveness of projects.

This analysis quantitatively evaluated the policy performance of block grant projects since 2009. First, the increase and decrease effect of categorical grants since the introduction of block grants was examined. When a block grant project is carried out, in other words, when there is a fixed allocation of national finances for block grants, the categorical grants of the related department in the corresponding regions were found to increase. This analysis interpreted it as the effect of national financial support. The significance of the input of national finances for a corresponding project is important most of all in local governments’ carrying out projects. This is not in agreement with the existing opinion that a block grant project does not have any influence on the expenditure of categorical grants as it is a part of categorical grants. Furthermore, it concluded that there is a possibility of duplicate use of block grant projects and categorical grant projects rather than complementary management between the two grants when corresponding local governments construct the projects of certain departments.

Second, only the scale of self-input of national finances influenced the execution rate of block grant projects, and the proportion of block grants to categorical grants and others could not explain other factors. An increase of the categorical grant rate of other projects in the same department or increase of financial burden of local governments was also found not to be an influence. It is understood that as a minimum grant rate fixed by an individual project is maintained, the grant rate between individual projects within unit projects cannot be adjusted.

Third, in the analysis of grant rate, the high proportion of the regional development special accounts to total categorical grants by department indicated a high categorical grant rate. This analysis interpreted this as the result of local governments’ choosing projects with a high grant rate as a priority when they plan block grant projects. It is also a result showing the differentiation of block grant projects from existing categorical grant projects as long as a fixed block grant rate exists. Meanwhile, the rate of the financial burden of local governments
is the most active expression of the will to do a project. However, this analysis could not differentiate the project management of local governments through this.

On the other hand, the variable consistently showing a strong statistical significance so far is the “proportion of welfare expenditure of local governments” or “scale of welfare expenditure of local governments.” It was examined with the assumption that usable revenue is highly likely to be eroded due to the increase of welfare expenditures by local governments, and that will influence SOC project execution and management. And it was confirmed that the “financial condition of local governments,” a factor of pressuring the welfare expenditure of local governments, rather than a variable of management of grants by local governments, had a significant effect on the explanation of dependent variables such as “execution rate” and “grant rate.” In other words, it showed that the securing of fiscal space by local governments was the most important thing to increase the regional SOC financial expenditure.

Fifth, this positive analysis showed a robust “interdepartmental connectivity.” The department dummy explains the dependent variable of block grants with a statistical consistency even after considering other financial conditions or effects of grant management. This means there is no great difference between block grant project and categorical grant project in terms of interdepartmental connectivity. There was no decrease of project execution rate caused by weakened department management, which was a concern at first. Based on the results of this analysis, interdepartmental connectivity is an important cause of block grant projects. Therefore, although it was predicted that the effect of the department dummy variable could be a little unclear when corresponding local governments operated block grant projects autonomously by department, the department effect still existed in this analysis.

To summarize the above, it is difficult to see that the results quantitatively showed a different application of block grant projects from general categorical grant projects. This is because the high execution rate of projects with a high national financial support amount is also the same in the general categorical grant projects, and it can’t be seen that selecting projects with a high categorical grant rate rather than the autonomous expression of opinion is a characteristic of block grant projects. In other words, there were no characteristics of block
grant projects in terms of interdepartmental connectivity, and the influence of local financial conditions was not different from that of general categorical grant projects.

2 Alternatives for Securing Effectiveness of Block Grant Projects

A. Alternatives for Project Effectiveness and Increase of Autonomy

According to the positive analysis of this study, an important incentive to increase the execution rate of block grant projects was “the scale of the national financial support amount.” Therefore, it is concluded that increasing allocation scale by unit project by increasing the period of national financial support and ceiling finance scale as much as possible is desirable for the improvement of the execution rate. There was also a tendency of selecting block grant projects with a high grant rate. These two results explain that the increase of ceiling finance of block grants projects is the way to improve the execution rate and the possibility of project selection.

As the increase of revenue of block grant projects under limited finance means the reduction of categorical grant projects, departments and local governments do not seem to accept this as an improvement alternative unless it is a “net increase” effect. However, this study suggests that it should not necessarily be the case, at least in part. In the results of positive analysis, the scale of categorical grants of the corresponding department could increase when there is a fixed allocation amount of block grant projects and at least the increase of revenue for the block grants did not reduce the categorical grant projects of the same department. And as a policy improvement based on positive analysis, there is the securement of autonomy in project matching through the relaxation or abolishment of the fixed grant rate of block grants projects.

Moreover, since the block grant projects are allocated by local governments, there is less incentive for political use of discussion on the “budget amount of each project.” Therefore, there can be free discussions on unnecessary projects after departmental feasibility screening and budge cutting discussion as the total
finance scale can be protected as a ceiling. That is why this study sees that it is necessary for the inducement of project effectiveness of categorical grants to manage the parts of projects of departments related to the regional development special accounts separately as block grant projects and allocate them to local governments, and it is desirable for the welfare of local residents to increase the proportion of block grant projects. Also, it is proper that the absence of differentiation in application between block grants and categorical grants should be found in the fundamental problem of the management of local governments’ grant projects in South Korea rather than the problem of the block grant system itself.

According to summarized experts’ advice, it is necessary to minimize the uncertainty of projects in terms of policy. Although the advantage of the block grant system is that it allows local governments, the user of finance, to continuously think about selecting categorical grants or block grants in categorical grant projects, it is actually emphasized as a disadvantage in the process of project application in reality. For this reason, there has recently been a case of improvement in “categorical grants for site purchase,” which had been discussed from early times to make the project execution of local governments smooth.63)

This study suggests that project effectiveness and increased autonomy, such as the relaxation and abolishment of the fixed grant rate and elimination of uncertainty in the allocation period and application which have been suggested above, should be complemented, and ultimately the scale of block grant projects should be increased.

B. Securement of Financial Soundness and SOC Budget Flexibility

This analysis showed that budget increase rate of the block grant projects

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63) As of 2016, national finances were found to have supported site purchases for the purpose of public business facilities. (Source: Real-name policy priority control target project details (Daegu-si Taxi Procurement Division). According to the “(2016–103) Daegu Sinseo Truck Public Garage Construction Project,” a garage site purchase of 18.2 billion KRW was supported with national finances in April 2016, and there was also a reported national finance input plan for site purchase in Jeonju-si (description of Jeonju-si case: http://www.sangyongcha.co.kr/news/articleView.html?idno=2796).
of four departments was lower than the increasing trend of general categorical grant projects in the same departments as the achievement of the application of block grant projects. In other words, as the amount of finances for block grant projects is decided politically, reflecting the economic changes and finance demands of the year, it seems that the difficulties of financial condition due to mandatory expenditure have been reflected in SOC block grant projects. Also, it can be deduced that exclusion of the regional development special accounts from the subjects of the National Assembly’s budget increases and decreases, unlike general categorical grants, played a role in suppressing the increase factors of the regional development special accounts of major departments. Therefore, from the perspective of financial soundness, it can be seen that the regional development special accounts act as a buffer for flexible application according to financial keynote as a separate SOC finance item.

The relaxation of SOC budget increases through regional development special accounts can be seen as the result of an inevitable choice to consider financial soundness when the finances are used within a limited finance amount from the position of the budgeting department. However, the local governments which use the finances cannot help suspecting the finances of block grants that are used to be a financial cut. Local governments recognize that the projects for which finances should be cut are converted to block grant projects or the projects are limited as block grants for adjustment between projects within the limit. In other words, block grants are recognized as a device for the exclusion of uncompetitive projects. This will make the execution and application of finances difficult because it can give a negative signal for block grant projects, to the contrary of an important aim of block grants. To conclude, from the simple status analysis, the regional development special accounts of major departments can be seen to have been used favorably from the position of budgeting departments rather than local governments that use their finances.

A previous study that analyzed a block grant case in the U.S. stated the following three purposes for the introduction of the block grant system: 1) increase of local governments’ authority for priority setting and flexibility, 2) maximization of project effectiveness through political reduction of the role of Congress, and 3) spending control of finance transfers to sub-governments. Although there are pros and cons for the first two purposes because they could
not suggest specific data, the third purpose, “result of cutting finance transfers” is being reflected in the budget scale, showing a clear effect. This explains why local governments accepted financial cuts instead of obtaining autonomy of project selection. Therefore, it can be concluded that the current block grants that separately manage regional SOC budgets could be a useful measure in terms of financial soundness.

C. Securement of Incentive to Eliminate Similar Duplicated Projects

Most of the discussion in previous studies on the elimination of similar duplicated projects in financial projects focuses on the enhancement of top-down control and project inspection through consultative groups. Currently, such management is being conducted based on the exposure of the National Assembly and the Board of Audit and Inspection. However, as an alternative to this, the construction of a council for multi-departmental projects and enhancement of performance management have mainly been emphasized. Also, from the suggestion that real-time management and monitoring are needed at the stage of budget preparation, some devices that can filter duplication on the ledger, such as computerization of the project management of categorical grants, will be prepared. This is an alternative on side of the party that gives and monitors finances and means a method for a “follow-up management system.”

However, it is more desirable to have a prior management system to filter similar duplicated projects at the stage of project application in order to make this management more effective. Local governments, which use finances, can receive the authority to use the finances autonomously and can filter only necessary projects without planning or applying unnecessary projects under the system. This is a sustainable management of duplicated projects. In other words, the improvement of the incentive structure of local governments with the “bottom-up” method can be a more fundamental alternative. To this end, a project

64) "The point of block grant is to save the government money," Brookings Institute (2005), p. 3.
menu that has the possibility of similarity and duplication within the current block grant projects should be provided to local governments and they should select projects with priority. This is an alternative for the minimization of similar and duplicated projects. In the case of block grant projects, once local budgeting department confirms the ceiling, each project department applies a project budget from the project menu, and finally the budgeting department confirms the budget details by project. In this way, the duplication of projects is supposed to be found in the process of deciding the priorities of a budget. Although there was a discussion on duplication between some block grant projects and categorical grants before 2009, it is evaluated to have been partially improved with the sharing of selection of block grant projects among related departments and all local governments.66)

3 Alternative for Preparation of SOC Additional Finance

In the results of this analysis, the biggest reason for the lack of discretion by local governments can be seen as difficulties in the financial condition of local governments. It can be interpreted that only a passive application of block grant projects and categorical grant projects was possible because a fixed grant should be observed for both types of grant projects.

Finally, it seems the most important thing to enhance the self-financing ability of local governments and lower the reliance of local governments on national finances in order for autonomous preparation of block grant projects to be differentiated and thus become possible. The reason why block grants are used as a useful policy means in the U.S. and European countries is the autonomous financial authority of local governments. In the U.S., each state implements with different autonomy, and Nordic countries have developed a mature application of transfer revenue through the conversion of block grant projects from a deep-rooted local self-government, where the intention to burden local

66) Presidential Committee on Regional Development (2016)
governments is immediately reflected. Although the two cases have very different political situations and financial relationships between central and local governments, both the U.S. and Nordic countries use block grants freely because their local governments commonly have financial authority and responsibility. Therefore, in South Korea, it is important most of all for local governments to make efforts to secure their own revenue such as the securement of non-tax revenue by increasing the property tax and actualization of utilities. Differentiated local project success cases should be accumulated and a competitive composition for own projects between regions should be made. Based on this, financial responsibility such as increase of self-generated revenue for the effective use of categorical grants should be supported.

In addition, local capital facilities can become seriously deteriorated unless self-generated revenue is prepared as it is unclear if the proportion of national finances for local SOC finances will be maintained. As shown in studies on regions of the OECD and previous domestic studies, local investment in capital facilities is absolutely needed to secure the even distribution of the population across the nation through an increase in local residential living spaces and commercial districts with the influx of population. Therefore, there is a need to prepare measures to also use private finances, not only national finances, appropriately for SOC finances. However, the finances of budgeting departments and local governments are partially connected to national debt due to the nature of the soft budget of self-governing bodies and private finances. Finally, there is a need to bear in mind that a discussion on the “financial relationship between governments” is a discussion on the “debt burden relationship between departments.”

References


GAO, “Grants to state and local governments: An overview of federal funding levels and selected challenges”, September 2012, GAO-12-1016.
GAO, “Formula Grants: Funding for the largest Federal Assistance Programs is based on Census related Data and other factors”, December 2009, Report to Congressional Requesters, GAO-10-263.
unconditional block grant on the decentralized provision of care”, CPB Discussion paper.
http://digitalcommons.law.yale.edu/fss_papers/1185.
Spahn, Paul Bernd, “Conditioning intergovernmental transfers and modes of interagency cooperation for greater effectiveness of multilevel government in OECD countries”, OECD workshop on effective public investment at sub-national level in times of fiscal constraint: Meeting the co-ordination and capacity challenges, 21 June 2012.
United States Department of Agriculture, “How would rural areas fare under block grants?”, Issues in agricultural and rural finance, April 1996.