Intergovernmental Transfer in Thailand: A Test of Horizontal Equity

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Abstract

This article examines fiscal equality of intergovernmental grant allocation by testing a hypothesis on horizontal fiscal balances among local governments. General grants were the main explored variables because they are typically used to fix local government fiscal imbalances. General grants often supplement inadequate local own-source revenues to enhance a local government's ability to meet expenditure responsibilities. The study investigated horizontal equalization at all local government levels, especially the lower-tier, throughout the country. The units of analysis are provincial administrative organizations, municipalities, and sub-district (tambon) administrative organizations. Data were collected for four fiscal years from 2009 - 2012, based on records from the Department of Local Administration, Ministry of Interior. The findings confirmed the following. 1) General grant allocation did not have an inverse relationship with local government revenue; in other words, general grants were not delivered to a local government with lower tax capacity. 2) Fiscal inequality still remained in local administrative organizations; the disparity of 0.26 before general grant allocation persisted in the local governments, and declined to 0.22, or only a 0.04 reduction, after allocation. 3) Allocation created more fiscal inequality among some types of local administrative organizations, and among some regions. 4) The highest fiscal inequality by types of local administrative organization remained within sub-district municipalities, and in the eastern region.

Keywords: Intergovernmental grant, general grant, horizontal fiscal balance, fiscal equalization

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ความเหลื่อมล้ำทางการคลังและการจัดสรรเงินอุดหนุนให้แก่องค์กรปกครองส่วนท้องถิ่น

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บทคัดย่อ

งานวิจัยชิ้นนี้มีวัตถุประสงค์เพื่อทดสอบความเสมอภาคทางการคลังของการจัดสรรเงินอุดหนุนให้แก่องค์กรปกครองส่วนท้องถิ่น โดยทำการทดสอบการจัดสรรเงินอุดหนุนทั่วไปและความเหลื่อมล้ำทางการคลังระหว่างองค์กรปกครองส่วนท้องถิ่นหรือความเสมอภาคทางการคลังในแนวราบ การศึกษาเน้นเฉพาะความเหลื่อมล้ำทางการคลังขององค์กรปกครองส่วนท้องถิ่นในระดับล่างทั่วทั้งประเทศคือ เทศบาลนคร เทศบาลเมือง เทศบาลตำบล และองค์การบริหารส่วนตำบล ในช่วงเวลาระหว่างปี พ.ศ. 2552 - 2555 โดยใช้ข้อมูลในการวิเคราะห์จากกรมส่งเสริมการปกครองส่วนท้องถิ่น กระทรวงมหาดไทย ผลการศึกษาพบว่า 1) การจัดสรรเงินอุดหนุนทั่วไปให้แก่องค์กรปกครองส่วนท้องถิ่นไม่แปรผันตามรายได้ขององค์กรปกครองส่วนท้องถิ่น องค์กรปกครองส่วนท้องถิ่นที่มีรายได้น้อยได้รับการจัดสรรเงินอุดหนุนในจำนวนที่น้อย ในขณะที่องค์กรปกครองส่วนท้องถิ่นที่มีรายได้สูงได้รับการจัดสรรเงินอุดหนุนมาก 2) การจัดสรรเงินอุดหนุนทั่วไปช่วยลดความเหลื่อมล้ำทางการคลังขององค์กรปกครองส่วนท้องถิ่นได้เพียงเล็กน้อย ซึ่งทำให้ความเหลื่อมล้ำทางการคลังระหว่างองค์กรปกครองส่วนท้องถิ่นยังคงมีอยู่ในระดับที่ใกล้เคียงก่อนการจัดสรรเงินอุดหนุน 3) การจัดสรรเงินอุดหนุนเพิ่มความเหลื่อมล้ำทางการคลังระหว่างชนิดขององค์กรปกครองส่วนท้องถิ่นและระหว่างภาค 4) องค์กรปกครองส่วนท้องถิ่นที่มีความเหลื่อมล้ำทางการคลังสูงที่สุดคือ เทศบาลตำบล และองค์กรปกครองส่วนท้องถิ่นในภาคตะวันออกมีความเหลื่อมล้ำทางการคลังมากที่สุด

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Introduction

In Thailand, the intergovernmental grant allocation to local government bodies began in 1999. Over forty percent of the revenues of these local government organizations consisted of grants, while merely ten percent came from local own-revenue taxes. The grant has grown annually, from thirty-eight percent in 1999 to over forty percent since 2010. An increase of grants began annually from 1999, and up to 6.3 times in 2013, yet 2010 was exceptional due to the economic recession. Presently, grants are a source of revenue integral to local government organizations. Since 2001, grants have become their major source of revenue. (Figure 1)
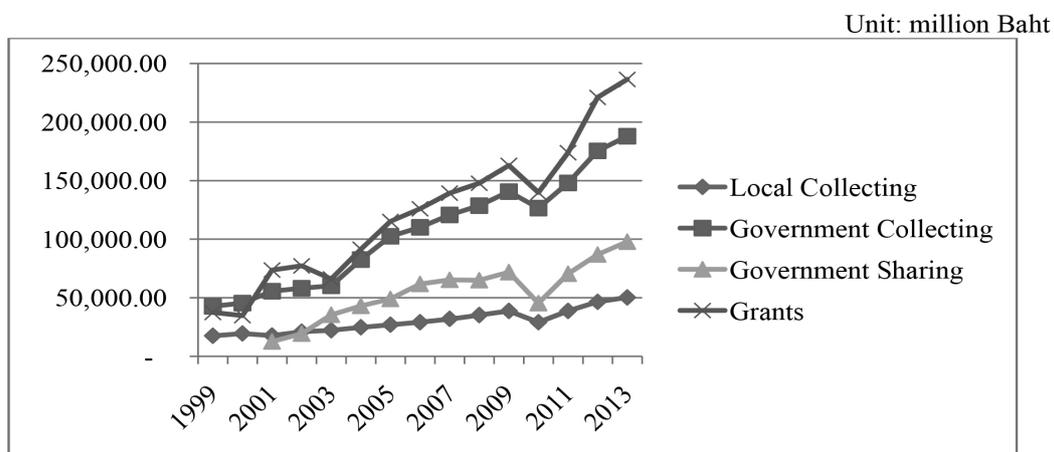
Unit: million Baht

Figure 1. Comparison of the Revenue of Local Government Organizations between 1999 and 2013

Source: The National Municipal League of Thailand (2013)

According to section twelve of the Determining Plans and Process of Decentralization to Local Government Organization Act B.E.2542 (1999), the Decentralization to the Local Government Organization Committee is authorized to make decisions on the regulations of grant allocation to the local government organization. The allocation carries three objectives: to support local government organizations for the nationwide provision of public services at acceptable standards; to reduce fiscal gaps among local government organizations; and to enable some

local government organizations to solve problems beyond their fiscal capacities. Therefore, intergovernmental grant allocation in Thailand is meant to diminish fiscal gaps among local government organizations so that people all over the country will be ensured standardized public services. It is the objective of this paper to study the effects of grant allocation and whether the policy is successful in meeting its objective. The situation of fiscal horizontal equalization in local administrative organizations will be described in this paper.

Currently, there are studies highlighting the expansion and strengthening of grant allocation mechanisms, along with fiscal disparity equalization. In terms of criteria, the central government simply employs population size and size of the area as the major criteria for grant allocation (Siriprachai & Pattamasiriwat, 2004; Krueathep, 2011). This method, however, seems inappropriate, the present, as well as the future. The horizontal allocation based on the population size under each local government is neither equitable nor efficient. In addition, as proposed by Sakon Varanyuwatana (2003), the criteria of grant allocation are not systematic. Revenue allocation focus on the aggregation of local revenues that also causes inequality among local governments (Varanyuwatana, 2003). Despite the government's attempts to develop a variety of approaches, these are rather simple and short of reliability and systematic investigation (Siriprachai & Pattamasiriwat, 2004). Charas Suwanmala (2010) insisted that although the Thai transfer system gives priority to the horizontal fiscal balance so as to address fiscal disparities, the grant transfer system does not reduce the horizontal fiscal gaps. On the other hand, the gaps tend to widen since the grant allocation leans towards the well-off provinces, or areas, rather than the poor ones. In 2011, Weerasak Krueathep (2011) investigated fiscal disparities among municipality units in 2009 and reported the presence of fiscal disparities in spite of fiscal transfer measures; the horizontal fiscal inequality prevailed among Thai municipalities. The municipalities with a high proportion of taxes and revenues were likely to receive a high proportion of intergovernmental grants. In other words, big budgets meant a big grant, and vice versa. Later, Direk

Pattamasiriwat (2012), an economist and expert on Thailand's fiscal system, studied fiscal inequality and grant allocation among seventy-five provinces in 2011. His findings confirmed the horizontal fiscal inequality in grant per capita, and more fiscal disparities were found in twenty-eight poor provinces. Meanwhile, in terms of the specific grant, its allocation opens an opportunity for local and national politicians to scoop up financial resources through their relationships (Suwanmala, 2010). This kind of allocation, in part, limits the generation of revenues by local governments. Meanwhile, Worapit Meemak (2002) found that the needs of the local politicians indeed were the priority for grants allocated in the jurisdictions of given local governments. The most preferable method used by local governments to acquire the intergovernmental grants was designing a project in accordance with the central government's desires.

However, only a few studies have conducted an in-depth investigation into intergovernmental transfers to local governments across the country, or have conducted time series analysis. Different from previous research, this study prioritizes the horizontal distribution of intergovernmental transfers of general grant allocation through all of the lower-tier local governments in order to determine how the intergovernmental grant allocation achieves equalization. This study proves the existing fiscal equality of the grant allocation system. Without equalization of transfers, three problems will emerge (Martinez-Vazquez & Boex, 2001). First, some local areas may experience a shortage of revenue to perform their functions or may provide public services with minimum standards, meaning that people of different areas may receive different standards of the same public services. Second, the horizontal fiscal imbalances still remain, particularly in local organizations with greater fiscal needs but smaller fiscal capacities. Third, the Thai government is unable to use the grant as a mechanism to implement fiscal policies and to achieve national objectives.

Conceptual Framework

Although fiscal decentralization is crucial for the provision of public services by local governments, in fact, fiscal disparities among the local government units is unavoidable. Typically, local governments are confronted with two fiscal challenges: revenue mobilization and revenue utilization (Brillantes & Tiu Sonco II, 2007). Local governments are tasked with local revenue generation at the same time as expenditure management concerning the allocation of revenues for public service provisions. Not only are there financial constraints to provide public services, there is also insufficient financing for local development, side by side with large expenditure responsibilities that exceed revenues from shared taxes and local-own revenues. These signify imbalances in resources among the local governments.

Intergovernmental grants are the transfer of money from the central government to local government units. Generally, the government provides intergovernmental grants for four key purposes: improving vertical fiscal balance or closing fiscal gaps; improving horizontal fiscal balance or equalization; correcting externalities and spillover effects; and achieving national objectives (Fisher, 2007; Boadway, 2007; Slack, 2007; Ulbrich, 2003; Bahl et al., 2001). Firstly, to correct the vertical fiscal imbalance, the intergovernmental grant plays a passive role as a tool to balance the central and local government budgets (Boadway, 2007). It is normal that wherever decentralization takes place and public functions are assigned to local governments, the central government tends to gain more revenues than expenditures, while local governments see revenues grow smaller than spending responsibilities. When expenditure responsibilities of local governments and their revenue raising power become imbalanced between the local and central government, a vertical fiscal gap occurs (Slack, 2007). According to Shah (2007), a vertical fiscal imbalance may be the result of an inappropriate assignment of responsibilities, centralization of taxing power and heavier tax burdens imposed by the central government. The result of a vertical fiscal gap is that local governments find it difficult to deliver public services at a set standard.

According to Bahl, Boex and Martinez-Vazquez (2001), this problem can be solved by intergovernmental transfers or devolving revenue-raising power to local governments. These methods imply that fiscal resources are provided and expenditure responsibilities are assigned to local governments. When these governments gain taxation power adequately to successfully deal with their expenditure responsibilities, there becomes a state of vertical fiscal balance.

Secondly, intergovernmental grants play an active role in horizontal fiscal balance or equalization (Boadway, 2007). Decentralization of expenditure and revenue assignments results in differences in fiscal capacities among local governments of the same level. Some local governments are able to provide sufficient public services, while others are not. The inability may come from the different cost for services, the need for services, and revenue raising capacities (Slack, 2007). On fiscal needs, different local governments require different expenditure because of two reasons: dissimilar local characteristics such as geography, climate, demographic composition and economic conditions; and different cost for the provision of standardized public services. As for fiscal capacity, different local governments have various economic bases and their ability to generate their own revenues. If the horizontal fiscal imbalance situation among local governments is not improved, it may lead to migration. People migrate out of jurisdictions that give them less satisfactory public services to places with the best public services that suit their needs (Martinez-Vazquez & Boex, 2001). Similar to Tiebout's model, local residents can seek a more precise match between their preferences and local provision by voting with their feet (Tiebout, 1956). They migrate to where the local government offers public goods that best fit their preferences. Therefore, measurements to solve fiscal disparities among local governments are important. Typically, the measurements to fix horizontal fiscal imbalance are different from ones that solve the vertical fiscal imbalance. The horizontal fiscal balance can be reached through the intergovernmental transfer only, not by devolving revenue-raising power that possibly widens fiscal disparities. This is because the more urbanized the local government becomes, the more taxable capacities the local government has (Bahl et al., 2001).

Thirdly, correcting externalities and minimizing spillover effects means that the intergovernmental grants are for correcting externalities arising from the misallocation of resources across local government units. It compensates local governments for service provisions in areas beyond their jurisdiction. For example, intergovernmental grants compensate for the spillover effects that occur because the public services provided by a given local government may generate benefits to those living outside its jurisdiction, and for those who do not contribute to its revenue (Ulbrich, 2003). In brief, intergovernmental grants compensate for discrepancies between the taxes paid by citizens and the benefits from the services financed by those taxes. This compensation allows people of poorer jurisdictions to enjoy public services delivered by the better-performing local governments nearby.

Fourthly, achieving national policy priorities means that the intergovernmental grants are used to encourage local governments to follow priorities set by the government; for example, education, health and welfare policies. These services, regarded as national equity and standard, are funded through intergovernmental grants. Besides the four rationales for intergovernmental transfers, Slack (2007) proposes one political rationale. The government uses intergovernmental transfers as incentives for local governments to act as an agent of the donor. It encourages local governments to offer public services of acceptable standards (Slack, 2007).

In practice, intergovernmental grants have different purposes in different countries. The main purpose of grants in Australia, Canada and Germany is for regional redistribution and equalization. Meanwhile, in the USA, grants are intended to affect spending on particular service categories (Fisher, 2007). Despite regional economic differences in the country, the equalization objective is relatively unimportant, meaning that fiscal equalization is of less interest for the government.

Generally, intergovernmental grants can be classified into two types; general grants and specific grants. According to Spahn (2012), general grants and specific grants are meant to achieve different policy objectives. General grants maintain the vertical fiscal balance so as to share financial risks arising at the revenue

side of public budgets. In addition, general grants act as an instrument to maintain horizontal fiscal balance and equalization that will result in regional equity. Specific grants provide incentives to local governments to perform particular programs, and compensate for spillover effects. Furthermore, they are employed to align local governments with the priorities established by the central government. In addition, each type of grant carries miscellaneous effects on the local government. In terms of local autonomy, the degree or intensity of the reduction in freedom of localities leans on the specificity of the grant (Kitchen, 2007). The specific grant appears to reduce such freedoms and power, especially autonomy over the budget, more than the general grant. General grants give the green light to localities to use their discretion in using grant funds, contrary to specific grants which bring along with them conditions and undermine local autonomy, flexibility, fiscal efficiency and fiscal equity objectives (Shah, 2007). As for the response to the locality's needs for public services, the specific grant undermines local governments' capacity in response to local priorities (Kitchen, 2007). In addition, the grant does not allow taxpayers to express what they want. The final effect is on an access to the budget (or resources), meaning that the specific grant is less accessible than the general grant owing to complexities that disable small-scale localities without the expertise in the grant application processes. The reason behind this is that specific grants work with different formulas and criteria, possibly confusing grant recipients about how to use the funds.

To investigate the horizontal equalization of grant distribution, this paper employs the following conceptual framework (Figure 2). Horizontal fiscal equalization, which is concerned with disparities between local administrative organizations in access to public services, is underpinned by equity and efficiency. From the equity perspective, the fundamental aim of fiscal equalization is the equity among residents of different local jurisdictions. The equity enables citizens of a given jurisdiction to be placed in a position of fiscal equality with their equals in other jurisdictions (Buchanan, 1950). This means households should not be treated differently as a result of their place of residence. All residents of a country should be able

to obtain similar public services. According to this view, large differences in fiscal burden among local governments are unacceptable if the causes of such differences are beyond the control of local authorities (Dafflon, 2007). From the perspective of efficiency, public services at the lowest possible cost should be provided. Transfers, therefore, should encourage local governments to spend their limited resources carefully and in the most possible and productive manner.
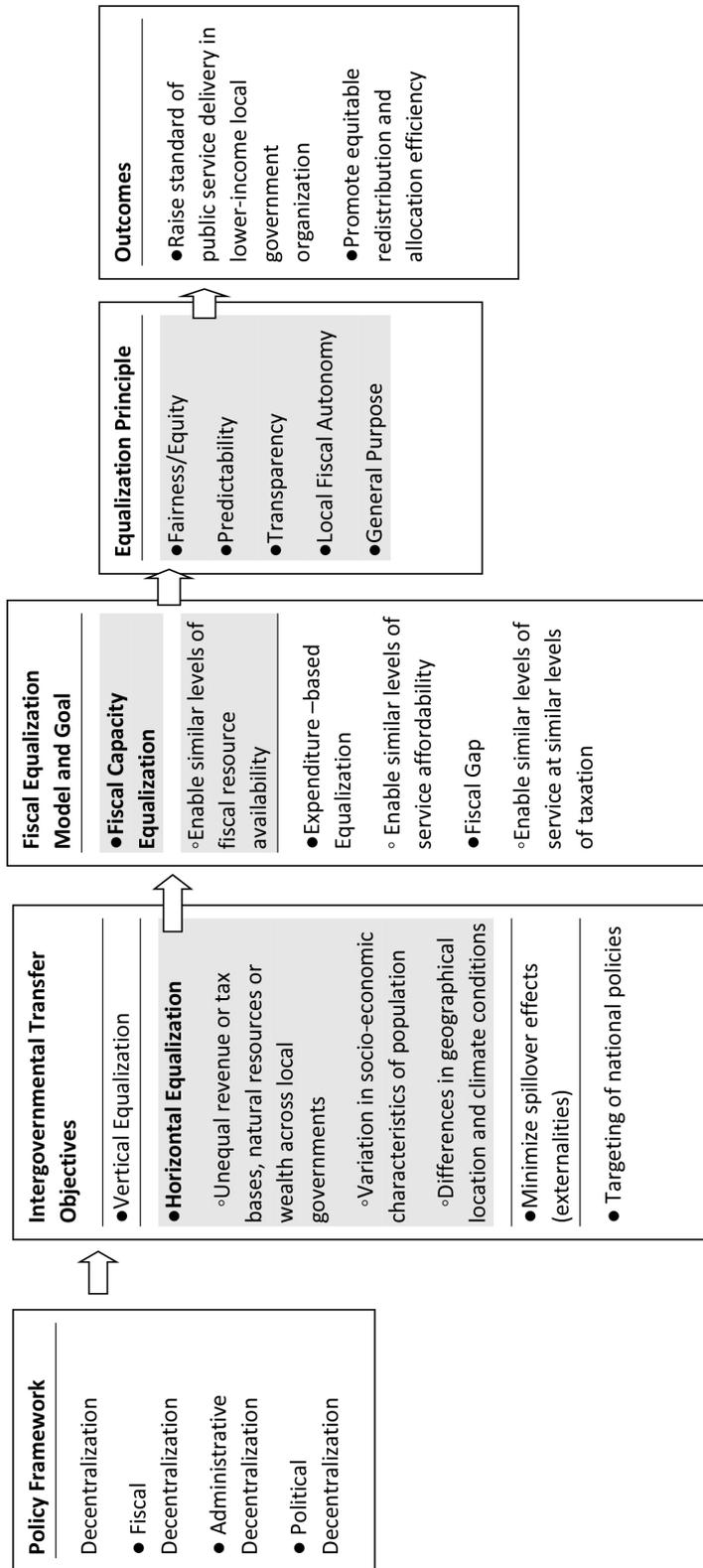
Figure 2. Conceptual Framework of Horizontal Fiscal Equalization within the Wider Context of Public Service Decentralization

(This article focuses on the highlighted components)

Source: Adapted from Brillantes and Tiu Sonco II (2007), Boex and Martinez-Vazquez (2004)

General grants as means of transfers are aimed at fixing local government fiscal imbalances, which supplement inadequate local own-source revenues in order to enhance the abilities of local governments to meet their expenditure responsibilities. The general grant is an instrument to maintain horizontal fiscal equalization, and is mostly allocated by formulas and for general purposes. Most formulas for equalization transfer encompass criteria concerning local government fiscal capacity, expenditure needs, local fiscal effort and equal share to all local governments (Steffensen, 2010). Typically, to distribute equalization transfers, the transfer scheme can be focused on either the revenue capacity or expenditure needs, which are called revenue equalization and needs equalization respectively. However, correcting imbalances between local government organizations, fiscal equalization can be pursued through both expenditure needs and fiscal capacity at the same time, which is known as "filling the gap" or need-capacity gap equalization (Dafflon, 2007; Boex & Martinez-Vazquez, 2004).

To achieve horizontal fiscal equalization, the government has many options for equalization formulas that should, nonetheless, be guided by universal equalization principles (Martinez-Vazquez & Boex, 2001). This study focuses on five principles, namely local autonomy, equity, predictability, transparency and general purpose. Starting firstly with local autonomy, the equalization should not undermine the autonomy of local governments, signifying that constraints or limitations on political, administrative and fiscal autonomy should not emerge despite the fact that the equalization is a resource provision to local governments. Local governments should obtain complete independence in setting priorities, allocating financial resources and authorizing annual budgets without external interference. The second principle, fairness or equity, has the criterion relevant to horizontal equalization. To meet the principle of equity, the transfer allocation should consider differences in both expenditure needs and fiscal capacity. In each transfer, it is important to equalize those resource-based differences by taking in fiscal need factors and the fiscal capacity of each local government in the distribution. This means more grants should be delivered to local governments with lower tax capacity and greater fiscal needs.

Thirdly, allocation should be predictable regarding local government shares and stability over the period of a year. That is to say, local governments and their people can calculate the share of transfers they will receive. The predictability gives an advantage to local governments as they can budget and plan for future expenditures (Kitchen, 2007). In the absence of predictability, local governments will be locked in a difficult situation, not knowing whether the intergovernmental transfers will meet their plans and budget for the next fiscal year. Fourthly, fiscal transparency is the fundamental principle of good governance of public finance. The activities and processes concerning the preparation, consideration, approval and implementation of budgets are not conducted secretly. Information about the public finance situation should be publicly accessible. As transparent as possible, the intergovernmental transfers should not lie beneath any hidden political negotiations. Decision-making by grant commissions or formal systems is the highlight, and the formulas for transfers should adhere to credible factors and simplicity. Finally, the general purpose principle implies that the grants should be unconditional or not lay down constraints for local spending. Local governments could use the funds as their own revenues for public services. All of these principles are needed in allocation in order to promote equalization in Thailand so that people all over the country will be ensured standardized public services.

Research Methods

This study investigates the horizontal fiscal equalization among local government organizations nationwide, by region and type of local administrative organization, during the years 2009 to 2012. A quantitative method is used to investigate whether or not the intergovernmental transfer in Thailand promotes fiscal equalization among local governments. Provincial administrative organizations (PAOs), city municipalities (RTGS: *thesaban nakorn*), town municipalities (RTGS: *thesaban muang*), sub-district municipalities (RTGS: *thesaban tambon*) and sub-district administrative organizations (Tambon administrative organization) are the units of analysis (Table 3). However, this research gives priority to lower-tier local

government more than upper tier because it is the lowest level of local government that takes responsibility in a wide range of functions or public services. The unit of analysis excludes Bangkok Metropolitan Administration and Pattaya City because of their special forms of administration. This study also investigated the horizontal fiscal imbalances in seven regions according to the National Economic and Social Development Board, which are the northeast, north, south, east, west, center, and vicinity. Fiscal data investigated are local own revenues, shared tax revenues, and intergovernmental grants, recorded by the Department of Local Administration. The general grant, as a tool of government to redress horizontal fiscal imbalances, is useful to test horizontal equalization of the budget. This study uses only the revenue capacity for fiscal equalization analyses because there are insufficient data for relevant indicators available for the analyses of both revenue capacity and expenditure needs.

Table 1. Number of Provincial Administrative Organizations, City Municipalities, Town Municipalities, Sub-District Municipalities and Sub-District Administrative Organizations between 2009 and 2012

Unit: Organization

Types of local government organization	Year			
	2009	2010	2011	2012
PAO	75	75	75	75
Municipality				
City municipality (Nakorn)	23	25	27	27
Town municipality (Muang)	142	142	149	167
Sub-district municipality (Tambon)	1,522	1,841	1,884	2,072
Sub-district administrative organization	6,089	5,767	5,715	5,507
Total	7,851	7,850	7,850	7,851

Source: Department of Local Administration (2010-2013)

Research Objective

The research objective is to investigate the intergovernmental transfer in Thailand, and to test the hypothesis on horizontal fiscal balance among the local governments.

Research Hypotheses

This study has developed two research hypotheses to guide the designing of the research.

Hypothesis 1: There is significant fiscal inequality in Thai intergovernmental grant allocation.

Hypothesis 2: The intergovernmental grant allocation in local government units equalizes between high-income areas and low-income areas.

Data Analysis

Descriptive statistics such as mean, minimum, maximum and coefficient of variation measured local fiscal disparities. To measure horizontal fiscal equalization, this study applied the Gini coefficient, or Gini ratio, to measure fiscal inequalities among local administrative organizations. If the Gini coefficient is zero, the grant allocation achieves perfect equality; if the Gini coefficient is one, a maximal inequality is produced. In addition, the Lorenz curve is used to describe fiscal inequality in local government. If intergovernmental grants are allocated equally to all local governments, the Lorenz curve is a straight line, called the line of equality. If there is any inequality, the Lorenz curve falls below the equality line. The results of both the Gini coefficient and the Lorenz curve are computed from secondary data collect by the Department of Local Administration. To measure horizontal balances, all local revenues from every source are converted into an amount (in baht) per capita so as to control differences of governing areas of local government organizations.

Research Findings

Presently, Thailand has two grant categories: general and specific (Table 2). The general grant is further subdivided: 1) general grants specified for purpose; and 2) general grants specified for responsibilities. The latter gives more freedom to make use of grant money for local development. Comparisons were made for the specific grant and general grant for fiscal years 2009 to 2012. Largely, the transfer of the general grant specified by responsibilities was more common than of the general grant specified by purpose (Table 3). Year 2010, nonetheless, was an exception. The general grant specified by responsibilities ranged between fifty billion and fifty-eight billion baht each year, or thirty percent of the total grant. The specific grant increased 3.9 times the 30.485 billion baht in 2009 to 119.497 billion baht in 2012, which was over fifty percent of the total grant.

Table 2. Proportion of the General Grant and the Specific Grant between 2006 and 2013

Unit: Million baht

Fiscal year	General grant	Percent (%)	Specific grant	Percent (%)	Total grant
2006	98,657.00	**89.50**	**11,556.00**	10.48	110,213.00
2007	114,293.00	**92.48**	**9,281.00**	7.51	123,574.00
2008	109,997.00	**83.91**	**21,077.00**	16.08	131,074.00
2009	104,099.00	**77.34**	**30,484.00**	22.65	134,583.00
2010	74,271.00	**59.24**	**51,091.30**	39.24	125,363.04
2011	80,029.00	**50.53**	**78,346.43**	49.46	158,375.43
2012	85,695.00	**41.76**	**119,497.08**	58.23	205,192.08
2013	104,444.85	**47.68**	**114,594.89**	52.31	219,039.74

Source: The National Municipal League of Thailand (2013)

Table 3. Percentage of the General Grant Specified by Responsibilities and Specified by Purpose, and the Specific Grant during Fiscal Years 2009 to 2012

Unit: Million baht

Fiscal year	General grant specified by responsibilities	Percent (%)	General grant specified by purpose	Percent (%)	Specific grant	Percent (%)
2009	57,233.60	42.5	46,866.19	34.8	30,484.63	22.6
2010	29,062.62	23.1	45,209.11	36.0	51,091.30	40.7
2011	52,062.62	32.8	27,966.38	17.6	78,346.43	49.4
2012	55,768.89	27.1	29,926.11	14.5	119,497.07	58.2

Source: The National Municipal League of Thailand (2010-2013)

Table 4 is a breakdown of local revenue consisting of local own revenue, shared tax revenue, grant revenue and total revenue. The grant revenue reduced in 2011, unlike other revenues, because of the recession. The local own revenue increased by twenty-four percent over four years (from 250 baht in 2009 to 308 baht in 2012) and so did the shared tax revenue, by thirty-nine percent, and the total revenue by thirty-six percent. By comparing all three sources of revenue, most local governments earned revenues from grants.The local own revenue produced the least revenueper capita, at less than 500 baht per capita every year.

Table 4. Local Own Revenue, Shared Tax Revenue, Grant Revenue by Year

Unit: Baht per capita

Fiscal year	N	Local own revenue	Shared tax revenue	Grant revenue	Total revenue
2009	7,851	250.16	1,792.63	2,234.27	4,277.07
2010	7,850	256.17	2,346.00	1,683.58	4,285.74
2011	7,850	272.80	2,320.01	2,348.09	4,940.89
2012	7,851	308.18	2,492.48	3,014.20	5,814.85
Total		271.83	2,237.77	2,320.05	4,829.65

Source: Department of Local Administration (2010-2013)

In Table 5 and Figure 3, the Gini coefficient and the Lorenz curves measured for fiscal disparities in the local own revenue, shared tax revenue, grant revenue and total revenue.

The Gini coefficient and the Lorenz curve reveal the greatest disparity in the local own revenue. The next greatest disparity exists in the grant revenue and shared tax revenue respectively. The Lorenz curves indicate fiscal disparities. The 45-degree line means equality or no disparity. The line closer to the 45-degree line implies less disparity, and thus the line farther from the 45-degree line implies more disparity.

Table 5. Fiscal Disparities in Local Own Revenue, Shared Tax Revenue, Grant Revenue and Total Revenue during Fiscal Years 2009 to 2012

Types of revenue	Gini coefficient				
	2009	2010	2011	2012	2009-2012
N	7851	7850	7850	7851	31402
Local own revenue	0.632	0.638	0.631	0.609	0.628
Shared tax revenue	0.223	0.214	0.219	0.227	0.232
Grant revenue	0.250	0.321	0.237	0.223	0.283
Total revenue	0.229	0.224	0.213	0.202	0.236

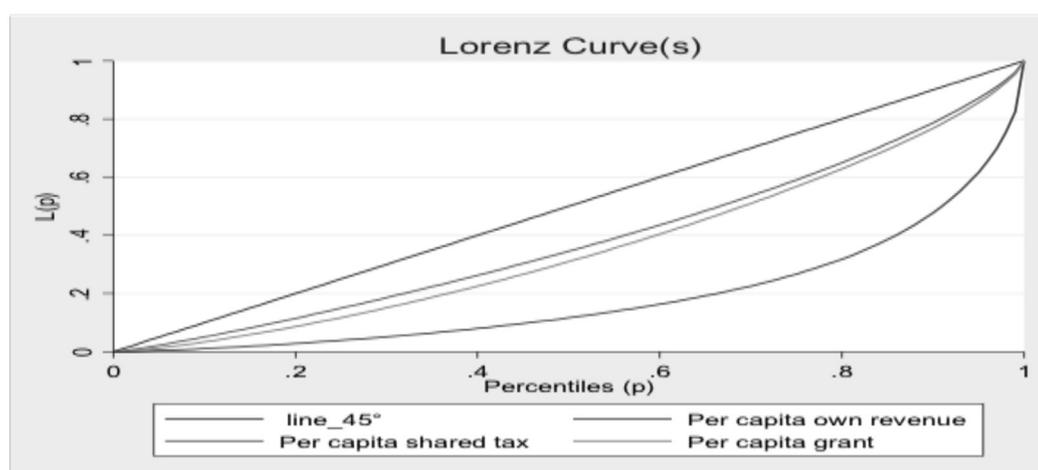**Source:** Department of Local Administration (2010-2013)

Figure 3. Fiscal Disparities in Local Own Revenue, Shared Tax Revenue, Grant Revenue and Total Revenue during Fiscal Years 2009 and 2012
Source: Department of Local Administration (2010-2013)

Table 6 shows the total amount of local own and shared tax revenues before general grant allocation and the sum of the two revenues, plus the general grant after allocation in fiscal years 2009 and 2012. During this four-year period, the local government earned an average local revenue of 2,509 baht per capita before allocation, of which the general grant was 1,349 baht per capita. The local administrative organization received the general grant at around one thousand and 1,500 baht per capita. In addition, the Gini coefficient shows fiscal disparitiesbefore and after general grant allocation during fiscal years 2009 to 2012, with descending disparities after grant allocation, from a Gini coefficient of 0.262 to 0.221. To a certain extent, the allocation resulted in reducing disparities despite the disparities remaining (Figure 4). Measuring by year, fiscal disparities were found in the general grant and local revenues before and after general grant allocation. During 2010 to 2012, larger disparities existed in the local governmentrevenues before allocation (Gini coefficient of 0.243 in 2010, 0.251 in 2011 and 0.258 in 2012). The general grant was added after allocation, reducing disparities (Gini coefficient of 0.230 in 2009, 0.229 in 2010, 0.251 in 2011 and 0.201 in 2012). Still, disparities persisted in spite of general grant allocation.

Table 6. Average Revenues from General Grant and Local Government Revenues before and after General Grant Allocation, and Gini Coefficient between 2009 and 2012

Unit: Baht per capita

Fiscal year	N	General grant	Local gov't revnue before general grant allocation[*]	Gini coefficient	Local gov't revnue after general grant allocation[**]	Gini coefficient
2009	7,851	1815.97	2,042.80	0.259	3,858.76	0.230
2010	7,850	1500.23	2,602.16	0.243	4,102.39	0.229
2011	7,850	1417.47	2,592.81	0.251	4,010.27	0.215
2012	7,851	1464.90	2,800.65	0.258	4,265.55	0.201
Total	31,402	1549.65	2,509.60	0.262	4,059.25	0.221

Source: Department of Local Administration (2010-2013)
[*] Local government revenue before general grant allocation = Total amount of local own revenue and shared tax revenue
[**] Local government revenue after general grant allocation = Total amount of local own revenue, shared tax revenue and general grant
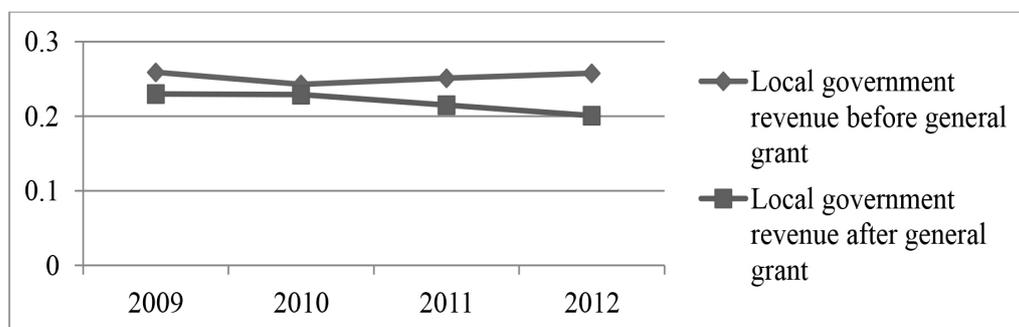
Figure 4. Fiscal Disparities in Local Government Revenues before and after General Grant Allocation by Year
Source: Department of Local Administration (2010-2013)

The Lorenz curves shown in Figure 5 measure the disparities in local revenues and reveal declining trends of disparities after general grant allocation. However, the disparities before and after allocation were not much different.

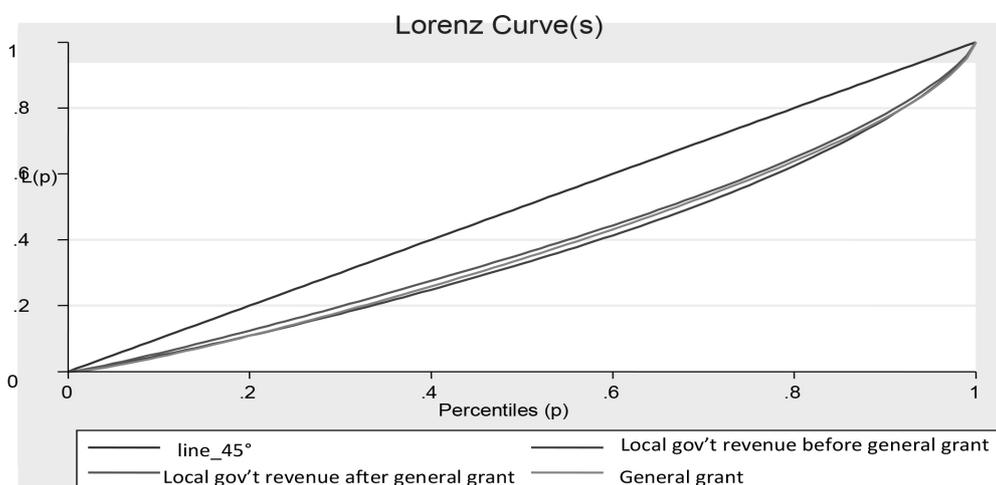**Figure 5.** Disparities in Local Government Revenues before and after General Grant Allocation during Fiscal Years 2009 to 2012
Source: Department of Local Administration (2010-2013)

Table 7 presents local government revenues before and after general grant allocation. The local governments with high revenues and low revenues (p90/p10) had 2.72, 2.59, 2.68 and 2.77 times differences in 2009, 2010, 2011 and 2012,

respectively. Differences of revenues of these governments increased every year after 2010. Nonetheless, such differences decreased after grant allocation, meaning differences between the governments with high revenues and those with low revenues decreased, from 2.4 times in 2009 to 2.41, 2.29 and 2.11 times in 2010, 2011 and 2012 respectively. There is a likelihood of such decreases to continue every year.

Table 7. Statistics of Fiscal Differences of Local Government Organization before and after General Grant Allocation by Year

Unit: Baht per capita

Fiscal year	Stats	General grant	Local gov't revenue before general grant allocation	Local gov't revenue before general grant allocation
2009	N	7,851	7,851	7,851
	mean	1,815.97	2,042.80	3,858.76
	p10	1,101.06	1,201.87	2,478.83
	p25	1,295.80	1,361.05	2,777.93
	p50	1,543.19	1,649.92	3,220.73
	p75	1,918.66	2,303.73	4,113.37
	p90	2,824.52	3,266.11	5,961.43
	p90/p10	2.57	2.72	2.40
2010	N	7,850	7,850	7,850
	mean	1,500.23	2,602.16	4,102.39
	p10	729.45	1,584.47	2,549.13
	p25	976.54	1,789.12	2,946.33
	p50	1,276.01	2,142.57	3,519.01
	p75	1,682.68	2,954.63	4,545.06
	p90	2,346.77	4,103.81	6,149.69
	p90/p10	3.22	2.59	2.41

Table 7. Statistics of Fiscal Differences of Local Government Organization before and after General Grant Allocation by Year (continued)

Unit: Baht per capita

Fiscal year	Stats	General grant	Local gov't revenue before general grant allocation	Local gov't revenue before general grant allocation
2011	N	7,850	7,850	7,850
	mean	1,417.47	2,592.81	4,010.27
	p10	938.05	1,550.68	2,674.26
	p25	1,075.46	1,752.84	2,931.01
	p50	1,231.33	2,104.49	3,350.04
	p75	1,511.86	2,944.64	4,404.66
	p90	2,100.28	4,156.90	6,134.14
	p90/p10	2.24	2.68	2.29
2012	N	7,851	7,851	7,851
	mean	1,464.90	2,800.65	4,265.55
	p10	989.13	1,640.15	3,035.36
	p25	1,147.82	1,872.01	3,201.58
	p50	1,329.21	2,252.11	3,510.59
	p75	1,573.24	3,223.10	4,604.18
	p90	2,043.47	4,549.53	6,408.72
	p90/p10	2.07	2.77	2.11

Source: Department of Local Department Administration (2010-2013)

Table 8 and Figure 6 show local government revenue before general grant allocation and the average general grant received. The result is a fluctuating trend of general grant allocation. It is not allocated according to local government revenue.

Table 8. Local Government Revenue before the General Grant and Average General Grant (2009 - 2012)

Unit: Baht per capita

Types of local administrative organization	N	Local gov't revenue before general grant allocation	General grant
City municipality	0	<500	
	0	501-1,000	
	0	1,001-2,000	
	4	2,001-3,000	1,484.9
	31	3,001-4,000	1,608.1
	33	4,001-5,000	1,210.4
	20	5,001-6,000	1,432.9
	10	6,001-7,000	1,123.1
	4	7,001-8,000	1,515.5
	0	8,001-9,000	
	1	9,001-10,000	1,003.2
	1	>10,001	1,203.1
Town municipality	0	<500	
	0	501-1,000	
	11	1,001-2,000	1,111.8
	95	2,001-3,000	1,747.4
	182	3,001-4,000	1,691.6
	132	4,001-5,000	1,962.8
	93	5,001-6,000	1,735.4
	36	6,001-7,000	1,544.8
	18	7,001-8,000	2,021.0
	8	8,001-9,000	1,619.5
	8	9,001-10,000	2,714.9
	15	>10001	1,994.8
Sub-district municipality	0	<500	
	5	501-1,000	1,572.2
	1,750	1,001-2,000	1,507.5
	1,916	2,001-3,000	1,823.8
	1,674	3,001-4,000	2,271.6
	925	4,001-5,000	2,720.5
	476	5,001-6,000	3,262.1
	239	6,001-7,000	3,652.3
	127	7,001-8,000	4,541.0
	61	8,001-9,000	4,299.9
	42	9,001-10,000	4,103.9
	97	>10,001	5,941.0

Table 8. Local Government Revenue before the General Grant and Average General Grant (2009 - 2012) (continued)

Unit: Baht per capita

Types of local administrative organization	N	Local gov't revenue before general grant allocation	General grant
Sub-district administrative organization	0	<500	
	49	501-1,000	1,287.1
	12,478	1,001-2,000	1,327.0
	7,757	2,001-3,000	1,346.4
	1,838	3,001-4,000	1,405.4
	520	4,001-5,000	1,315.5
	154	5,001-6,000	1,251.6
	99	6,001-7,000	1,400.0
	57	7,001-8,000	1,191.8
	31	8,001-9,000	1,325.5
	16	9,001-10,000	1,626.6
	59	>10,001	1,778.9

Source: Department of Local Department Administration (2010-2013)
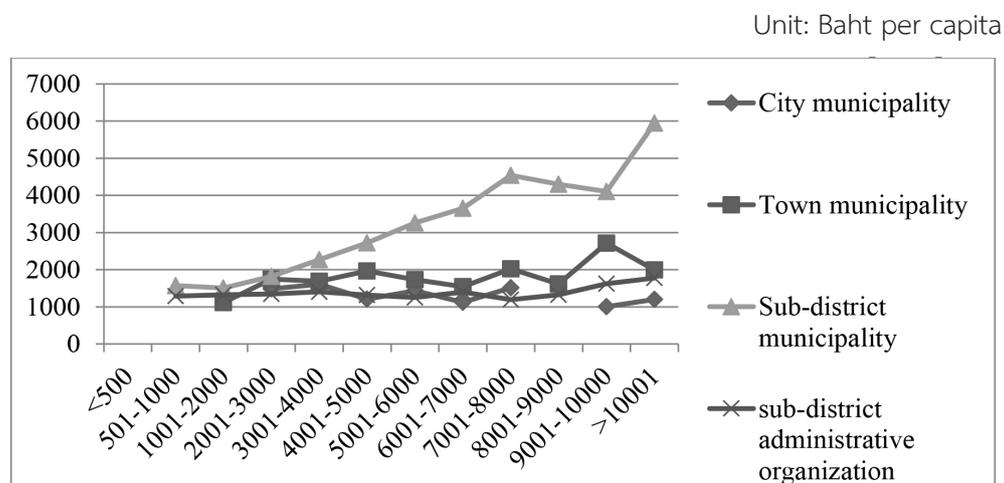
Unit: Baht per capita

Figure 6. Local Government Revenue before the General Grant and Average General Grant (2009 - 2012)
Source: Department of Local Administration (2010-2013)

Table 9 presents the statistics of average revenues of local government organizations in all regions before and after general grant allocation. The local government revenues are the sum of local own and shared tax revenues before allocation. The vicinity earned the highest local revenues of 3,000 and 908 baht per capita, but the least allocated grant of 1,201 baht per capita. This is opposite to the northeastern region where its local organizations had the lowest local revenues before allocation, but received the second lowest grant allocation of 1,524 baht per capita after the vicinity. This region's sum total of all revenues, only 3,555 baht per capita, remained lower than other regions as the general grant allocation did not inversely correlate with local revenue.

Table 9. Average Revenues of Local Government before and after General Grant Allocation during Fiscal Years 2009 to 2012 by Region

Unit: Baht per capita

Region	No. of local government organization	Local gov't revenue before general grant allocation	General grant	Local gov't revenue after general grant allocation
Northeast	11,865	2,028.4	1,524.2	3,552.6
North	6,772	2,442.2	1,528.2	3,970.4
South	4,760	2,621.0	1,723.5	4,344.5
East	2,333	3,315.3	1,528.2	4,843.5
West	2,172	2,650.4	1,551.0	4,201.4
Central	2,240	3,263.1	1,596.2	4,859.3
Vicinity	1,260	3,908.5	1,201.7	5,110.2
Total	31,402	2,509.6	1,549.6	4,059.2

Source: Department of Local Administration (2010-2013)

Table 10 and Figure 7 present the Gini coefficient measurement for fiscal disparities in revenues before and after general grant allocation during fiscal years 2009 to 2012 by region. The greatest disparities in revenues before grant allocation were in the eastern region with a Gini coefficient of 0.295, followed by the southern, the central, the northern, the western, the vicinity and the northeastern regions respectively. Such disparities in every region decreased after allocation. Yet, the east faced the greatest disparities with a Gini coefficient of 0.261, followed by the southern, western, central and northeastern regions respectively. This implies that, regardless of grant allocation, fiscal inequalities in all regions still grew because there were large gaps of disparities among them (the greatest disparity in the east was 0.261, while the smallest disparity in the northeast was 0.165).

The general grant allocation after 2010 resulted in a reduction in fiscal disparities of local governments, especially in four regions (northeast, north, south and west). The allocation slightly influenced the disparities in the eastern and central regions. Both had quite stable disparities (the east had a Gini coefficient of 0.254, 0.255 and 0.250 in 2010, 2011 and 2012 respectively; and the center had 0.231, 0.21 and 0.21 for the same years. The vicinity exhibited a fluctuation of disparities between 2009 and 2012.

Table 10. Fiscal Disparities before and after General Grant Allocation by Region and by Year

Region	Types of revenue	Gini coefficient				
		2009	2010	2011	2012	2009-2012
Northeast	Local revenue before general grant allocation	0.183	0.176	0.174	0.184	0.193
	general grant	0.188	0.247	0.165	0.135	0.194
	Local revenue after general grant allocation	0.174	0.182	0.156	0.137	0.165
North	Local revenue before general grant allocation	0.236	0.224	0.226	0.237	0.242
	general grant	0.251	0.267	0.226	0.199	0.245
	Local revenue after general grant allocation	0.229	0.217	0.208	0.196	0.214
South	Local revenue before general grant allocation	0.293	0.270	0.276	0.279	0.287
	general grant	0.287	0.366	0.240	0.227	0.289
	Local revenue after general grant allocation	0.265	0.274	0.244	0.222	0.253
East	Local revenue before general grant allocation	0.296	0.277	0.282	0.295	0.295
	general grant	0.301	0.294	0.261	0.232	0.280
	Local revenue after general grant allocation	0.276	0.254	0.255	0.250	0.261
West	Local revenue before general grant allocation	0.237	0.228	0.223	0.227	0.238
	general grant	0.289	0.368	0.249	0.221	0.289
	Local revenue after general grant allocation	0.250	0.251	0.217	0.203	0.233
Central	Local revenue before general grant allocation	0.247	0.231	0.232	0.238	0.246
	general grant	0.257	0.324	0.223	0.212	0.265
	Local revenue after general grant allocation	0.233	0.231	0.210	0.210	0.222
Vicinity	Local revenue before general grant allocation	0.226	0.206	0.214	0.224	0.231
	general grant	0.299	0.374	0.255	0.235	0.299
	Local revenue after general grant allocation	0.225	0.219	0.197	0.203	0.216

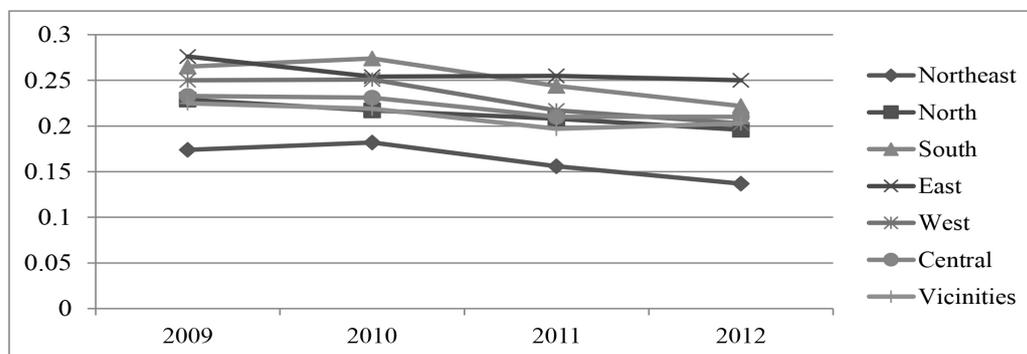**Source:** Department of Local Administration (2010-2013)

Figure 7. Fiscal Disparities after General Grant Allocation by Region and by Year
Source: Department of Local Administration (2010-2013)

Table 11 presents the average revenues of each organization type before and after general grant allocation between fiscal years 2009 and 2012. The subdistrict administrative organization-- SAO (TAO in Thai) gained the lowest revenue (2,189 baht per capita) and the lowest grant (1,340 baht per capita). Even after allocation, its revenue ranked the lowest (3,530 baht per capital or 1.6 times lower than the sub-district municipality).

Table 11. Average Revenues of Each Type of Local Government Organization before and after General Grant Allocation during Fiscal Years 2009 to 2012

Unit: Baht per capita

Types of local government organization	N	Local revenue before general grant allocation	General grant	Local revenue after general grant allocation
PAO	301	628.25	121.10	749.35
Municipality				
City municipality	104	4,689.59	1,383.57	6,073.17
Town municipality	600	4,511.75	1,775.79	6,287.55
Sub-district municipality	7,319	3,400.16	2,252.49	5,652.65
Sub-district administrative organization	23,078	2,189.83	1,340.25	3,530.07
Total		2,509.60	1,549.65	4,059.25

Source: Department of Local Administration (2010-2013)

The general grant is integral to lessening fiscal disparity and promoting fiscal equalization, as in Table 12 and Figure 8. Before the grant allocation, disparities in local government organizations varied from highest to lowest as follows: sub-district municipality (0.281), town municipality (0.22), SAO (or TAO) (0.203) and city municipality (0.156). Such descending order remained unchanged even after allocation, but disparities declined as follows: sub-district municipality (0.261), town municipality (0.198), SAO (0.145) and city municipality (0.126). The disparities between organizations widened after all. The disparities between the SAO and sub-district changed from 0.061 to 0.063, while the sub-district municipality and town municipality had a similar experience from 0.017 to 0.053 after allocation.

Table 12. Fiscal Disparities of Each Type of Local Government Organization before and after General Grant Allocation during Fiscal Years 2009 to 2012

Types of local government organization	Gini coefficient									
	2009		2010		2011		2012		2009-2012	
	Before	After	Before	After	Before	After	Before	After	Before	After
PAO	0.300	**0.250**	0.260	**0.245**	0.279	**0.253**	0.268	**0.232**	0.281	0.248
City municipality	0.113	**0.098**	0.150	**0.138**	0.127	**0.101**	0.145	**0.122**	0.156	0.126
Town municipality	0.214	**0.213**	0.200	**0.190**	0.212	**0.180**	0.219	**0.188**	0.220	0.198
Sub-district municipality	0.282	**0.268**	0.280	**0.279**	0.276	**0.249**	0.280	**0.248**	0.281	0.261
SAO	0.194	**0.138**	0.180	**0.165**	0.190	**0.139**	0.199	**0.124**	0.203	0.145

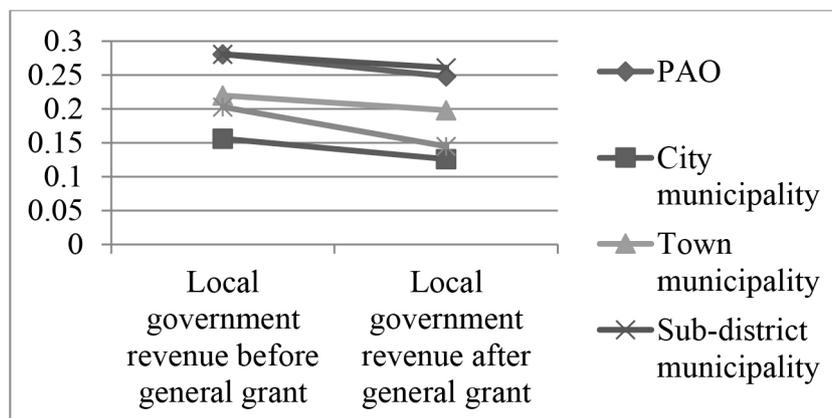**Source:** Department of Local Administration (2010-2013)

Figure 8. Fiscal Disparities within Each Type of Local Government Organization before and after General Grant Allocation during Fiscal Years 2009 to 2012
Source: Department of Local Administration (2010-2013)

This is because the allocation positively influences the disparities within the organization, not between organizations.

Fiscal disparities are illustrated by type of local government organization during fiscal years 2009 to 2012 in Figure 9. After the general grant allocation, SAOs in the eastern region had the highest disparities (Gini coefficient of 0.192), sub-district municipalities in the southern region had the highest disparities (Gini coefficient of 0.307), town municipalities in the central region had the highest disparities (Gini coefficient of 0.264), city municipalities in the eastern region had the highest disparities, and provincial administrative organizations in the southern region had the highest disparities (Gini coefficient of 0.275).

In brief, the results confirmed that general grant allocation relieved the differences in fiscal disparity among the regions in all types of local administrative organization. However, when concentrating on fiscal disparity within each type of LAO, the result shows that the allocation decreased fiscal disparity only within SAOs (TAOs) of every region, but for other types of local administrative organization, the allocation increased fiscal disparity in some regions. For example, the fiscal disparity in sub-district municipality in the western and vicinity regions were higher after grant allocation. In the western region, the Gini coefficient was 0.207, and

went up to 0.260 after general grant allocation. Meanwhile, in the vicinity, fiscal disparity grew from 0.207 to 0.218. In addition, city municipalities in the central and the vicinity regions also experienced greater fiscal disparity after general grant allocation.
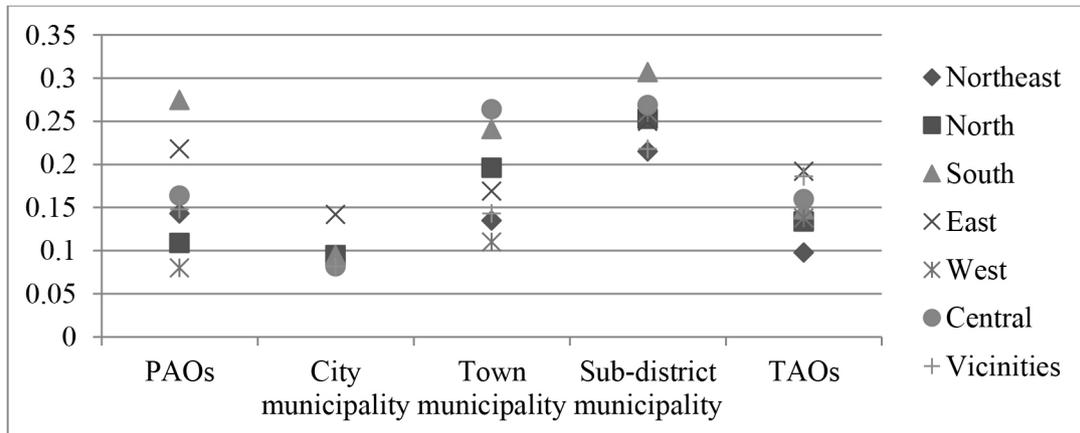

Figure 9. Fiscal Disparities within Each Type of Local Government Organization after General Grant Allocation by Region
Source: Department of Local Administration (2010-2013)

Table 13 and Figures 10 to 13 look into fiscal disparities within each type of local government organization before and after general grant allocation by region. The Gini coefficient generates the result that, after the allocation, SAOs in the east had the greatest disparities in revenues, and those in the northeast experienced the lowest disparities every year. Sub-district municipalities in the south had the largest disparities between 2009 and 2011, and such disparities decreased in 2012, whereas sub-district municipalities in the east and the vicinity had the greatest disparities. Town municipalities in the south had growing disparities more than those in other regions every year after 2010. City municipalities in the east faced fluctuating disparities each year.

Table 13. Fiscal Disparities of Each Type of Local Government Organization by Region and by Year

Fiscal year	Types of local government organization	Northeast		North		South		East		West		Central		Vicinity	
		Before*	After**	Before	After	Before	After	Before	After	Before	After	Before	After	Before	After
2009	PAO	0.160	0.128	0.132	0.104	0.301	0.277	0.287	0.213	0.061	0.092	0.198	0.153	0.139	0.127
	City municipality	0.028	0.048	0.111	0.087	0.134	0.112	0.000*	0.000*	*	*	0.000	0.000	0.055	0.083
	Town municipality	0.116	0.160	0.220	0.210	0.269	0.218	0.182	0.177	0.121	0.090	0.278	0.259	0.171	0.188
	Sub-district municipality	0.233	0.219	0.265	0.265	0.324	0.309	0.261	0.262	0.254	0.268	0.283	0.281	0.224	0.242
	SAO	0.111	0.095	0.163	0.133	0.193	0.142	0.254	0.188	0.157	0.134	0.204	0.154	0.206	0.173
2010	PAO	0.135	0.129	0.104	0.092	0.273	0.260	0.233	0.201	0.048	0.057	0.177	0.155	0.112	0.105
	City municipality	0.088	0.083	0.073	0.040	0.136	0.146	0.173	0.183			0.000	0.000	0.053	0.070
	Town municipality	0.108	0.131	0.190	0.172	0.256	0.230	0.172	0.159	0.116	0.104	0.265	0.274	0.149	0.137
	Sub-district municipality	0.233	0.227	0.256	0.256	0.307	0.343	0.265	0.255	0.258	0.291	0.279	0.290	0.221	0.257
	SAO	0.108	0.133	0.155	0.153	0.174	0.177	0.223	0.186	0.142	0.173	0.184	0.172	0.179	0.175
2011	PAO	0.152	0.138	0.110	0.091	0.297	0.273	0.263	0.206	0.033	0.069	0.189	0.151	0.186	0.181
	City municipality	0.094	0.070	0.080	0.049	0.128	0.113	0.075	0.053			0.000	0.000	0.064	0.050
	Town municipality	0.105	0.092	0.190	0.169	0.303	0.250	0.181	0.161	0.133	0.090	0.260	0.238	0.130	0.116
	Sub-district municipality	0.231	0.205	0.255	0.246	0.309	0.286	0.254	0.235	0.242	0.238	0.276	0.251	0.183	0.186
	SAO	0.105	0.080	0.156	0.126	0.180	0.135	0.244	0.192	0.145	0.121	0.187	0.152	0.206	0.172
2012	PAO	0.158	0.111	0.139	0.120	0.296	0.264	0.258	0.217	0.038	0.075	0.179	0.152	0.127	0.120
	City municipality	0.058	0.046	0.144	0.122	0.129	0.118	0.132	0.104			0.000	0.000	0.068	0.043
	Town municipality	0.140	0.119	0.205	0.185	0.300	0.246	0.184	0.158	0.128	0.091	0.270	0.241	0.115	0.107
	Sub-district municipality	0.240	0.203	0.260	0.243	0.309	0.283	0.273	0.248	0.248	0.239	0.276	0.252	0.175	0.185
	SAO	0.112	0.059	0.168	0.112	0.189	0.118	0.258	0.186	0.147	0.102	0.195	0.153	0.229	0.188

Source: Department of Local Administration (2010-2013)

*Local revenue before general grant allocation = The total amount of local own revenue and shared tax revenue

**Local revenue after general grant allocation = The total amount of local own revenue, shared tax revenue and general grant
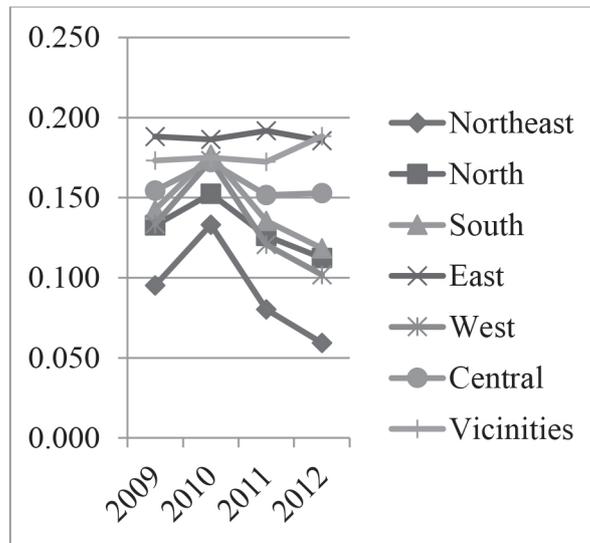
Figure 10. Fiscal Disparities of SAOs after General Grant Allocation by Region and by Year
Source: Department of Local Administration (2010-2013)
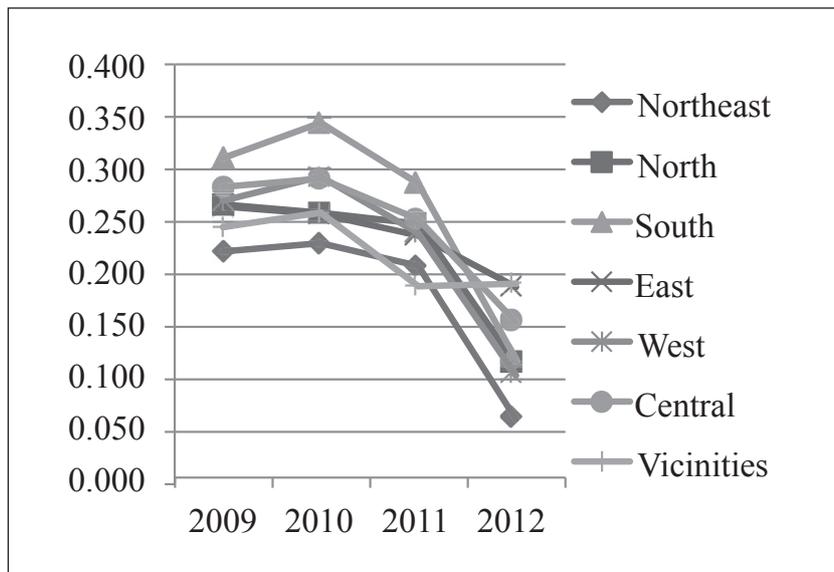

Figure 11. Fiscal Disparities of Sub-District Municipalities after General Grant Allocation by Region and by Year
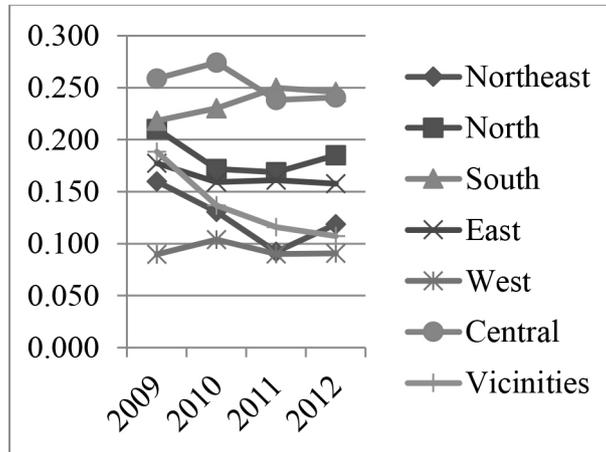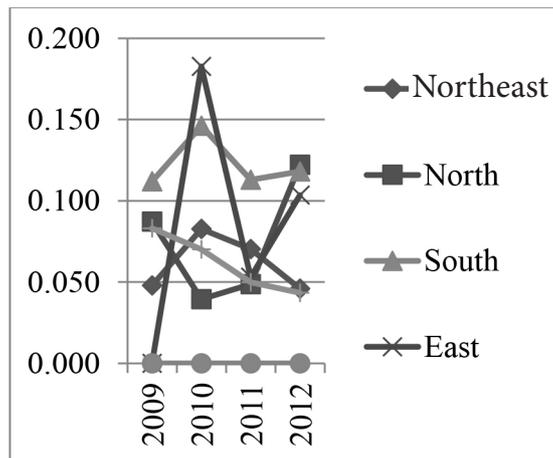**Source:** Department of Local Administration (2010-2013)

Figure 12. Fiscal Disparities of Town Municipalities after General Grant Allocation by Region and by Year
Source: Department of Local Administration (2010-2013)

Figure 13. Fiscal Disparities of City Municipalities after General Grant Allocation by Region and by Year
Source: Department of Local Administration (2010-2013)

Discussion

In terms of general overview, during the period under this study, from fiscal year 2009 to 2012, the Gini coefficient showed that Thailand still experienced fiscal horizontal imbalance. The disparity of 0.26 before general grant allocation persisted in the local governments and declined to 0.22, or only 0.04 reduction, after allocation. In terms of fiscal disparity at the regional level, the highest disparity existed in the eastern region both before and after grant allocation. The eastern region, which is composed of developed industrial cities and rural areas, brought the different capacity to generate revenue of each local administrative organization. After the allocation, this region still had the highest fiscal disparity, meaning that the transfer was not fixing local government fiscal imbalance. In addition, the result confirmed that the grant allocation did not support fiscal equalization among regions as seen from the large disparities between eastern region and northeast region since 2010.

Analyses of disparities in lower tier local government organizations before and after general grant allocation found sub-district organizations had the greatest disparities before and after allocation, followed by town municipalities, SAOs and city municipalities respectively. The number of sub-district municipalities having a population of over thirteen million, ranked second highest after SAOs, but had the greatest disparity before allocation. The disparity was at a highest level after allocation, with a minimal reduction of just 0.02 (from 0.281 to 0.261). The disparities fluctuated annually. When analyzing by region, sub-district settings in each region had fiscal disparities different from each other - both before and after allocation. The measurement by Gini coefficient reports the highest disparity before and after allocation of sub-district municipalities in the southern region. Following the disparities of sub-district municipalities are town municipalities that reduced from 0.22 before grant allocation to 0.198 after allocation. The highest disparity remained in town municipalities in the central region. Those in the south had the highest disparities before and after allocation from 2011 onwards.

SAOs outnumbered other types of local government organizations (6,089 in 2009, 5,767 in 2010, 5,715 in 2011 and 5,507 in 2012) and occupied the largest governing area (0.01268 square kilometers per capita) with a population of over thirty-seven million, but achieved the third highest disparity. The disparity before general grant allocation was 0.203, and decreased to 0.145 after allocation. So, when compared to other organizations, SAO disparities could be most reduced and, from 2010, fell down afterwards. The disparities of SAOs (TAOs) in the eastern region grew larger than in other regions every year. When comparing the local government revenue before general grant allocation and the average general grant received, grant allocation tends not to promote fiscal horizontal equity or pro-poor allocation. Local organizations having small revenues also received small grants, and this is a reverse trend according to the principle of filling fiscal gap and equalization. SAOs in the northeastern region had the smallest revenue of 1,815 baht per capita and received a smaller grant than southern SAOs that had revenue of 1.2 times higher before grant allocation. Following SAOs in the vicinity, SAOs in the center earned the second highest revenue, but ranked third for the highest grant. The principle of fiscal gap filling was applicable to SAOs in the vicinity, meaning that they earned the highest revenue and the lowest grant.

According to the above findings, the fact that grant allocations do not achieve the goal of horizontal equity may be due to institutional arrangements. The Committee is a mechanism and a regulator of grant allocation. The structure of the Committee of Decentralization to Local Government Organization does not allow the committee to have more power for determining the direction of grant allocation. The Committee's structure, chaired by the Prime Minister or Deputy Prime Minister, has influence on the allocation that causes disparities due to a lack of budgeting independence. By having a politician sitting as the Chair, there is more political interference and a growing possibility of money being allocated to the government's strongholds. In addition, the Committee is

composed of representatives from three groups, namely, concerned government organizations, experts and local government organizations. However, it appears that having representatives from the first two groups tends to lead to budget disparities. In the first group, eleven representatives are appointed by position (Interior Minister, Finance Minister, Permanent Secretary of Interior, Permanent Secretary of Finance, Permanent Secretary of Education, Permanent Secretary of Public Health, Secretary General of the Councilor of the State, Secretary General of the Civil Service Commission, Secretary General of the National Economic and Social Development Board, Director of the Bureau of the Budget and Director General of the Department of Local Administration). All of these eleven members are under the Prime Minister. It is beyond the bounds of possibility for them to freely make decisions and express their opinions.

The second group of twelve experts has less independence. Initially, they are selected by the Expert Selection Committee consisting of the Permanent Secretary of the Office of the Prime Minister as the Committee Chair, Permanent Secretary for Finance, Permanent Secretary for Interior, Secretary General of the Office of the Higher Education Commission, Secretary General of the Councilor of the State, Secretary General of the Civil Service Commission, Secretary General of the National Economic and Social Development Board and Director General of the Department of Local Administration. This Selection Committee nominates qualified candidates for the Prime Minister's consideration. New nominations will continue until the Prime Minister makes a final decision. Political interference in expert selection means a link between selected experts and politicians. The link blocks the Committee's freedom to exercise power, and without this, the grant allocation rests upon a compromise with politicians. The role of the Decentralization Committee was questionable in spite of having experts that would make decisions based upon academic criteria. In fact, the expert committees are powerless to determine the direction of grant allocation criteria. Their decisions tend to meet political objectives,

rather than to benefit the public. The grant allocation criteria set each year are not much different. This means that, despite new criteria being made, grant allocation still does not meet academic criteria.

The Committee sets the criteria for grant allocation. The Decentralization Committee allocates the grant using population and equal share between the same types of local government organizations. About thirty percent of the total grant falls under this criteria. This simple formula, however, is not predictable for local government organizations as a fixed grant per capita is not specified. Similar to the general grant specified by purpose, most of this grant's allocation adopts the population as a basis. This allocation fails to meet the real needs for budget requirements and fiscal equity. For example, the allocation criteria do not include non-registered or hidden population and migrant laborers, local factors, and lack of local statistics. Non-registered people have requirements and demands for public services provided by local government organizations that consequently have increased expenditures for existing services. The non-registered migrants are blamed for pollution and social problems that require a budget for finding solutions. From all that is mentioned here, the number of non-registered people should be counted in grant allocation criteria, and this is to empower local governments to better perform their responsibilities and functions.

For local factors, the criteria for grant allocation leave out a variety of indicators such as certain conditions, needs, geographical differences, population density, the poverty line and infrastructure of each local government organization. Local organizations located in the non-economic zone may encounter difficulties to seek more revenues. Some local governments may have expenditure needs due to geographical and demographic restrictions. Different conditions of local government organizations do not fall into the "one size fits all" criteria that brings in large inequities instead of manageable criteria that well suit organizations.

However, local statistics are short of records or have non-systematic collection, incomplete data and data centers. Reasons given here are that all local government organizations have neither a statistical office nor a statistician for collecting and systematizing data at the local level. Links of data between organizations and centralized data are also missing, causing difficulties in data collection and analysis. As to the Department of Local Administration as the coordinating center for local data, it fails to collect complete data. Efforts for data collection by local government organizations are a must and need support from the Decentralization Committee as well as the Department of Local Administration. Coverage of data collection and its completeness pave the ground for development plans and proper criteria for grant allocation.

The impacts of grant allocation on local government organizations. Firstly, fiscal autonomy of local governments decreased because they relied heavily on the grant that increased year by year. Despite an annual increase, only around thirty percent of the general grant authorized organizations to use their own discretion to distribute the grant money. The remaining seventy percent of the total grant restricted local organizations autonomy, including twenty percent for general grants specified by purpose and fifty percent for specific grants that were mostly allocated for the government's projects such as the pension for the elderly and school lunch program. Secondly, because of non-fixed criteria and fluctuation, the grants for local governments were unpredictable, making it difficult to estimate for future budgets. The estimation was only made closer to the previous years' budget and this practice was still far from accurate due to the instability of the grant allocation. The unpredictability put a strain on organizations to budget the next year's projects accurately. And because of an unpredictable budget, the provision of public services could be suspended, discontinued or reduced. Thirdly, application of the principle of filling the fiscal gap did not occus. In principle, local organizations having small revenues should receive larger

grants. In this study, SAOs (TAOs) in the northeastern region gained the lowest revenue but their grant was lower than those in the south that had 1.2 times higher revenue before allocation. The revenue before allocation of SAOs in the central region was the second highest after the vicinity, but these SAOs received the third highest grant. The general grant allocation instead widened the revenue differences between SAOs and municipalities. The grants for SAOs in the vicinity were allocated according to the principle. The Gini coefficient analysis reiterates faulty functioning of the general grant. In descending order of organizations with disparities before general grant allocation, there were sub-district municipalities, town municipalities, SAOs and city municipalities. This order continued on unchanged after allocation, although the disparities were reduced The disparities between SAOs and sub-district organizations changed from 0.061 to 0.063, and between sub-district and town municipalities from 0.017 to 0.053.

Conclusion and Limitations

Differences in capacities of local government organizations to seek revenues are the reason for fiscal horizontal gaps. The general grant, in particular, is a means of fiscal horizontal equalization or narrowing fiscal differences between these organizations. However, local administrative organizations still experience fiscal horizontal imbalance. General grant allocation does not vary inversely with local revenue. Allocation creates more fiscal inequality among types of local administrative organization and among regions. The highest fiscal inequality remains in sub-district municipalities. The east region shows the highest fiscal inequality. Moreover, because of non-fixed criteria and fluctuation, the grant for local governments is unpredictable, making it difficult for future budget estimation of both expenditure and revenue.

It is hoped that the disparities observed in this study would contribute to a consideration of changes in policies. Knowledge about local fiscal disparities could lead to remedial action, which in turn would benefit people's quality of life. If fiscal equalization of local government organizations were achieved, this would enable citizens to gain access to standard public services.

This study has some limitations, however. Local data were scattered and sporadic. The lack of systematic data has weakened this study's attempt to make more detailed analyses for valid fiscal equalization. Hence, comparison was made among local revenues only through the use of per capita revenue. If sufficient data and relevant indicators were available for analyses of both revenue capacity and expenditure needs, future studies will better represent the situation of fiscal disparities that is more concordant with the facts.

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