Fiscal Desentralisation and Sustainable Development: Lesson from Local Government Levels in Indonesia

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Abstract: Indonesia introduced fiscal desentralisation when the central government enacted Law No. 25/1999 on fiscal balance between the central government and the local governments. This law was later revised as Law No. 33/2004 and is widely known as the 'new direction of fiscal relationship' which guides the intergovernmental financial relationship between central and local government in Indonesia (Brojonegoro & Asanuma, 2003; Suharyo, 2009). According to the law, local governments have two major sources of revenues to finance their expenditures: own-source revenues and intergovernmental transfers. Own-source revenues are revenues raised by local governments from their local sources, consists of taxes, levies, proceeds from the management of regional assets set aside for the purpose, and other source of revenues. While intergovernmental transfers consist of Revenue Sharing from natural resources and taxes, General Allocation Funds (Dana Alokasi Umum, or DAU), and Specific Allocation Funds (Dana Alokasi Khusus, DAK). The fiscal desentralisation law established principles on the intergovernmental financial relationship between central government and local governments, which take the forms of devolution, deconcentration, and co-administration of tasks. Through those forms, most authority and responsibility of the central government was devolved to local governments, including the financial responsibility over the provision of public goods and services at local levels.

This study examines the arguments in favor of the impact of fiscal desentralisation on the economic development at local levels through the public financing capacity. The methodological approach was qualitative and quantitative modes of inquiry. The analysis on the fiscal budget includes the revenues and expenditures assignments, the trends on the local government expenditures, revenue desentralisation and financing capacity, as well as the roles of intergovernmental transfers within the local budget. This study was undertaken upon the economic arguments on fiscal desentralisation to increase the revenues or fiscal autonomy of sub-national governments (Falleti, 2005) and provides autonomy to local governments in the provision and financing of public goods (Brueckner, 2008). Fiscal decentralisation exists when sub-national governments have powers given to them by the constitution or by legislation, to raise taxes and/or carry out spending activities within clearly established legal criteria (Tanzi, 2000). This study therefore seeks to examine whether fiscal desentralisation in Indonesia increases the financing capacity of local governments, thus promoting local economic development.

The results from this study demonstrate that the practice of desentralisation in Indonesia has shown that various reforms have affected the political and administrative system in Indonesia and also the arrangements of authority and financial responsibility between the central government, and the local governments (province and district/city). Under desentralisation policy, the central government gives authority in most areas of governance to local governments. It is however, the central government that retains responsibility for national planning, control on national development, intergovernmental fiscal arrangements, the state administration and economic institutions system, training and human resource empowerment, utilization of natural resources, strategic high level technology, conservation, and national standardization. Such arrangements

have changed the mechanism of accountability among central and local governments in Indonesia. Fiscal data analysis performed for provinces, districts and cities in Indonesia indicate that most local governments are still highly dependent on the fiscal transfers from the national governments in performing their public financing functions. As such, the sustainability of local development can be achieved in the long run.

Keywords: Governments, decentralization, fiscal, transfer

Introduction

Indonesia introduced decentralisation policy in 1999 when the central government enacted two laws on decentralisation. The first was Law No. 25/1999 on fiscal balance between the central government and the local governments. This law was later revised as Law No. 33/2004 and is widely known as the 'new direction' which guides the intergovernmental financial relationship between central and local government in Indonesia (Brojonegoro & Asanuma, 2003; Suharyo, 2009). According to the law, local governments have two major sources of revenues to finance their expenditures: own-source revenues and intergovernmental transfers. Own-source revenues are revenues raised by local governments from their local sources, consists of taxes, levies, proceeds from the management of regional assets set aside for the purpose, and other source of revenues. While intergovernmental transfers consist of Revenue Sharing from natural resources and taxes, General Allocation Funds (*Dana Alokasi Umum*, or DAU), and Specific Allocation Funds (*Dana Alokasi Khusus*, DAK). The fiscal decentralisation law established principles on the intergovernmental financial relationship between central government and local governments, which take the forms of devolution, deconcentration, and co-administration of tasks. Through those forms, most authority of the central government was devolved to local governments. Devolution of authority to local governments has altered the structure of revenue and expenditure of local governments.

The Conceptualisation of Fiscal Decentralisation

The literature on fiscal decentralisation is closely related to fiscal federalism [1](Bardhan, 2002, p.187) and it is a subfield of public finance (Oates, 1999, p.1120). The key issues in the fiscal federalism literature are the responsibilities and the fiscal instruments between levels of government that address which functions and instruments are best to decentralise and which are best placed in the higher level of government. In other words, it arranges how expenditures and revenues are allocated across different levels of the administration. A key issue in fiscal federalism is the arrangement of intergovernmental fiscal structures to improve the functioning of the public sector (Oates, 2008). In particular, it focuses on how fiscal decentralisation affects fiscal stability, accountability, public sector efficiency, democracy, government quality, and economic growth. According to the fiscal federalism literature, fiscal decentralisation can increase efficiency and accountability in resource allocation. The two basic arguments are: (i) local governments are better positioned geographically to provide public goods than are central governments. Local governments can thus be more responsive to local preferences and needs; and (ii) pressure from inter-jurisdictional competition may motivate local governments to be more innovative and accountable to their residents. Inter-jurisdictional competition refers to situations where local governments compete with each other to attract (or retain) residents and capital to their jurisdictions. If residents can choose among a large number of districts, they would tend to favor districts that produce higher quality public services for a given local tax liability or have a lower local tax liability for a given level of quality (Oates, 1972).

The literature on fiscal decentralisation can be divided into three categories (Cheikbossian, 2008). The first category was pioneered by Tiebout (1956); it suggests that allocation of public resources would be efficient if such services are provided (and paid for) by the governments responsible for those resources. This view is based on the following assumptions: (i) given that tastes and willingness to pay differ for geographical, cultural and historical reasons, demand for local public services varies across locations (however, *local preferences* are reasonably homogeneous). If these assumptions are valid, the central provision of local public goods (if it tends to be uniform across the country), is *unlikely* to please anybody; and (ii) decentralisation would result in every local government providing *a different bundle* of local public services, each such service bundle reflecting local preferences.

In its pure form, Tiebout's argument implies that mobility of voters is sufficient to ensure efficient allocation of public resources. In Tiebout's analysis, taxpayers move in order to avoid higher taxes and to advantage themselves

[1]The terms *federalism* and *decentralisation* are used synonymously in this study.

through inter-jurisdictional competition, thereby limiting the excessive taxing power of governments. Assuming people are mobile, therefore, competition for mobile people should match bundles of public goods to citizens' preferences.[2] Tiebout claimed that in a system with many jurisdictions, competition among local jurisdictions would ensure efficiency in the production of local public goods and also in the distribution of total population over communities. Tiebout's theory on fiscal federalism also focuses on the economic efficiency of intergovernmental relationships. In his theory, Tiebout provided an explanation of the advantages of distributing power to the lowest level of government. By distributing some functions to the lower government levels, for example the provision of public services, the degree of efficiency in the allocation of resources would increase. Over the long term, efficiency gains from the local delivery of public services would lead to faster local, as well as national, economic growth (Oates, 1972). Local provision might also be a way to reduce the free-rider problem,[3] by inducing people to reveal their preferences for public expenditure. Here, people reveal the strength of their taste for publicly provided goods through their choice of jurisdiction in which to live.

The second strand of the literature on fiscal decentralisation focuses on inter-jurisdictional spillover theory,[4] also known as spillover effects.[5] This theory is constructed based on the view that more resources should be allocated to regions that undertake public expenditure *benefiting residents of other regions* and not only their own residents. This is with particular regard to the provision of public services. If travel costs are low, public goods are non-excludable where residents can obtain utility from the public goods provided in their own municipality as well as from those supplied in neighboring municipalities. Consequently, all residents of that municipality are able to consume the full benefits of the public goods provision because they cannot be excluded from the benefits. Thus, if there are spillovers from local public goods provision, residents of one municipality may migrate outside their municipality and enjoy the services provided elsewhere. A key point in spillovers literature suggests that spillover benefits that may occur from fiscal decentralisation can be achieved when lower-level jurisdictions of government ensure cooperation among one another in providing public goods and services. Such cooperation is important to avoid free riding in the provision of public services. The third branch of the literature focuses on the concept of fiscal equalisation. Fiscal equalisation involves a system for addressing fiscal disparities and seeks optimal power-sharing between central and local governments. It refers to the transfer of money from central governments to local governments (Brilliantes & Tiu Sonco II, 2007) and aims to reduce the incentives for migration from relatively poor regions to relatively rich regions (Buchanan, 2001, p.11). Addressing fiscal equalisation in Indonesia, Hofman *et al.* (2006) pointed out that the need for fiscal equalisation is based on the fact that only the richest sub-national governments will typically have enough revenues with some reasonable level of revenue effort to finance a basic set of expenditure responsibilities/needs.

Arguments for Fiscal Decentralisation

The widely-known arguments for fiscal decentralisation are: (1) economic efficiency because local governments are better positioned than national governments to deliver public services given their information advantage, this is known as *the preference-matching argument*; and (2) population mobility and competition among local governments for delivery of public services will ensure the matching of preferences of local communities and local governments (Oates; 1972; Tiebout, 1956, as cited in Davoodi & Zou, 1998, p.244). Further, Tiebout and Oates divided the basic economic argument on fiscal decentralisation into two strands. *First*, decentralisation will increase economic efficiency because local governments are in better positions than the national government to deliver public services because of the information advantage. As a result, local governments are more capable than central governments in getting the information on local preferences and needs (Faguet, 2001). *Second*, population mobility and competition among local governments for delivery of public services will ensure the matching of preferences of local communities and local governments. This matching of preferences may improve allocative efficiency because public services provided by the local government will be better matched to the preferences of the residents of those localities (Lockwood, 2006).

In addition to these arguments, de Mello (2004, pp.7-9) suggested broader arguments for fiscal decentralisation which include not only the economic benefit effects of fiscal decentralisation, but others including social benefits

[2] In the literature, this is known as the preference-matching argument.
[3] Free-riding may occur when consumers can take advantage of public goods without contributing sufficiently to their creation (Musgrave & Musgrave, 1980, p.57).
[4] See Oates (1999) for further discussion.
[5] In economic literature, spillover effects may also be called as externalities (for example, Jaffe, Trajtenberg, & Fogarty, 2000).

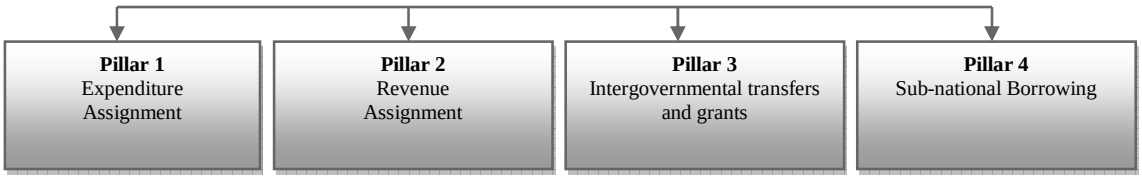
and public sector activities such as:

- fiscal decentralisation enables sub-national governments to take account of local differences in culture, environment, endowment of natural resources, and economic and social institutions;
- information on local preferences and needs can be extracted more cheaply and accurately by local governments, which are closer to the people and hence more identified with local causes;
- bringing expenditure assignments closer to revenue sources can enhance accountability and transparency in government actions;
- fiscal decentralisation can help promote streamlining public sector activities and the development of local democratic traditions;
- shortening the 'informational distance' between the providers and recipients of public goods and services can reduce information costs and boost public-sector efficiency in service delivery; and
- by promoting allocative efficiency, fiscal decentralisation can influence macroeconomic governance, promote local growth and poverty alleviation directly as well as through spillovers.

Pillars of Fiscal Decentralisation

Literature on fiscal federalism suggests two measures of fiscal decentralisation: (1) the share of expenditure and revenue collection between sub-national governments and the central government; and (2) the percentage of sub-national revenue and central government transfers. These measurements are arranged as four pillars of fiscal decentralisation: (a) expenditure assignment; (b) revenue assignment; (c) intergovernmental transfers; and (4) sub-national borrowing.[6]

Figure 1. Pillars of fiscal decentralisation



Expenditure Assignment and its Principles

A key challenge in fiscal decentralisation is how to design optimal expenditure assignments among levels of government. In this context, expenditure assignment means how spending should be spread among levels of government, or what expenditures should be retained by the central government, and what expenditures should be transferred to sub-national levels of government. What is clear in the literature is that the assignment of expenditure responsibility should precede revenue autonomy, particularly taxing power. This is because the division of taxing power, besides being based on principles of tax assignment, should be determined by the requirements of different spending agencies. Decentralisation of tax powers based on expenditure responsibilities is desired so that sub-national governments do not have to rely exclusively on intergovernmental transfers to finance their expenditures. The linking of revenue and expenditure decisions at lower levels of government is considered important to preserve the incentive to provide public services in a cost-effective manner (Shah, 1994). Sidik (2007, pp.190-192) provided two different approaches in expenditure assignments: the 'expenditure-led' approach, and the 'revenue-led' approach. Under the first approach, functions are first designated as the clear responsibility of one or another level of government on a mutually exclusive basis. The designation is based on objective criteria such as the degree of local impact of the function in question, considerations of policy and administrative uniformity, general technical and managerial capacity, the existence of spatial externalities or spillovers associated with the function, and of economies of scale, among other considerations.

[6] While it is noted that sub-national government borrowing is one of the pillars of fiscal decentralisation, this subject, however, is not discussed in detail in this study. For the purpose of this study, discussion of the pillars of fiscal decentralisation was only made for the other three pillars. Sub-national borrowing was not included in the discussion since local governments in Indonesia do not often utilise sub-national borrowing to fill local revenue shortfalls. More importantly, Law No. 33/2004 does not allow local governments to directly use sub-national borrowing from foreign sources.

Thus, public functions such as primary education, local general hospitals and refuse collection would be assigned to local governments as having primarily local impact, and being within management capacities at that level; specialist secondary schools, regional specialist hospitals, and river and water resource management might be assigned to the provincial level, given their substantial interregional impacts; religious affairs and justice would be reserved as central functions, requiring policy uniformity, and given their nationwide impacts. In any case, once the assignment of functions is agreed, revenue-source allocations between levels, and among regional governments at each level, are then tailored accordingly. In contrast to the expenditure-led approach, under the revenue-led approach, public revenue resources are first allocated in a general way between levels of government essentially as the result of a political bargain struck between centralist and regionalist power interests. Political trade-offs also strongly influence the allocation of resources among regional governments at each level, as reflected in the systems of inter-governmental transfers. In the subsequent assignment of functions, while consideration of the principles mentioned above in connection with the expenditure-led approach are still relevant, regional fiscal capacities become a prominent consideration. While a general scheme for the allocation of functions between levels may be formulated, fiscal capacity disparities between individual regions may well mean that not all places can finance their designated functions, leading to direct higher-level government interventions in services provision.

Revenue Assignment

In theory, fiscal decentralisation would bring sub-national government closer to societies, thus it will be more responsive to societies' preferences regarding quantity and quality of public goods and services. To meet these objectives, it is important for local government to have the authority and responsibility to finance their own local services (Sidik, 2007). However, to determine which taxes are best suited for different levels of governments is not easy considering efficiency and equity. Broadly speaking, the principles of revenue assignments (taxes) are developed based on Musgrave (1959) and Musgrave and Musgrave (1989) who offered a comprehensive theory of the state and public finance. According to Musgrave, there are three fiscal functions of government: providing public goods and services (resource allocation), redistributing income in order to ensure income distribution (income redistribution), and stabilising economic activities in order to reduce business cycle fluctuations (macroeconomic stabilisation). Musgrave's idea is known as 'three functions of government activities' that can be used to guide revenue assignments across government levels. According to Musgrave, central governments must be responsible for income redistribution and macroeconomic stabilisation, whereas resource allocation could be assigned to all levels of government.

Therefore, several taxes should be assigned to the central government as they can be used to secure both income redistribution and macroeconomic stabilization at the national level. These taxes include personal taxes with progressive rates and corporate income, taxes that are suitable for purposes of stabilization policy, and all tax bases which are distributed highly unequally among sub-jurisdictions. In exercising those functions, Musgrave suggests that revenue assignment should be transferred to three levels of government: central level, regional levels, and local levels.[7] At sub-national levels, Oates (1972, 1996) addressed tax arrangements which should be assigned to this level. According to Oates, middle and especially lower levels of government should tax those bases which have low inter-jurisdictional-mobility because high Inter-jurisdictional-mobility tax bases make taxation difficult for sub-national governments. Musgrave and Oates's views, above, have been criticised. Their assumptions, arguments and conclusions, which assume that lower levels of government are unconcerned with income redistribution is questioned. In practice, local governments in many countries are really concerned with income redistribution, for instance in education and health care sectors; and local governments in fact make little use of benefit taxes. Musgrave and Oates's views have also been criticised since their approach takes only the three usual governmental levels into account (central, regional and local). In many countries, the geographical area covered by many locally-provided (public) goods and services do not always coincide with the borders of jurisdictions (Bird, Dafflon, Jeanrenaud & Kirchgassner, 2003).

Intergovernmental Transfers and Grants

As noted earlier, a significant feature of decentralisation is the transfer of responsibility over the function of public services delivery to the local government. Transfer of such responsibility has to be accompanied with transfer of revenue to the lower levels of governments to bridge the gap between spending and revenues of these lower levels of

[7] Musgrave's opinion in this issue is known as'multilevel finance'.

government (de Mello, 2000). The arrangement of revenue transfers among the levels of government are known as intergovernmental fiscal transfers (Brilliantes & Tiu Sonco II, 2007), which aims to compensate for vertical fiscal imbalances and to offset horizontal fiscal disparities among government tiers (Musgrave, 1959; Oates, 1972). Transfer of revenues is crucial, particularly in developing and in transition countries (Rodden, Eskeland & Litvack, 2003). In such countries, even though decentralisation has assigned revenue autonomy to local governments, they are still dependent on central government funding in performing their public responsibility; in many cases, financial resources from national to sub-national levels of government are still the major source of sub-national revenues. In similar vein, Shah (2007) indicated that intergovernmental transfer and grants finance are about 60% of sub-national expenditures in developing countries and transition economies and about a third of such expenditures in member countries of the OECD. Hofman and Guerra (n.d) assessed whether there is a systemic relation between fiscal disparities and disparities in service delivery indicators. To examine their hypothesis, Hofman and Guerra used a simple regression approach to test the impact of expenditures per capita on social outcome indicators including the Human Development Index (HDI), persons per hospital beds, life expectancy, and literacy rates in some East Asia countries, including China, Indonesia and Vietnam. The estimation showed that most countries in their study have a modest significant correlation between social indicators and sub-national expenditures.

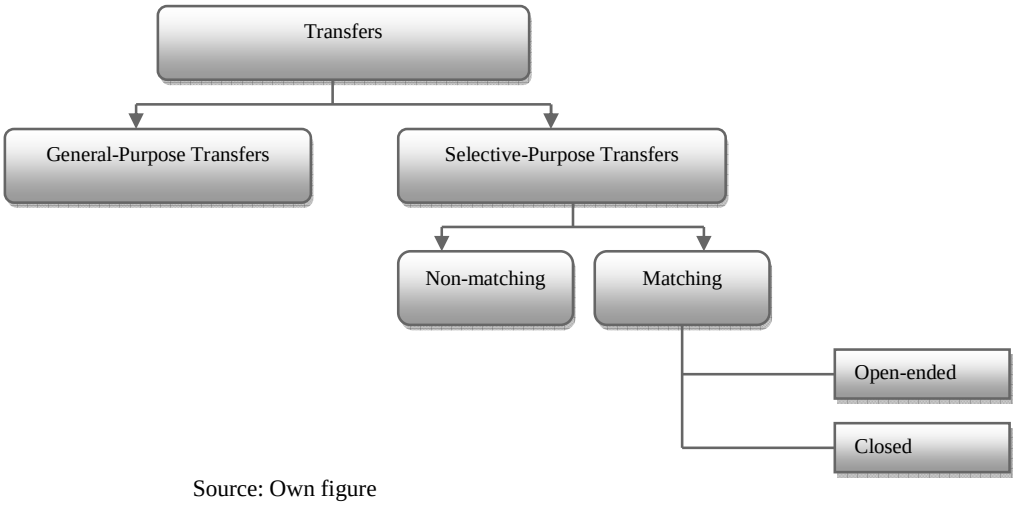
The literature suggests various objectives for intergovernmental transfer. *First*, intergovernmental transfer aims to redistribute income in order to correct fiscal imbalances that exist when fiscal capacity does not match fiscal need. Fiscal capacity refers to the potential ability of local governments to fund their public functions (based upon a standardised basket of public goods and services) from their own revenue sources (Richard & Tarasov, 2004; (Martinez-Vazquez & Boex, 1997), whilst fiscal need, or expenditure need, is the amount that would have to be spent on residents to provide services at par with the national average (Yilmaz, Hoo, Nagowski, Rueben & Tannenwald, 2006). Thus, fiscal capacity is revenue capacity relative to a locality's expenditure need. Fiscal imbalances can be divided into two types: (1) vertical imbalances; and (2) horizontal imbalances. Vertical imbalances refer to a situation where sub-national government is financially dependent upon national government revenues to support their expenditures (Bouton, Gassner & Verardi, 2008; Bahl & Wallace, 2007). Vertical imbalance occurs when sub-national government revenues do not match their expenditure responsibilities. Central governments usually offset vertical imbalances by transferring a portion of their tax revenues to local government. Such transfer is important to avoid poor provision of public services occurring because of vertical imbalances (Fiva, 2006). Horizontal imbalances indicate that revenue capacity and expenditure needs vary among local governments where some local governments can fund expenditure more easily than others (Brilliantes & Tiu Sonco II, 2007). Therefore, different sub-national governments and different regions may face different cost and demand pressures as they attempt to meet their assigned expenditure responsibilities. Where central government can mitigate vertical imbalances by transferring its own funds to local governments, transfer mechanisms to address horizontal imbalances are often more complicated than those addressing vertical imbalances.

The second objective of intergovernmental transfers is political benefit. Intergovernmental transfers to local government are provided to support local government to achieve development objectives that directly promote economic growth and efficiency in resource allocation such as providing more public goods and services which provide spillover benefits to residents of other areas. In addition, local governments are also encouraged to promote equal opportunity and quality in the provision of public services, even for the poorest regions. On many occasions, transfers from the national level are used to ensure that national priorities will be met in all sub-national government jurisdictions (Bahl, Boex & Martinez-Vazquez, 2001; ADB, 2003, as cited in Brilliantes & Tiu Sonco II 2007, pp.104-105).

Intergovernmental transfers fall into two broad categories, namely, *general-purpose transfers* and *specific-purpose transfers*[8] (Shah, 2007, p.2).

[8]In Indonesia, General-purpose Transfers is called *Dana Alokasi Umum* (DAU), whereas Specific-purpose Transfers is known as *Dana Alokasi Khusus* (DAK).

Figure 2. Basic taxonomy of intergovernmental transfer



Source: Own figure

General-purpose Transfers (GPTs)

GPTs, also known as general grants or unconditional grants, refer to a set of funds transferred from central to lower governments without any conditions set on the use of the transfers. Thus, local governments can allocate GPTs for any expenditure programs according to need. Usually mandated by law, GPTs are provided as all-purpose budget support; they are termed block transfers when used to provide broad support in the general area of sub-national expenditures while allowing recipients discretion in allocating the funds among specific uses. The basic aim of this transfer is to preserve local autonomy and enhance inter-jurisdictional equity. Many empirical studies show that GPTs are used to achieve vertical balance among regions. Once central government has transferred money to a local government, it will shift the local government budget line on some public goods (for example, spending on education and health). In Figure 3, it is shown by shifting the initial budget line of local government (AB) upward and to the right by the amount of the grant (AC=BD), creating a new budget line (CD). Since the transfer can only be spent on any combination of public goods or services (for example, health and education), or used to provide tax relief to residents, thus the transfer does not affect prices of health relative to prices of education (*price effect*), but only creates the higher spending of local government on these public services (income effect) as indicated by the new budget line.[9] It tends to *the flypaper effect* (Shah, 2007). The flypaper effect occurs when the portion of transfers retained for greater local spending tends to exceed local government's own revenue, or, for political and bureaucratic reasons, transfers to local governments tend to result in more local spending than would have occurred had the funds been transferred directly to local residents (i.e., bypassing local government). It shows the increase of expenditures is higher when financed by general-purpose transfers than by financing through the locality's own resources (Aragon & Gayoso, 2005).

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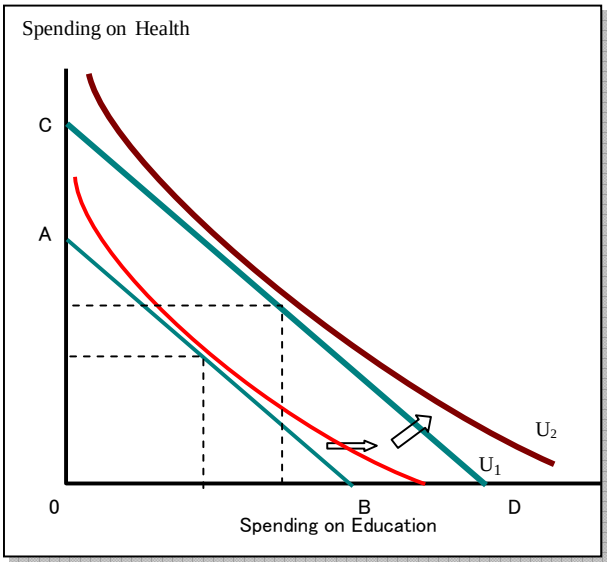
[9] In this context, *income effect* refers to such situations where transfers from higher levels of government are used to subsidize public goods or services. Subsidies on these services give the community more resources, some of which may go to acquire more of the assisted service.

Figure 3. Effect of unconditional non-matching grant



Source: Adapted from Shah (1994), as cited in Shah (2007, p.3)

Specific-purpose Transfers (SPTs)

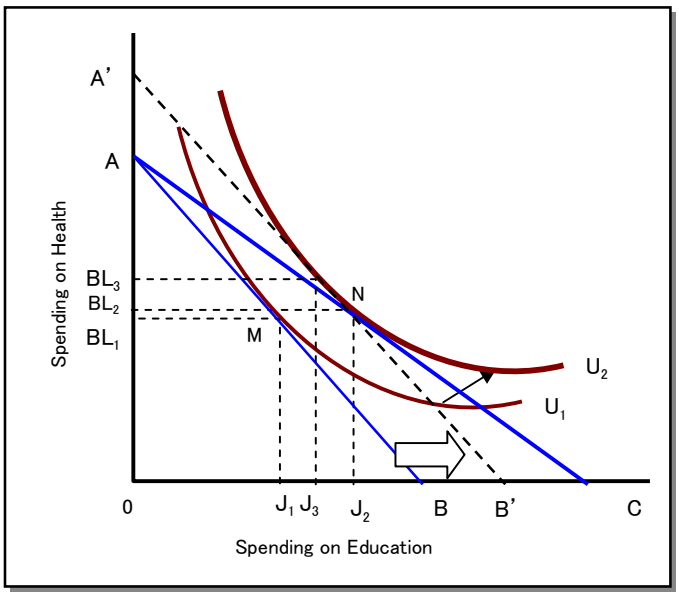
SPTs are conditional transfers, designated for a specific public expenditure program. They are intended to provide incentives for government to undertake specific programs or mandatory activities. These transfers typically specify the type of expenditures that can be financed (input-based conditionality). They may also require attainment of certain results in service delivery (output-based conditionality). Therefore, specific-purpose transfers are often used to ensure minimum standards in the provision of public goods and services. Specific-purpose transfers can be seen as two kinds: *matching transfers* and *non-matching transfers.*

Matching Transfers

In this scheme, local government as recipient is required to spend some of its own funds on the public goods or services for which the transfer is provided, therefore, this transfer is also called a cost-sharing program. The transfers provide an additional amount of funding for such goods or services to match the amount provided by the local government. Such transfers can be open-ended (no limit on matching funds) and closed-ended. These funds are assistance funding in nature; they are required to be spent for specific purposes. Such transfers have two impacts on the recipient: (i) *price effects*, and (ii) *income or substitution effects*.[10] Both effects stimulate expenditures on the subsidised public goods and services. As described in Figure 4, the initial budget line is AB. This line indicates how a local government allocates its money for the provision of public services (for instance in health and education). The best combination of public spending can be seen at M, where the initial budget line intersects the indifference curve (U_1).

[10]*Price effects* occur when a provider of public goods receives a grant used to provide certain public goods, or put another way, the grant creates a subsidised public good(s). Therefore, such grants have affected the price as between the subsidised public good and the unsubsidised one. *Substitution effect* occurs when transfers have changed the relative price of certain public goods or services as compared to other goods or services; the community acquires more subsidised goods or services from a given budget.

Figure 4. Effect of matching transfers



Source: Adapted from Shah (1994) as cited in Shah (2007)

At that point, the local government spent money on health services as OBL_1 and education as $0J_1$. When local government spent 25% of the specific matching-grants on health, the budget line shifted to AC, creating a new equilibrium point at N (where AC crosses U_2). This implies that the amount of money allocated in these public services has increased and improved access to such services, since $U_2 > U_1$.

The specific-matching grants may improve the provision of public goods or services, both subsidised and unsubsidised. As specific-matching grants can be spent on certain public goods or services that are included in the grants, the local government now can allocate more money to finance other public goods or services that are not included in the grant scheme. Specific-matching grants can be divided into two types: *open-ended matching grants* and *closed-ended matching grants*. Open-ended matching grants are those where no limit is placed on available assistance thorough matching provisions; there is no maximum amount of grant funding that a community can receive from this grant type. In this scheme, the amount of money that local government receives is dependent on what they spend. Central government agrees to 'match' local spending at a certain percentage. These grants are well-suited for correcting inefficiencies in the provision of public goods and services arising from benefit spillovers or externalities.[11]

By comparing the two types of matching grants, it can be seen that an open-ended matching grant is at least as stimulative as, and sometimes more stimulative than, a closed-ended matching grant. A closed-ended matching grant is equivalent to an open-ended matching grant below the maximum. Beyond the maximum, a closed-ended matching grant is equivalent to a lump-sum grant and is therefore less stimulative than an open-ended matching grant. However, both grants increase the median voter's income (income effect) and reduce the median voter's marginal tax-price (substitution effect). The local government or recipient is likely to desire an open-ended matching grant, as this grant allows recipients to determine which public expenditure can be financed by the grant. So the recipient has more flexibility to spend the money, based on its preference and priority, in the context of its local development. Open-ended matching grants are used to compensate for spillover benefits, while closed-ended grants are used to promote specific public expenditures.

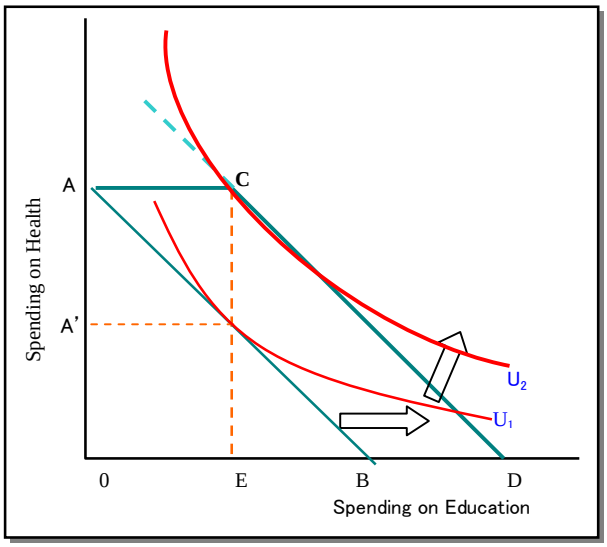
Non-matching Transfers

This transfer does not require the government receiving the transfers to spend any of its own funds on the good or

[11] Benefit spillover, or positive externality, occurs when services provided and financed by a local government also benefit citizens of other local jurisdictions not contributing to what their citizens receive from the spillover.

service for which the grant is provided. Figure 5 illustrates how the non-matching transfers affect the recipient's budget. The initial budget line of a local government is AB given its existing budget. When the local government receives non-matching transfers, it shifts the budget line upward to AC. From this point, any additional money that is transferred to the local government will create a new budget line (ACD) showing an *income effect* on the local government. When local government places a priority on a certain public service to be financed (such as health), the matching grants would have impact on that service as many as AC=OE. Put another way, the recipient is able to increase, for example, health service provision from OA' to OA.

Figure 5. Effect of conditional non-matching grant



Source: Adapted from Shah (1994) as cited in Shah (2007, p.5)

In summary, matching transfers are more stimulative than non-matching transfers of the same amount. Unlike non-matching transfers that only have income effects to society, matching transfers have two effects: 1) it increases total resources available to the community (*the income effect*), but also 2) reduces the tax-price of the public service to the community (*the substitution effect*), providing an incentive for the community to substitute the public service, which is now cheaper, for other public goods and services.

The Practice of Fiscal Decentralisation in Indonesia

As explained earlier, fiscal decentralisation has changed fiscal relationship between central government and local governments in Indonesia. Such changes impact the revenues and expenditures of local governments. The following parts provide the trends on fiscal decentralisation indicators of provinces, district/city governments in Indonesia. Revenue and expenditure as percentages of GDRP[12] at district and city levels across Indonesia between 2001 and 2008 are shown in Figure 6. During this period, an increase in the size of district governments is clearly evident, both in terms of total revenue size and total expenditure in all districts and cities. On average, the increase of the revenue is about 45%, slightly higher than the increase in the expenditure which is approximately 42% from 2001 to 2008. In 2001, both revenue and expenditure as percentages of GDRP was at 12.7%, this increased marginally to about 15% in 2002. From 2004, revenue as a percentage of GDRP was higher than expenditure as a percentage of GDRP which reached 57.9% in 2008, whilst expenditure as a percentage of GDRP was about 54.7% at the time.

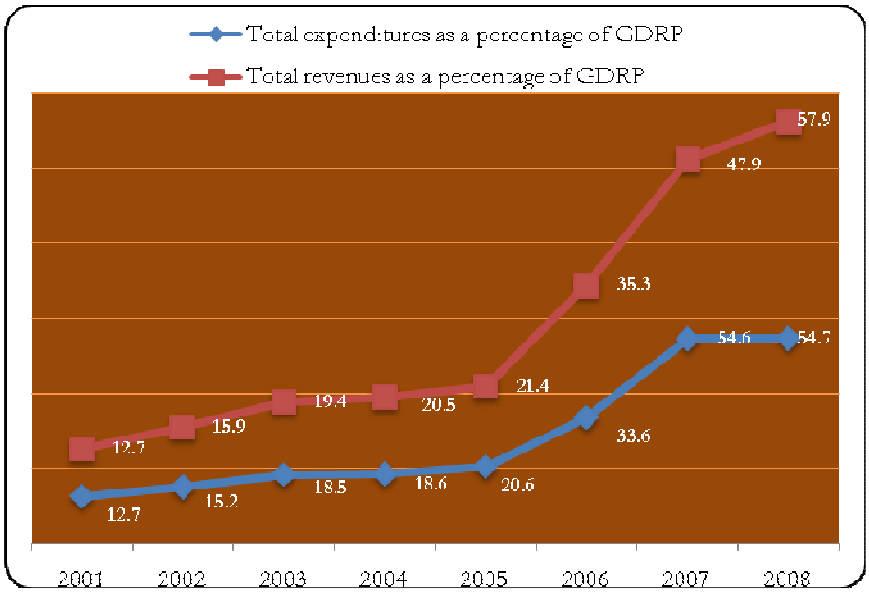
The increase in the revenue of district and city governments during the period is largely due to intergovernmental fiscal transfers or balancing funds[13] in total revenues. As will be discussed in the next section, total balancing funds which are transferred by the central government to local governments (provinces, districts and cities) accounted for about 86.8%, while revenues that were collected from their own jurisdictions, i.e. own-source revenues was

[12] GDRP stands for Gross Domestic Regional Product.

[13]The term 'balancing funds' are used interchangeably with 'intergovernmental fiscal transfers" or equalisation funds' throughout this study.

abysmally low accounted only about 5.5% between 2001 and 2008. This clearly indicates that district and city governments are very much dependent upon the fiscal transfers from other tiers of government. The steady increase in expenditure size of district and city governments cannot be claimed as an evidence of the improvement in financing capacity because majority of district and city governments' expenditure are funded by external financial sources.

Figure 6.Total revenues and expenditures as a percentage of GDRP in all districts/cities (Average, 2001-2008)



Source: own calculations based on data from Ministry of Finance.

To show the aggregate revenue as percentages of GDRP of district and city governments based on the jurisdictional variation, the revenue of district and city is grouped based on main islands in Indonesia[14] (Table 1). From 2001 to 2008, revenue as percentage of GDRP has increased in all districts and cities. As seen in the table, districts and cities in the eastern part of Indonesia such as Nusa Tenggara Barat, Nusa Tenggara Timur, Maluku, Maluku Utara, Papua and Papua Utara recorded the highest increase in total revenue as a percentage of GDRP from about 27.1% in 2001 to 94.1% in 2008 with an average increase about 58.5% during that period. The location of the highest revenue as a percentage of GDRP in Nusa Tenggara, Maluku and Papua Islands shows that districts and cities in these islands are financially very reliant on fiscal transfers from central and provincial government. As will be explored later, nearly 95% of revenues of districts and cities in those islands came from balancing funds from higher governments. Sulawesi, Gorontalo and Kalimantan were in next highest with an average total revenue as percentage of GDRP of 30.2% and 29.2% in 2001-2008 respectively. While revenues as a percentage of GDRP in district and cities in Kalimantan islands were approximately 29.2% in 2001-2008. In Jawa, Bali and SumateraIslands, the revenue size ranged from 24.5% in 2001 to 17.2% in 2008. Based on the spatial analysis on the revenue size of government measured as total revenues as a percentage of GDRP, it can be concluded that most districts and cities in the eastern part of Indonesia have a relatively larger government compared to other districts and cities in other islands.

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[14]The division of the islands is based on the official division as used by the Statistics Office of Indonesia.

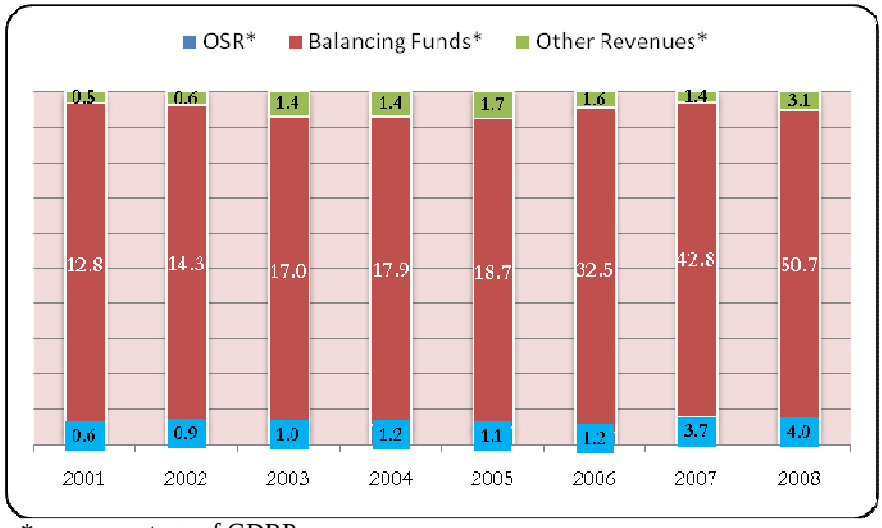
Table 1.Total revenue size of district and city governments for main Islands (Average 2001-2010, %)

Island	2001	2002	2003	2004	2005	2006	2007	2008	
Sumatera	11.7	13.6	16.8	17.0	16.1	26.2	44.6	53.4	Western
Java and Bali	8.5	10.8	12.7	12.5	11.9	17.0	29.0	41.6	
Kalimantan	11.1	16.3	20.5	19.8	19.0	27.0	62.0	57.7	Middle
Sulawesi and Gorontalo	14.3	18.7	21.1	23.2	24.1	39.7	44.6	56.1	
Nusa Tenggara, Maluku & Papua	27.1	35.5	43.3	45.9	51.0	97.9	73.3	94.1	Eastern

Source: own calculations based on data from Ministry of Finance.

The structure of revenue for the period 2001-2008 is shown by Figure 7. In this figure, comparison on the three sources of revenue is shown: Own-source revenues, balancing funds and other source of revenues, all as a percentage of GDRP. Broadly speaking, it suggests that the revenue of district/city government has increased between 2001 and 2008. The increase was largely driven by balancing funds from central and provincial governments. In all districts, balancing funds as a percentage of GDRP has increased annually from only about 12.8% in 2001 to approximately just over 50% in 2008. Own-source revenues, as the very useful indicator of financial independence of local government, and other revenues are very small. As seen among districts and cities, own-source revenues and also other revenues as percentage of GDRP had remained very low with less than 5% every year from 2001 to 2008. This evidence shows a large imbalance between revenue raising power and expenditure responsibilities of district and cities governments. A higher proportion of balancing funds in the total revenue is also an indication that public financing on goods and services at the districts level are largely financed by fiscal transfers from higher government levels. As such, the aim of fiscal decentralisation to give more fiscal autonomy for local governments and to encourage self-financing appears to have not yet been achieved.

Figure 7. Different measures of the revenue size of district governments (Average, 2001-2008 %)



*as a percentage of GDRP

Source: own figure based on data from Ministry of Finance.

Table 2 disaggregates each revenue sources of district and city government based on main islands in Indonesia. As seen in the table, most districts and cities with the higher revenue size of government are located in eastern part of Indonesia including Nusa Tenggara, Maluku and Papua (58.5%) and followed by Sulawesi (30.2%) and Kalimantan (29.2%) from 2001 to 2008. When calculated as own-source revenues as a percentage of GDRP, the highest percentage is found in Nusa Tenggara, Maluku, Papua, Jawa and Bali with an average size of 1.9% every year. Based on own-source revenues as a percentage of GDRP in all districts and cities, it can be seen that revenue raising capacity is significantly small, with an average below 2%. As such, it suggests that revenue increases locally in these districts and cities was too small to have a meaningful impact in mobilising local economy. Relatively similar spatial distibution of the revenue size of government calculated as balancing funds as a percentage of GDRP is also found. As presented in table, districts and cities in Nusa Tenggara, Maluku and Papua have the highest balancing funds as share of GDRP with about 53.6% from 2001 to 2001, followed by districts and cities in Sulawesi and Gorontalo with an average at 27.6% and Kalimantan with approximately 26% balancing funds of its GDRP.

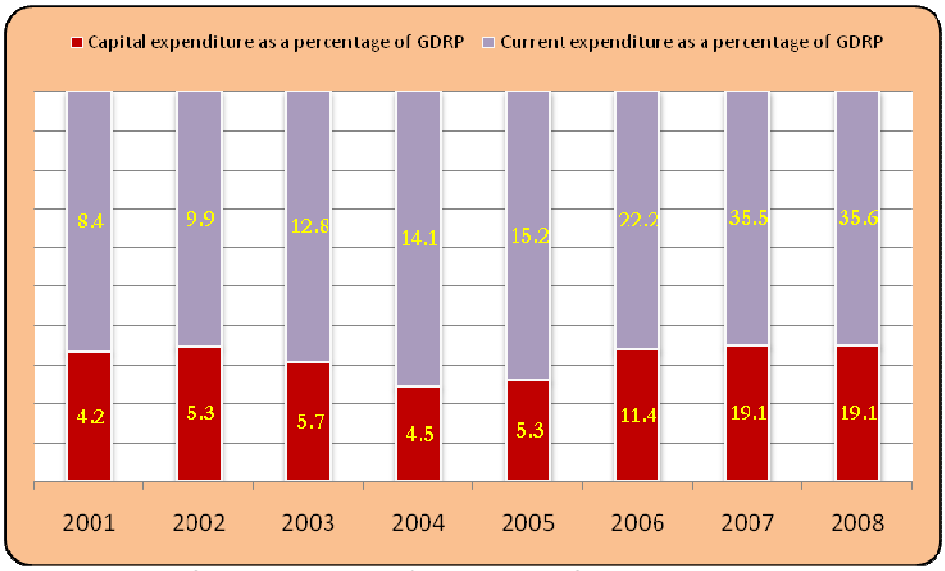
Table 2. Three measures of the revenue size of district and city governments, average 2001-2008, (%)

Island	Total revenue as % of GDRP	Own-source revenues as % of GDRP	Balancing funds as % of GDRP	
Sumatera	24.9	1.7	22.4	Western
Jawa & Bali	18.0	1.9	15.2	
Kalimantan	29.2	1.6	26.0	Middle
Sulawesi	30.2	1.5	27.6	
Nusa Tenggara, Maluku & Papua	58.5	1.9	53.6	Eastern

Source: own calculations based on data from Ministry of Finance

In addition, the expenditure structure is also measured by using capital expenditure as a percentage of GDRP and current (routine) expenditure as a percentage of GDRP as displayed in Figure 8. Using capital expenditure and current is particulary significant to capture the different approaches used by the local government in the provision of public goods and services. As indicated in the figure, current expenditure relative to GDRP have increased steadly with an average about 19.2% from 2001 to 2008. With a slightly different rate, capital expenditure relative to GDRP has also increase with an average of 9.2% over the same period, but current expenditure had constantly larger than capital expenditure as percentage of GDRP in 2001-2008. Overall, current expenditure as a share of GDRP has a steady increase, whilst capital expenditure had fluctuated moderalty. In the beginning of fiscal decentralisation in 2001, current expenditure reached about 8.4% of GDRP, while capital expenditure was only about half of current expenditure which approximately at 4.2% of GDRP. In 2008, current expenditure as propotion of GDRP was still larger then capital expenditure accounted to about 35.6% of GDRP, while capital expenditure was only about 19.1% at the same time. This data raises some concerns. First, considerable variation between current expenditure and capital expenditure reflects that budget priorities at district/city level has largely been devoted to running the government administration rather than spending more on productive sectors under capital expenditure allocation. As found in the budget allocation, a susbtantial amount of the current expenditure at districts and cities is used to cover salaries and wages of the government employees. Second, a broad gap on the allocaton of current and capital expenditure is also somewhat politics. As found by Tirtosuharto (2010, p.304), in his study on 26 districts and cities between 1996-2005, funding for capital allocation for purposes such as human investment and technological resources is actually available, but there is evidence that districts and cities tend to allocate more funding to current expenditure and discreationary expenditure, either to benefit themselves or their political constituents by awarding lucrative government contracts.

Figure 8.Current and capital expenditures in all districts and cities, average, 2001-2008



Source: own figure based on data from Ministry of Finance.

Share of capital expenditure and current expenditure as percentage of GDRP based on main islands is shown in Figure 9. Of the two expenditure categories, current expenditure had remained dominant in district and city expenditure indicating very little productive economy activies in those regions. As shown, districts and cities with higher capital expenditure and current expenditure as percentage of GDRP are located in eastern part of Indonesia with capital and current expenditrure as percentages was approximately 20.1% and 22.6% between 2001 and 2008. Current expenditure in these regions was almost doubled than other districts and cities in different islands. A significant amount of capital expenditure in eastern part of Indonesia could be driven by a significant increase in the capital expenditure in Papua due to allocation of the special autonomy funds *(Dana Otonomi Khusus)* which are mostly allocated for infrastrucre financing especially during the first few years since the special allocation funds were given to Papua (World Bank, 2005)[15].

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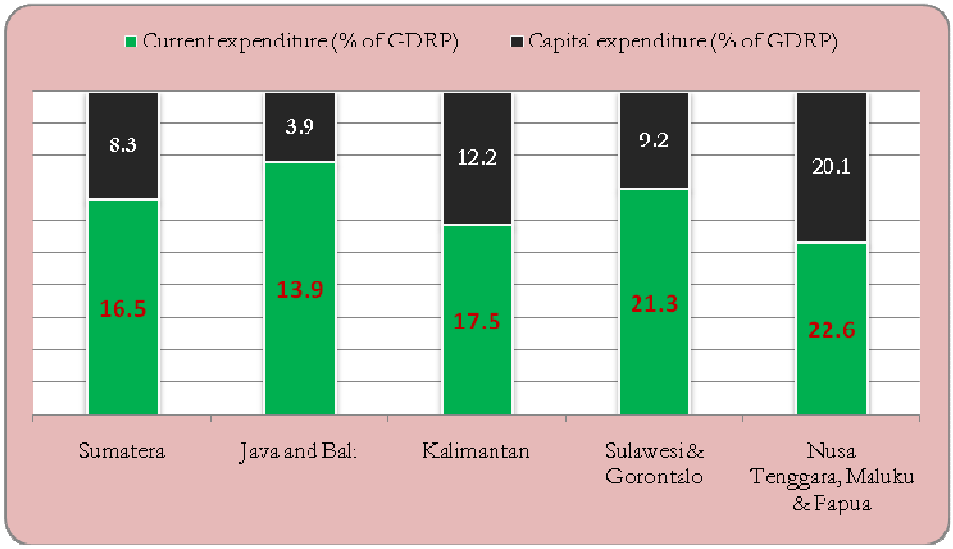
[15]The Special Autonomy Fund is given to provinces which have special autonomy status *(status otonomi khusus).* Nanggroe Aceh Darussalam and Papua are granted Special Autonomy Status since decentralisation. Papua entitles to special autonomy funds as stipulated by with Law No. 21/2001, Papua received special autonomy funds at the first time in in 2002, and province distributed larger share of the special autonomy fund to district/city government across since 2003 (World Bank, 2005, p.22). Two other provinces with special autonomy status are D.I. Jogjakarta and DKI. Jakarta, these provinces were given the special status prior to decentralisation era.

Figure 4.Current and capital expenditures by main islands, average, 2001-2008



Source: own figure based on data from Ministry of Finance.

Revenue Decentralisation and Financing Capacity of District and City Governments

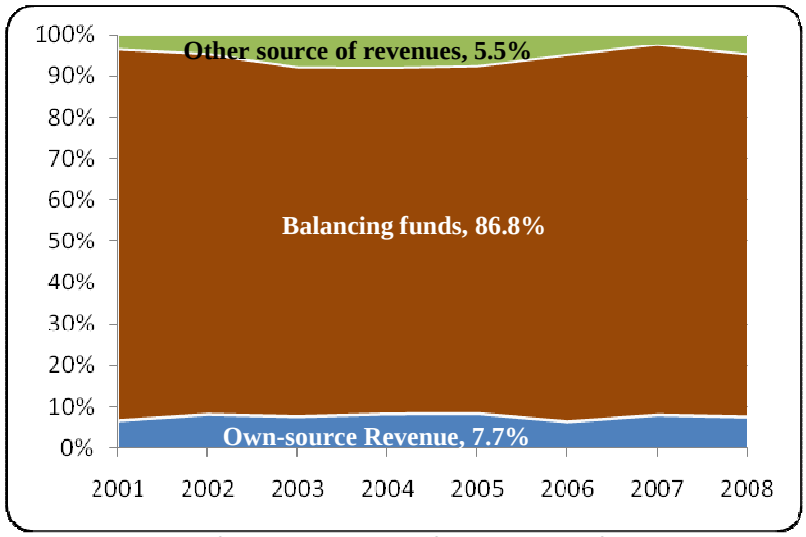
As suggested in the literature on fiscal federalism, the transfer of authority and responsibility from national to local governments cannot be meaningful unless local governments possess adequate financing. Thus, the central government promulgated Law No 25 of 1999, which was revised to Law No. 33/2004 regarding the Fiscal Balancing between Central and Local Governments. This law sets out a framework for the redistribution of revenues between central and local governments where local governments are given considerably greater authority and responsibility to manage their own budgets and also to raise their own revenues to help offset the expenditures arising from decentralisation (Barr, Resosudarmo, McCarthy & Dermawan, 2006, p.11).

The revenue assignment is stipulated in Law No. 33/2004, Chapter III, Article 2. According to this law, sources of state finances are made available to the regional government in the implementation of decentralisation based on the transfer of tasks from the central government to regional governments with due regard to fiscal stability and balance. Further, in Article 4, it is stated that delegation of authority in the implementation of deconcentration and/or co-administration tasks from the central to local governments shall be followed with the provision of funds. This is why the principle view on the fiscal law is termed, 'Finance Follows Functions' which means that the transfer of government functions to local governments is accompanied with various transfers over financial sources (Sidik, 2007, p.415). Specifically, in Chapter III, Article 155 of Law No. 32/2004 and Chapter V, Article 5-6 of Law No. 33/2004, local governments' revenue is derived from three sources: (1) own-source revenues; (2) balancing funds or intergovernmental transfers; and (3) other local government income. Own-source revenues is comprised of local government taxes, levies, proceeds from the management of local assets set aside for the purpose, and other own-source revenues. The latter consists of proceeds from sales of local assets not set aside, current account service, interest income, profits from difference in the exchange rate of the Rupiah against foreign currencies, and commissions, discounts and other forms of income arising from sales and or procurement of goods and services by the local government.

Law No. 25/1999 or Law No. 34/2004, provides revenue autonomy to local government in Indonesia. Revenue autonomy implies that local governments have the freedom to decide about the source and volume of resources that can be sought from their own region (Bahl, 2008). Under decentralisation, the autonomy of local governments to seek new source revenues is underpinned with the enactment of Law No. 28/2009 regarding Local Taxes and Levies. In particular, these regulations stipulate that provincial and district governments are allowed to impose some

taxes and levies.[16] From the law, it is seen that there is opportunity for local governments to introduce taxation in their regions and determine tax rates, tax bases and other tax parameters based on the regulations. Under the revenue assignment, it is postulated that local governments should be able to increase their own-source revenues. Law No. 33/2004 assigns some revenue resources to local governments. To the greatest extent possible, the local government should finance their obligatory and discretionary functions from their local taxes or other local government revenue sources (Bird, 2000). Revenue composition of all districts and cities is presented in Figure 10 which shows that district and city governments have not utilised the revenue-raising opportunities given to them under the fiscal decentralisation law as own-source revenues only made about 7.7% of the total revenues of the local government. Rather, the local governments are depending largely on balancing funds from the central and provincial governments which accounted to 86.8%.

Figure 10. Revenues as percentage of total revenues, average, 2001-2008



Source: own figure based on data from Ministry of Finance.

Table 3 exhibits the composition of revenue of district and city government from 2001 to 2008. Overall, districts and cities revenue rose from about 76,610 trillion IDR in 2000 to 264,387 trillion IDR in 2008 with an overwhelming share of total revenues is obtained from balancing funds. According to fiscal decentralisation Law No. 33/2004, Own-source revenue aims at providing authority to the districts and cities government in financing their expenditures under the fiscal and administrative autonomy given upon the districts and cities. Thus, it is expected that districts and cities could enhance their efforts in collection their own-source revenues. As seen in Table 3 however, Own-source revenues increased from 5,170 trillion IDR in 2001 to 20,142 trillion in 2008 with an average increase about 10,725 trillion IDR every year during the period. This figure is quite low. In 2001, own-source revenues were about 5,170 trillion IDR with a relatively small increase every year and reached 20,124 trillion IDR in 2008. On average, own-source revenues were only 7.7% of the total revenues, this is still not significant. A substantial amount of the own-source revenues is from local taxes, other revenues and proceeds from the management of districts and cities' assets set aside for the purpose. Although own-source revenues had risen in nominal term every year, but the relative share of own-source revenues in total revenues is significantly low, approximately thirteen-fold smaller than balancing funds. Other revenues which consist of incomes from grants and emergency fund were rising from about 2,769 trillion IDR in 2001 to 12,710 trillion IDR in 2008. Revenue from

[16] The taxes were categorized into Province Taxes of which there are 5 types, (1) Motorized Vehicle Tax and Above Water Vehicles Tax; (2) Vehicle Transfer Tax and Above Water Vehicles; (3) Motored Vehicle Fuel's Tax; (4) Tax for Taking and Using Under Earth Water and Surface Water; and (5) Cigarette Tax.Whilst District/Municipality taxes consist of 11 types, (1) Hotel Tax; (2) Restaurant Tax; (3) Entertainment Tax; (4) Advertisement Tax; (5) Street Lighting Tax; (6) Tax for Mining Class C; (7) Parking Tax; (8) Ground Water Tax; (9) Swallow Tax; (10) Rural and Urban Land and Building Tax; and (11) Acquisition fees from Building and Land (Law No. 29/2008, Chapter II, Article 2).

grants and emergency funds remains small for the districts and cities because these revenues are considered as untied financial assistance to districts and cities and not all local governments obtain such funds every year. Overall contribution of other revenues to total revenues from 2001 to 2008 was about 5.5%.

Table 3. Revenue structure of district and city governments average 2001-2008 (Trillion IDR)

	Own-source revenues	Balancing funds	Other sources of revenues	Total revenues
2001	5,170 (6.7%)	68,671 (89.6%)	2,769 (3.6%)	76,610
2002	7,079 (8.2%)	74,810 (87%)	4,084 (4.8%)	85,973
2003	8,161 (7.7%)	89,391 (84.5%)	8,286 (7.8%)	105,839
2004	9,219 (8.4%)	92,379 (83.7%)	8,787 (8.0%)	110,385
2005	9,299 (8.4%)	92,603 (84%)	8,306 (7.5%)	110,207
2006	9,909 (6.5%)	135,727 (88.6%)	7,564 (4.9%)	153,200
2007	16,824 (8.1%)	185,782 (89.4%)	5,171 (2.5%)	207,778
2008	20,142 (7.6%)	231,535 (87.6%)	12,710 (4.8%)	264,387
Average	7.7%	86.8%	5.5%	100%

Numbers in parentheses are shares to total revenues
Source: own calculation based on data from Ministry of Finance.

The share of balancing funds in total revenues of districts and cities has increased steadily with share about 86.8% on an annual basis between 2001 and 2008 due to increasing amount of general allocation funds, revenue sharing and special allocation funds provides to districts and cities. In the beginning of fiscal decentralisation, the balancing funds was about 68,671 trillion IDR, this jumped more than half to about to approximately 231,535 trillion IDR in 2008. Between 2001 and 2008, balancing fund in the total revenues was 86.8% annually, meaning that the balancing funds have been very dominant in districts and cities' budget. In summary, there is an increase in district and city budgets from 2001 to 2008. Nevertheless, the increase in local revenue does not necessarily imply improvement of financing capacity of district and city governments, because the governments can only generate a small amount of own-source revenues to finance their expenditure (see also Table 4).

The structure of districts and cities revenues addressed above suggests two important features of district and cities city budgets: (1) strong reliance of local budget upon fiscal transfers from higher level of governments; and (2) low revenue-raising efforts. Local governments across Indonesia are very much dependent on fiscal transfers from the central government due to the highly centralised fiscal system in Indonesia in the past. Under the centralised fiscal system, the central government collected the majority of the revenue across the country. For instance, in 2011, about 91% of revenue collection and 64% of direct spending is held by the central government (Shah, Qibthiyyah, & Dita, 2012, p.7).

As Lewis notes, despite fiscal decentralisation in Indonesia, local government authority over local tax administration and collection has not changed much and can still be considered as the lowest in the world (Lewis, 2003, p.227). It is true that fiscal decentralisation law provides legal right to district and city government to create new taxes and levies in their jurisdiction, the fiscal system in Indonesia provides minimal fiscal autonomy to local governments in terms of revenue assignment since the central government still retains more authority in collecting some major and productive revenues sources such as income tax and oil revenues (see for example, Suhendra & Amir, 2006; Taliercio, 2005, p.111). The relatively low own-source revenues at all districts and cities was due to insufficient capacity of district and city governments and weak fiscal tools in administering and collecting local revenue sources at local level. As stated, such conditions are largely caused by the long history of centralised revenue collection in Indonesia (Lewis, 2003; Suhendra & Amir, 2006; Taliercio, 2005). Since fiscal decentralisation, district and city

governments have created some taxes or levies that are economically harmful to their economy activities due to unclear, and often conflicting, objectives of the taxes and levies (Lewis, 2003, p.228). Such a condition in turn poses profound arguments on why districts and city governments have not achieved significant revenue autonomy under fiscal decentralisation era.

The financing capacity of district/city governments as summarised in Table 4. It indicates that districts and cities have failed to keep pace total expenditures within their jurisdictions. As seen in the table, districts and cities generate less own-source revenues relative to their total expenditure between 2001 and 2008. It implies that their total expenditures are much more dependent on financial transfers from higher government levels or implies a broad vertical imbalance between districts and city governments and the higher level of governments (both provinces and central governments). Overall, districts/cities were only able to finance not more than 8% of their expenditures based on their own-revenue sources. For example, in 2001, financing capacity of districts and cities was 7.4%. This rate increased slightly until 2005, before falling to about 6.6% in 2006. Based on these figures, it is evident that district and city governments are heavily dependent on other central government in performing their functions in the public goods and services provision within their jurisdiction.

Table 4. Financing capacity of district and city governments (Trillion IDR)

	Own-source revenues	Total expenditures	Financing Capacity (%)
2001	5,170	69,431	7.4
2002	7,079	82,791	8.6
2003	8,161	101,345	8.1
2004	9,219	98,200	9.4
2005	9,299	106,426	8.7
2006	9,909	149,234	6.6
2007	16,824	228,438	7.4
2008	20,142	254,076	7.9
Average	10,725	136,243	8.0

Source: own calculation based on data from Ministry of Finance.

Intergovernmental fiscal transfers to District and City Governments

As specified in the explanation in Chapter VIII of Law No. 32/2004 and in Chapter V of Law No. 33/2004, the balancing fund consists of sources from the national budget (APBN) which are allocated by the central government to local governments to fund the needs of the local government in implementing decentralisation. The balancing fund originates from three sources: (1) the Revenue-Sharing Fund (*Dana Bagi Hasil*); (2) the General Allocation Funds (*Dana Alokasi Umum*); and (3) the Special Allocation Funds (*Dana Alokasi Khusus*). The objectives of the balancing fund are to: (1) address vertical fiscal imbalances between levels of government (revenue sharing and DAU); (2) equalise regional government fiscal capacities to deliver services (DAU); (3) encourage regional expenditure on national development priorities (DAK); (4) promote the attainment of minimum infrastructure standards (DAK); (5) compensate for benefit/cost spillovers in priority areas (DAK); (6) stimulate regional commitment (DAK); and (7) stimulate revenue mobilization (revenue sharing, DAU, DAK) (Sidik, 2007, pp.377-378).

Revenue sharing is derived from taxes and natural resources. Revenue sharing from taxes is generated from land and building tax (Pajak Bumi dan Bangunan, PBB), acquisition fees from building and land, or land rent (Bea Perolehan atas Hak Tanah dan Bangunan, BPHTB), and personal income taxes (Pajak Penghasilan, PPh), revenue sharing from natural resources is derived from forestry, general mining, fisheries, petroleum mining, gas mining and geothermal mining. Revenue sharing from PBB and BPHTB[17], as explained earlier, is divided between the provincial

[17]PBB and BPHTB for urban and rural have been decentralised since the enactment of Law No. 28/2009 on Local Tax and Levies.

governments, district/city governments, and the central government under the following formula. Ninety per cent (90%) of the revenue obtained from PBB is allocated to the respective local governments with details as follows:

a) 16.2% is allocated to the province from which the fund originates,
b) 64.8% is allocated to respective districts/cities,
c) 9% is used as collection fees.

The rest of the 10% of revenue-sharing is distributed to other local governments across Indonesia under the following rules:

a) 65% is distributed evenly to all districts/cities, and
b) 35% is distributed as incentives to certain districts/cities which had good fund-generating performance during the previous fiscal year.

According to Law No. 32/2004, Chapter VIII, Article 161 of and Chapter VI, Article 27-29 of Law No. 33/2004, the DAU is an unconditional grant from the central government to local governments aiming to help local governments meet their expenditure needs in implementing decentralisation. Since local governments have differences in their revenue-raising capacity (known as horizontal imbalances), it is likely they also have different capacities in providing public services. Thus, DAU is allocated to correct horizontal imbalances among local governments (Sidik, 2007, p.389). Since there is no condition attached to DAU, the recipient local governments can spend DAU as they choose (Sidik, 2007, p.377). DAU is calculated based on certain criteria emphasising aspects of equity and justice in harmony. The total amount of the DAU shall be at least 26% of the net domestic revenues as reflected in APBN. The DAU should be allocated based on the existing fiscal gap and the basic allocation. Fiscal gap is calculated as the fiscal need less fiscal capacity of the region; the basic allocation, however, should be calculated from the total salaries of the civil servants in the region.

Under decentralisation, all local governments have full autonomy and discretion to allocate funds obtained from the DAU. In addition to DAU, the central government also allocates DAK to local governments. The DAK fund is allocated to finance specific activities in the region that are part of the national priorities and to finance special activities proposed by the region (Law No. 32/2004, Chapter VIII, Article 162). According to Law No. 33/2004, the purpose of the DAK fund includes helping to fund important needs which cannot be estimated in the DAU formula, and to assist with funding expenditures related to national priorities or commitments (Sidik, 2007, p.407). According to Law No. 33/2004, DAK is considered to be a matching grant which means the recipient local governments are required to provide at least 10% contributory funding from their own budgets to the overall amount of DAK given to the region (Chapter VI, Article 41). The contribution funding to DAK required from the local governments aims to establish local government ownership of, and participation in, decisions concerning investments. In addition, the contribution fund is also to encourage the local government to pay attention to local benefits and financial valuations in investment selection and design (Sidik, 2007, p.410).

As mentioned before, under fiscal decentralisation policy, central government assigns functions and responsibilities to local governments. Whether or not local governments can financed the assigned functions by their own-revenue sources is a significant matter. As shown in earlier section, own-source revenues in all districts and cities are very small which implies that their own revenue cannot cover their expenditures. This is called a mismatch between revenue capacity and expenditure responsibilities. To mitigate the mismatch, local governments must seek revenue sources outside their own source, mostly from higher government levels in form of fiscal transfers, either from central or provincial governments. The dependency of local revenue on fiscal transfers from higher government level is known as vertical imbalances (Bahl & Wallace, 2007; Bird, 2010).

Table 5 presents details of total balancing funds which compose of revenue sharing, general allocation funds and specific allocation funds between 2001 and 2008. In principle, districts and city government have discretionary power in the allocation of revenue sharing and general allocation funds, while specific allocation funds are considered as tied funds for which districts and cities have to spend the funds on specific sectors determined by the central government. During this period, total balancing funds have increased steadily from about 68,671 trillion IDR in 2001 to approximately 121,362 trillion IDR in 2008. As be seen in Table 5, a substantial proportion of balancing fund transfers were general allocation funds, dominating balancing funds to districts and cities with average about 74.9% per year between 2001 and 2008. As stated earlier, general allocation funds are provided as an equalisation funds to local governments. Thus, districts and cites which have a relatively low own-source revenues will receive bigger share of general allocation funds. General allocation funds percentages were followed by revenue sharing and specific allocation funds which were approximately 20.4% and 4.6% of central government expenditures per year, respectively.

General allocation funds are spent largely to pay wages and salaries of the government employees and also other bureaucratic and administration cost. Compared to period of the early decentralisation in 2001, specific allocations funds have increased significantly since 2003. Such increase was due to the increase of the national priorities[18] funded with the specific allocation funds. Prior to 2005, specific allocations fund was aimed to finance education sector, health, road, irrigation, government infrastructure, marine and fisheries. After 2005, new sectors had been added to the national priority sectors to be financed by the Specific Allocation Funds. These sectors are clean water and agriculture which were added to the list in 2005, environment sector was added in 2006, family planning and forestry in 2008, and trade and infrastructure of rural areas were listed in the national priorities in 2009 (Decentralisation Support Facility, 2011).

Despite the substantial balancing funds given to districts and cities, the balancing funds are not directly linked to the improvement in local development because majority of the funds are largely spent to cover routine/current expenditure such as salaries and wages (see Figure 8 for comparison on capital and routine/current expenditures). In addition, the dominance share of the balancing funds in district and city governments' revenue in Indonesia indicates an excessive reliance of the local governments on fiscal transfers. When compared to many developing countries in around the world, it is seen that fiscal transfers to local government covers about 60% of their expenditures, while in more developed countries such as OECD countries, fiscal transfers accounted to about 29% of the local governments' expenditures in the Nordic countries and about 46% non-Nordic Europe (Shah, 2007).

Table 5. Balancing funds to district and city governments, (Trillion IDR)

	Revenue Sharing	General Allocation Funds	Specific Allocation Funds	Total
2001	13,864.53 (20.2%)	53,973.11 (78.6%)	833.52 (1.2%)	68,671
2002	15,900.92 (21.3%)	58,362.72 (78.0%)	546.25 (0.7%)	74,810
2003	19,345.34 (21.6%)	66,891.50 (74.8%)	3,154.55 (3.5%)	89,391
2004	21,577.56 (23.4%)	67,989.01 (73.6%)	2,812.22 (3.0%)	92,379
2005	16,914.02 (18.3%)	71,868.27 (77.6%)	3,820.53 (4.1%)	92,603
2006	20,231.37 (14.9%)	106,209.94 (78.3%)	9,285.76 (6.8%)	135,727
2007	38,394.36 (20.7%)	131,213.40 (70.6%)	16,174.63 (8.7%)	185,782
2008	53,531.81 (23.1%)	157,452.51 (68.0%)	20,550.56 (8.9%)	231,535
Average	24,969.99 (20.4%)	89,245.06 (74.9%)	7,147.25 (4.6%)	121,362

Numbers in parentheses are shares to total revenues
Source: own calculation based on data from Ministry of Finance.

The Revenue and Expenditure Provincial Governments

Table 6 presents the total revenues[19] of provinces grouped into five major islands: Sumatera (10 provinces); Jawa and Bali (7 provinces); Kalimantan (4 provinces); Sulawesi (6 provinces); Nusa Tenggara, Maluku and Papua (6 provinces). This grouping shows that there are considerable disparities across islands. It can be seen that provinces in Jawa and Bali have the highest total revenue relative to GDRP among provinces. On average, the total revenue in

[18]The national priorities are stipulated in Article 39, Law No. 33 of 2004 which are further explained in Article 51, Government Regulation No 55 of 2005.

[19]Total revenues compose own-source revenue, balancing funds, and other incomes. Other incomes for provinces are excluded from analysis because not all provinces have generated such incomes during the considered period. Recall that total revenue size of government is calculated as total revenues as a percentage of GDRP in each respective year.

Jawa and Bali Islands accounted to 22.5% between 2001 and 2010. Provinces in Jawa and Bali have also recorded the highest percentage of revenue measured as own-source revenues as a percentage of GDRP with an average about 13.5%, this rate is eight-fold larger than the size of own-revenue sources in all other provinces. The magnitude of the total revenue size and own-source revenues size above of provinces in Jawa and Bali indicates that those provinces are in a better position in term of revenue collections under fiscal decentralisation arrangement. Higher revenue size of provinces in these islands was due to the fact that economic development in the provinces is largely driven by secondary and tertiary economic activities such as manufacturing industry and services[20]. Provinces in Nusa Tenggara, Maluku and Papua are next in terms of the total revenue size of government, with an average at 13.2% in 2001-2010. Total revenue in these islands is largely a result of the substantial amount of balancing funds given to those provinces. As seen in Column 4, Table 6, provinces in Nusa Tenggara, Maluku, and Papua recorded the highest revenue size of government in term of the amount of balancing funds that they received from the central government, about 9.1% during 2001-2010. In the same period, provinces in these islands are not superior in own-source revenues generation as seen in Column 3, own-revenue in Nusa Tenggara, Maluku and Papua has been the lowest amongst provinces, only about 1.4%.

Table 6. Total revenue size of provincial government for main Islands average 2001-2010

Island	Total revenue as % of GDRP	Own-source revenues as % of GDRP	Balancing funds as % of GDRP	
Sumatera	4.9	1.6	2.9	Western
Jawa & Bali	22.5	13.5	8.4	
Kalimantan	4.4	1.6	2.7	Middle
Sulawesi	7.5	1.7	5.5	
Nusa Tenggara, Maluku & Papua	13.2	1.4	9.1	Eastern

Source: own calculations based on data from Ministry of Finance.

Figure 6 shows provinces ranked by the total revenue relative to GDRP between 2001 and 2010. As seen, after nine years of fiscal decentralisation, there is an upward trend of the total revenue in all provinces with overall size was 6.2% annually during 2001-2010. In the early of fiscal decentralisation, in average, total revenue size of provinces stood at 2.6% of GDRP and increased slightly to 3.6% in 2002. A marginal increase in the total revenue size continued in 2003-2004 with an average at 4.3% and 4.8% respectively and become 5.1% in 2005. The total revenue size continued to rise with average of 9.4% in2009, before declining back to 8.9% in 2010.

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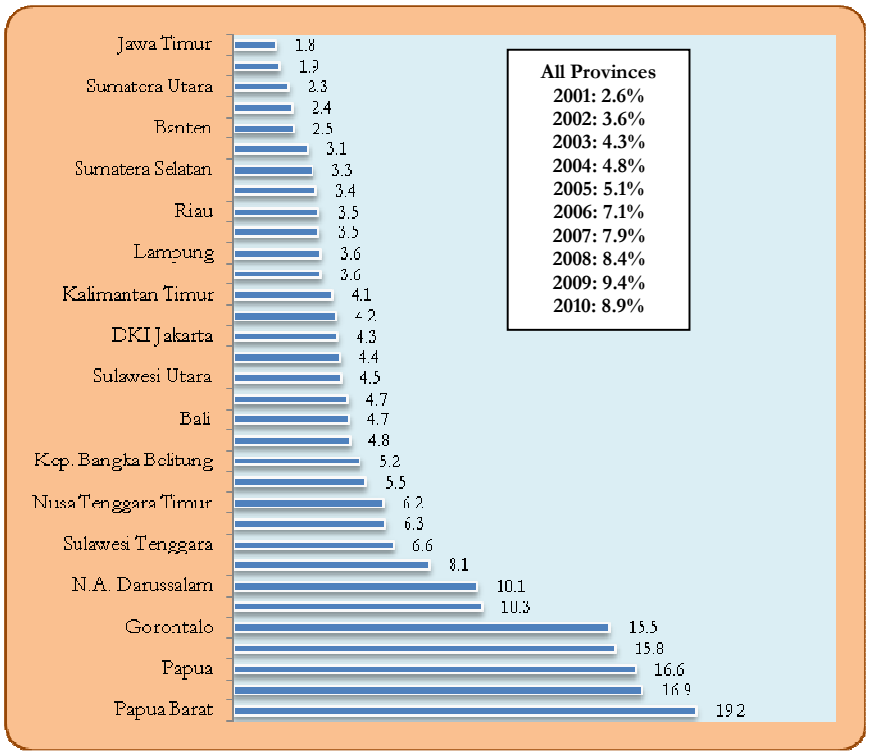
[20] While economic activities in most provinces in other islands are very dependent on natural-resources-related sectors such as agriculture, forestry and mining.

Figure 12. Provinces in Indonesia ranked by total revenue size average 2001-2010



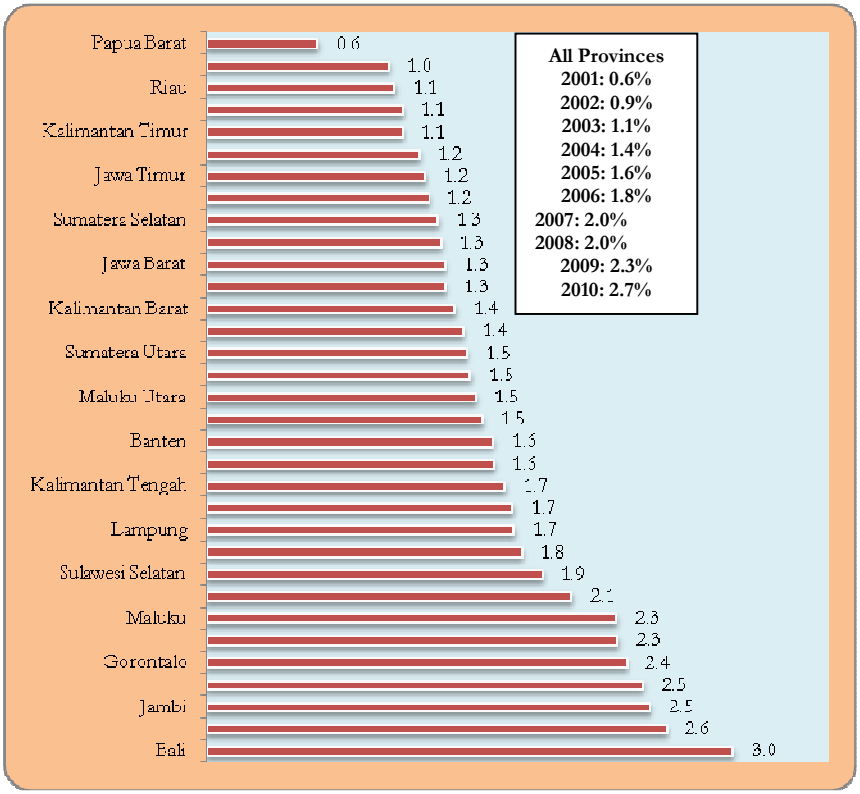
Note: Revenue size for Kepulauan Riau, Sulawesi Barat and Papua Barat is an average from 2004-2010.
Source: own calculations based on data from Ministry of Finance.

As displayed in figure above, provinces which have higher total revenue are located in eastern part of Indonesia. Papua Barat d had the highest total revenue as percentage of GDRP with an average size is 19.2% from 2001 to 2010. This was followed by Papua, Maluku and Gorontalo with average at 16.6%, 15.8% and 15.5% respectively. Whereas Jawa Barat and Jawa Timur that are in western part of Indonesia recorded the lowest average rates of 1.9% and 1.8% respectively. The trend above shows some interesting facts. Five provinces that recorded the highest total revenues as percentage of GDRP are located in the eastern part of Indonesia. Of five provinces, three are new provinces which were established and split off from their "parent" province since the decentralisation era. These are Papua Barat which split off from Papua in 2003, Maluku Utara which was originally part of Maluku before 1999 and Gorontalo that split off from Sulawesi Utara in 2000. This indicates that fiscal decentralisation has substantially increased the total revenue as percentage of GDRP of new provinces in Indonesia. By contrast, five provinces which recorded the lowest total revenues as percentage of GDRP are located in Java and Sumatera that is in the western part of Indonesia. It is important to understand that the higher revenue size does not simply indicate a favourable financial performance; it was largely driven by revenue received from the central government in the form of intergovernmental transfers or balancing funds, as shown in greater detail below.

Figure 13 shows revenue of government is estimated as own-source revenues as a percentage of GDRP. As displayed in the figure, locally raised revenue in all provinces is abysmally low ranging from a low of 0.6% in 2001 to a high of 2.7% in 20010 with an average was only about 1.6% every year. Own-source revenues comprised only 0.9 1% of GDRP in the beginning of fiscal decentralisation and 0.9% in 2002. It had a steady position with an average size above 1% of GDRP but still less than 2% between 2003 and 2006. Own-source revenues rose to about 2% in 2007 and increased further to about 2.7% by 2010. Variation of own-source revenue is quite different than the total revenue as shown in Figure 6. When compared individually, the spatial distribution of the size of own-source revenue does not skew to particular islands. As seen in Figure 13 below, five provinces which have higher of own-source revenues are distributed across different islands ranging from middle part of Indonesia (Bali, 3%), western island (Bengkulu, 2.6%; Jambi and DKI Jakarta, 2.5%) and eastern island (Gorontalo, 2.4%). Across provinces, the lowest size of own-source revenues was in Papua Barat which was only 0.6% between 2001 and 2010. The lowest

size of own-source revenues of this province could possibly due to its status a newly established province and its location is in the most remote area in Indonesia.

Figure 13. Provinces in Indonesia ranked by size of own-source revenues, average 2001-2010



Source: own calculations based on data from Ministry of Finance.

Figure 14 shows the revenue calculated from balancing funds as a proportion of GDRP. In 2001, the size of balancing funds was about 1.6 and reached 6.1% in 2010 with an average rate of 3.9% GDRP during the time. As in the figure, there was a small increase of the size of balancing funds from 2002 until 2005 with an average rates across provinces were approximately 2.6% in 2002, 2.7% in 2003, and 2.8% and 2.9% in 2004 and 2005. Between 2006 and 2007, the size of balancing funds increased from 4.6% to 4.7%, while during the period 2008-2009, the size was unchanged at about 5.5% for all provinces in Indonesia. Spatial variation of the size of balancing funds among provinces as shown in Figure 8 confirms that some new provinces and their parent provinces located in the eastern part of Indonesia had the largest balancing funds. These provinces are Maluku Utara which posted 14.8% of balancing funds as a percentage of its GDRP between 2001 and 2010, Papua Barat (14.6%), Gorontalo (12.4%), Maluku (12.1%), Sulawesi Barat (8.4) and Papua (6%). On the other end of the scale, provinces in the western part of Indonesia such as Jawa Timur, Jawa Barat, and Sumatera Utara showed the lowest size balancing funds which an average size less than 1% from 2001 to 2010.

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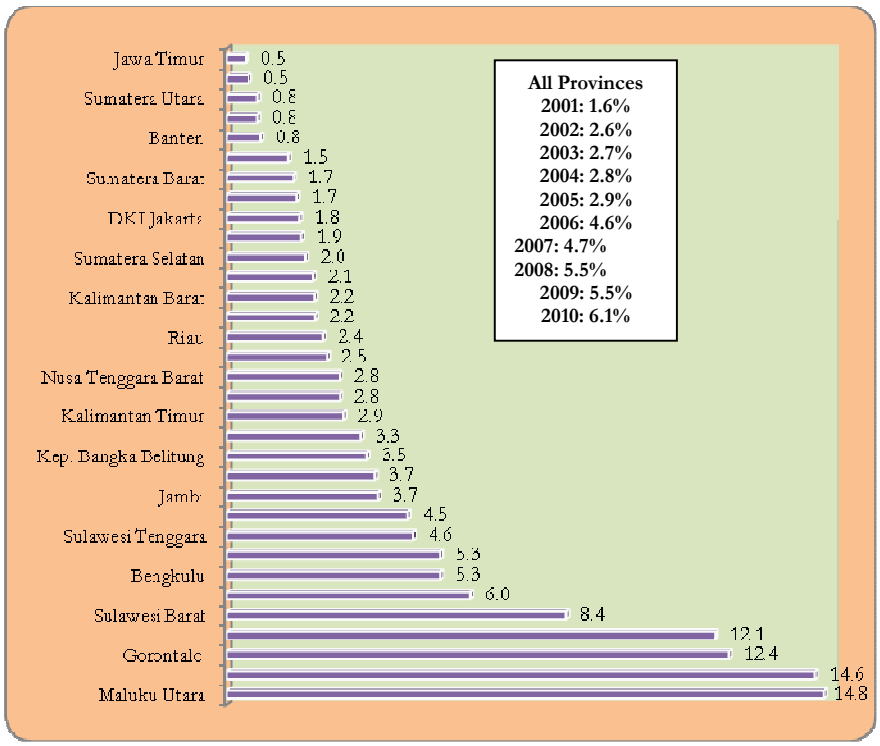
Figure 14. Provinces in Indonesia ranked by the size of balancing funds, average 2001-2010



Source: own calculations based on data from Ministry of Finance.

The total expenditure as percentage of GDRP of all provinces from 2001 to 2010 is presented in Table 7. As seen in the table, there is no significantly difference across provinces in all islands based on their total expenditure. Provinces in Sumatera Island made the highest total expenditures size with an average rate of 4%. While provinces in Kalimantan Island, Sulawesi, Nusa Tenggara, Maluku and Papua Islands had a slightly similar expenditure size with averages range from 3.6% and 3.4% respectively. In contrast, provinces in Jawa and Bali Islands recorded the lowest total expenditure relative to GDRP which accounted only about 2.5%.

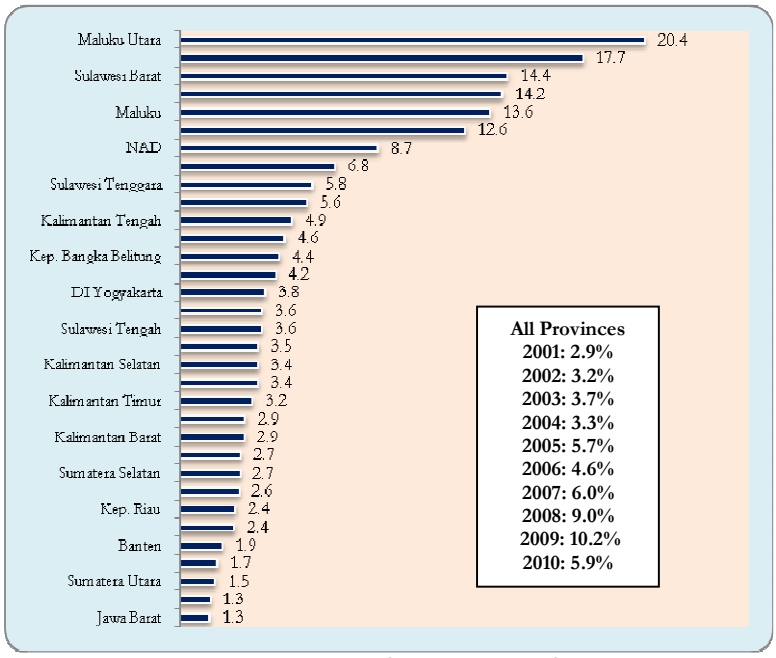
Table 7. Total expenditure as percentage of GDRP of provincial government for main Islands*

Island	Total expenditure as % of GDRP	Capital expenditure as % of GDRP	Current expenditure as % of GDRP	
Sumatera	4.0	2.4	1.6	Western
Jawa & Bali	2.5	1.6	0.9	
Kalimantan	3.6	2.1	1.5	Middle
Sulawesi	3.4	2.1	1.3	
Nusa Tenggara, Maluku & Papua	3.4	2.1	1.3	Eastern

* average 2001-2010
Source: own calculations based on data from Ministry of Finance.

Figure 16 below shows spatial variability of the total expenditure size as percentage of GDRP of all provinces. As seen, the total expenditure of all provinces has been rising since the introduction of fiscal decentralisation. On average, it increased from 2.9% in 2001 to a peak of 10.2% in 2010, before falling back to about 5.9% in 2010. Five provinces which have higher total expenditure size are Maluku Utara (20.4%), Papua Barat (17.7%), Sulawesi Barat (14.4%), Papua (14.2%) and Maluku (13.6%). While provinces which have smaller size of expenditure are in Sumatera and Jawa Islands such as Jawa Barat and Jawa Timur (1.3%), Sumatera Utara (1.5%), Jawa Tengah (1.7) and Banten (1.9%). The skew of the expenditure size of government as in the figure below is makes sense in the light of the higher total revenue size in those provinces as explained earlier.

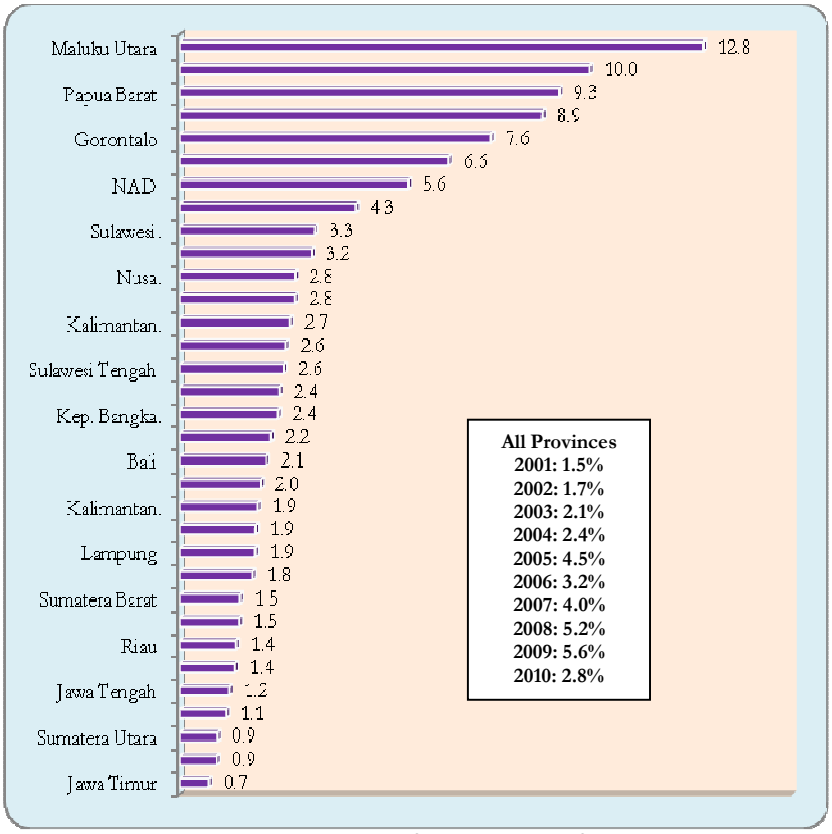
Figure 16. Provinces in Indonesia ranked by total expenditures as percentage of GDRP, average 2001-2010



Source: own calculations based on data from Ministry of Finance.

As indicated, capital expenditure and current expenditures of local government pinpoints the key priorities areas of development of the local governments. Capital expenditure can be categorised as expenditure on assets which consists of land expenditures, building expenditure, and other fixed asset expenditures. While current (routine or operating) expenditure are recurring expenditures which includes wages and salaries expenditures, materials, interest payments, subsidies, grants and social assistance. As shown in Figure 17, capital expenditure across the province fluctuated between 2001 and 2010. In early fiscal decentralisation, all provinces made up only about 1.5% of capital expenditures relative to GDRP and this increased slightly to 1.7% in 2002. A modest increase of capital expenditure was seen during 2003-2004 with average rates in all provinces equivalent to 2.1% and 2.4% of GDRP by annual basis. The size of capital expenditure has increased further from 2005 and reached about 5.6% of GDRP in 2009 before decreasing to 2.8% in 2010. During that period, the size of capital expenditures ranged from 0.7% (the lowest) in Jawa Timur and 12.8% in Maluku Utara (the highest). As indicated, provinces in eastern part of Indonesia, especially Maluku Utara, Sulawesi Barat, Papua Barat, Papua and Gorontalo had higher capital expenditure as percentages of GDRP due to increasing infrastructure development in these provinces.

Figure 17. Provinces in Indonesia ranked by capital expenditures as percentage of GDRP, average 2001-2010

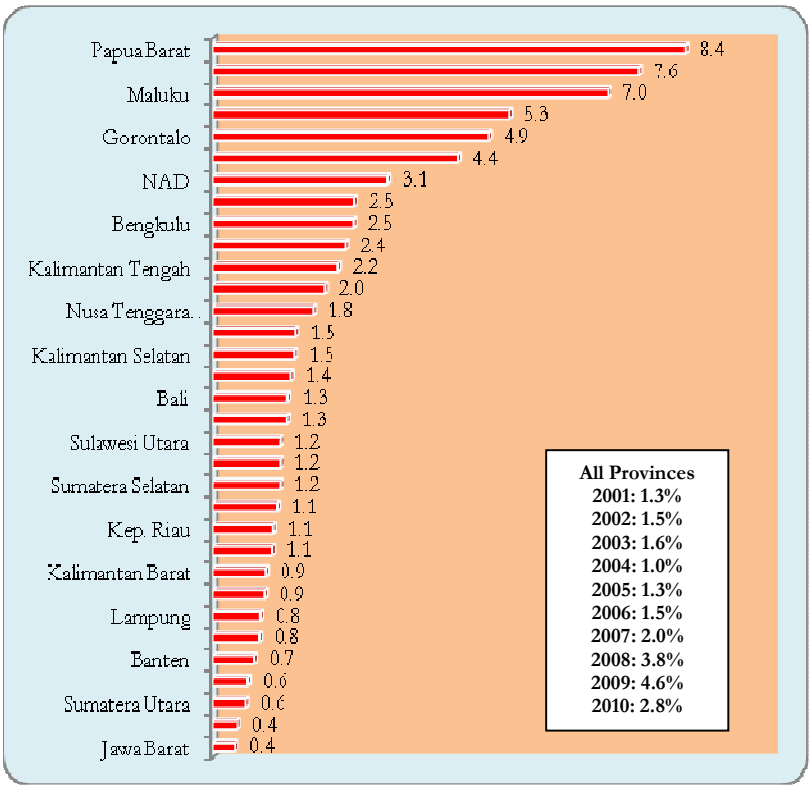


Source: own calculations based on data from Ministry of Finance.

Similar to the size of capital expenditure of provincial government, size of current expenditure also show a modest increase from 1.3% in 2001 to about 2.8% (Figure 18). Accordingly, Papua Barat registered the highest size of current expenditure with an average at 8.4% of GDRP from 2001 to 2008. Higher size of current expenditure is also appeared in Maluku Utara (7.6%), Maluku (7%) and Papua (5.3%). Current expenditure was fairly low in Jawa Tengah and Jawa Barat which represented only 0.4% of GDRP. Based on analysis on the size of capital expenditure and current expenditure as percentage of GDRP above, it can be concluded that the expenditure size of provincial government in Indonesia is considerably small with an average less 4.5% on annual basis[21].

[21]Research on the optimum size of expenditure of government is very limited which leads to an absence of the theoretical and empirical agreements on the optimum level of the size of expenditure of government. As for comparison, Chobanov and Mladenova (2009) found that the optimum size of government in OECD countries is no more than 25% of GDP. Using a normal distribution to determine the optimum size of government measured as public expenditure as a percentage of GDP, Ekinci (2011) suggested that the minimum level of expenditure as a percentage of GDP should be at 4.55%, while the optimum level at 13.4% which was the case in some developed countries such as UK, USA and the European countries, the optimum expenditure size of government was approximately 13.4%, while the maximum expenditure as a percentage of GDP should be no while the maximum expenditure as a percentage of GDP should be no greater than 31.7%. Based on data of 23 OECD countries, Witte and Moesen (2010) claimed that the optimum size of government is at 41.22 % of GDP.

Figure 18. Provinces in Indonesia ranked by current expenditures as percentage of GDRP, average 2001-2010



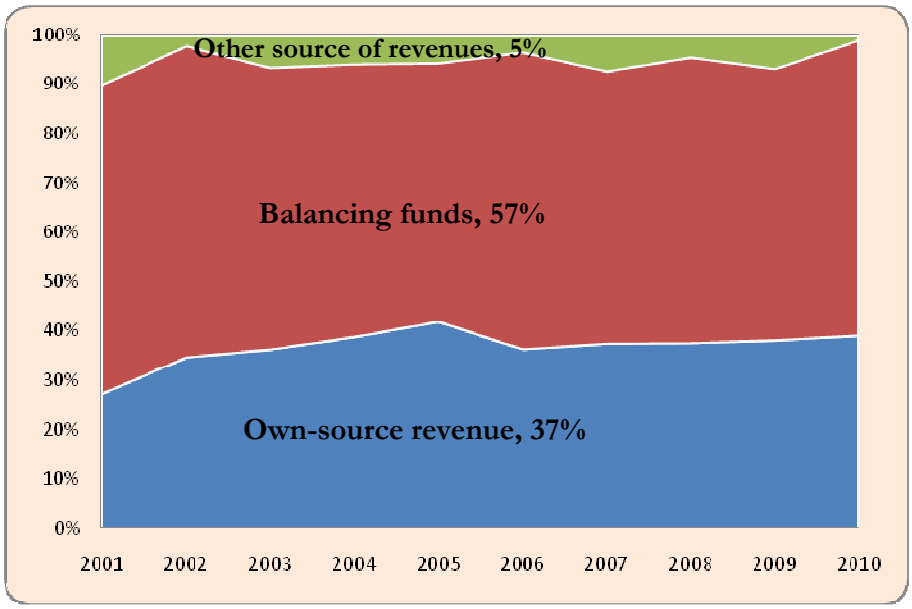
Source: own calculations based on data from Ministry of Finance.

Revenue Decentralisation and Financing Capacity of Provincial Level

Provincial government's total revenues consist of own-source revenues, balancing funds; and other sources of revenue[22]. In reality, provincial governments cannot make the most of their capacity to optimize their revenues from own-source revenues. In 2001-2002, total balancing funds was about 62.5% and 62.9% of the total provincial revenue respectively. At the same period, own-source revenues made between 27.3% and 34.7% of total revenues. For three years between 2003 and 2005, the proportion of the balancing funds in provincial revenue was slightly decreased to 57%, 55.2% and 52.3% respectively. Provincial governments continued to receive a significant amount of balancing funds in between 2006 and 2010 with steady contribution from 2006 to 2010 with proportion less than 40% of total revenues, but it made 41.9% of the total revenues composition in 2005. The dominant proportion of balancing funds in provincial revenue indicate clearly that balancing funds, which were merely supposed to be subsidiary funds to local budgets, has functioned as one of the main sources of revenues of provincial governments which may also has substitute the function of provincial's own revenues to finance provincial expenditures. Overall, balancing funds from national level to provinces constituted more than half of total provincial budgets with proportion to total revenues about 57% from 2001 to 2010 (Figure 19). Own-source revenue contributed about 37% and other revenues made up only about 5% of the provincial revenues at the same period.

[22] Other sources of revenues include grant, emergency fund and other income. But in general, such revenues are significantly smaller than own-source revenues and also balancing funds.

Figure 19. Structure of provincial revenue, average, 2001-2010



Source: own calculations based on data from Ministry of Finance.

The higher proportion of balancing funds indicates that provinces are more dependent upon intergovernmental transfers, hence revenue sharing from tax and non-tax, general allocation funds and also specific allocation funds. It implies that provincial governments also had not been able to increase their revenue raising power as deliberately designed under fiscal decentralisation. As stated previously, the dependency of provincial budgets upon balancing funds from central government could be as the result of a very long period of centralised revenue collection by the central government in Indonesia. As a result, the fiscal decentralisation policy which ideally provides opportunities and encourages local governments to become financially independent from fiscal transfers has not led to significant change. Lack of financial capacity and the past centralised revenue collection system have contributed to the fiscal dependency of local governments on transfers from central government. This is shown by a large vertical fiscal gap which is compensated with balancing funds from central government to local government, including provinces as shown in Table 8.

Table 8. The structure of provincial revenues, average 2001-2010 (%)

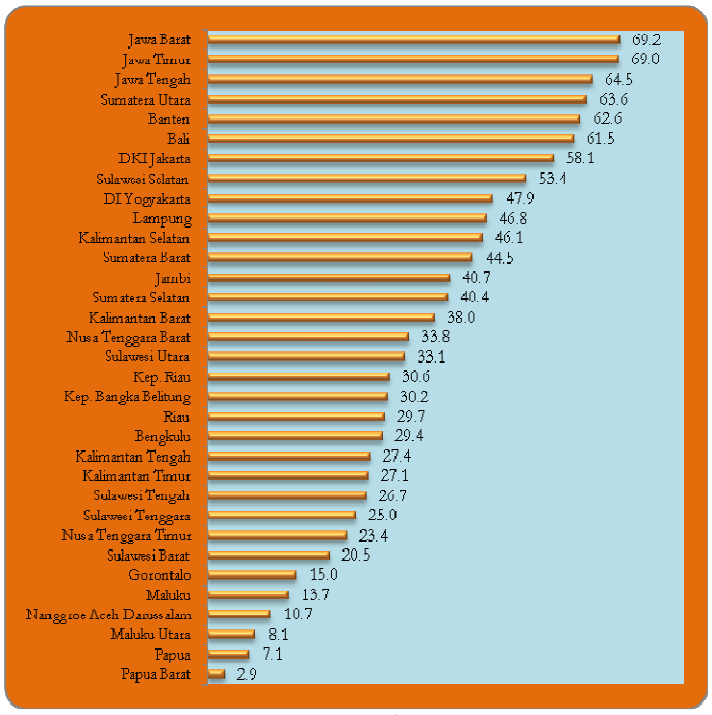
	Own-source revenues	Balancing funds	Other source of revenues
2001	27.3	62.5	10.1
2002	34.7	62.9	2.3
2003	36.3	57.0	6.7
2004	38.8	55.2	6.0
2005	41.9	52.3	5.8
2006	36.3	60.1	3.6
2007	37.5	55.1	7.4
2008	37.6	57.8	4.6
2009	38.2	55.0	6.9
2010	39.1	59.7	1.1

Source: own calculations based on data from Ministry of Finance.

Spatial variation in the own-source revenues generation across provinces in presented in Figure 20. This reveals a significant difference in the revenue raising power among provinces in different islands, especially between western part of Indonesia and eastern part of Indonesia[23]. Provinces such as Jawa Barat, Jawa Timur, Jawa Tengah and Sumatera Utara are the most developed provinces in Indonesia. In these provinces, economic development is significantly higher than other provinces which contribute to the higher GDRP and economic development and eventually will contribute to higher local revenues. As shown, five provinces which had greater proportion of own-source revenues in their total revenues are located in Jawa Island (Jawa Timur, Jawa Tengah, Jawa Barat, and Banten) and Sumatera Island (Sumatera Utara).

Among 33 provinces, on average, Jawa Barat and Jawa Timur had the highest own-source revenues in the total revenue which accounted almost 70% between 2001 and 2010. Sumatera Utara and Banten also had considerable performance of revenue power where 65% and 64% of their total revenue came from own-source revenues respectively. Some important factors which could explain the difference in the provincial capacity in revenue making locally are the wide gap in fiscal resources and poverty rate among provinces across Indonesia. As found by the World Bank (2009), regions which have higher fiscal resources and lower rate of poverty as well as high GDRP tend to have higher own-source revenues than regions with lower fiscal resources and higher poverty rate. By contrast, regions with higher poverty and lower GDRP have less own-source revenues and higher dependency upon balancing funds from central government. These provinces include Papua Barat, Papua and Maluku Utara which collected own-source revenues less than 9% every year between 2001 and 2010.

Figure 20. Revenue decentralisation*, average 2001-2010 (%)



* calculated as own-source revenues as % of total revenue.
Source: own calculations based on data from Ministry of Finance.

[23] This finding supports view of the regional inequality of economic development between Jawa Island and outside Jawa (particularly eastern part of Indonesia). About 80% of the Indonesian economy is occurred in the provinces in these islands, while other provinces only made small contribution to Indonesian economy (Kuncoro, 2013).

As explained earlier, under fiscal decentralisation policy, central government provides balancing funds to local governments in order to create financing balancing between central and local governments (provinces and districts/cities), and also amongst local governments. The balancing funds comprise general allocation funds, specific allocation funds and revenue sharing funds. Specifically, general allocation funds aim to finance administrative and other costs associated with new functions performed by local governments under the decentralisation policy. This fund includes financing wages and salaries as a basic allocation[24], while the specific allocation grants aim to finance development sectors identified as national priorities (Shah, Qibthiyyah, & Dita, 2012). On the other hand, revenue sharing was developed to meet aspiration from the local level to have more access and control over local revenues, to stimulate mobilisation of revenue at local level and also to equalise fiscal imbalances (Sidik & Kadjatmiko, 2002).

As shown in Table 9, general allocation funds constitute the biggest proportion of total balancing funds with an average about 64.9% between 2001 and 2010. This is followed by revenue sharing funds of approximately 32.9% and special allocation funds about 2.2% between 2001 and 2010. Between 2001 and 2003, general allocation funds made up about 67% of the balancing funds before declining to around 65.3% and 59.8% in 2004 and 2005 respectively. The amount of general allocation funds being transferred to provincial governments continued to increase in 2006 to a peak of 70.6% in 2007, falling to about 65.2% and 55.8% in 2008-2009 and to 55.8% in 2010. The higher proportion of general allocation funds in the provinces' revenue indicates that provinces are not yet financially independent. Rather, the provinces remain heavily dependent to the central government as more than half of their revenue came from general allocation funds. Based on these facts, it could be argued that providing the funds to local level which was meant to overcome either vertical or horizontal fiscal imbalances among government tiers has failed.

Some criticisms have emerged of the general allocation funds being transferred to local governments. One criterion in determining the amount of general allocation funds is the level of own-source revenues of each local government. Provinces which have higher own-source revenues will receive small general allocation funds, by contrast, province that have lower own-source revenues will receive bigger amount of general allocation funds. This approach creates disincentives to provinces to raise their own-source revenues since an increase in own-source revenues is offset by decrease in general allocation funds composition (Shah, Qibthiyyah, & Dita, 2012, p.7)[25]. In addition, the general allocation funds to provinces have been used largely to finance wage and salaries of civil service while only a small portion has been allocated as financial equalisation among local governments[26]. As the result, the local governments spend less on capital and infrastructure spending that can promote local development (OECD, 2012; Decentralisation Support Facility, 2011). Hence, the aims of the general allocation fund to reduce regional imbalances and regional disparity in development have not been achieved. If this practice continues in the future, it is anticipated that local governments will still be highly reliant upon transfers from central government and the regional disparity, especially between rich regions and poor regions will continue to worsen.

Prior to the implementation of fiscal decentralisation, the central government enjoyed more taxes and natural resources revenues collected from provinces in Indonesia. This was due to a centralised revenue collection, while provincial and district/city government had less opportunity to collect taxes in their regions (Shah, 2012, Shah, Qibthiyyah, & Dita, 2012). Since the fiscal decentralisation law was imposed, one of the key issues of the local budget has been the financing capacity of local governments; whether they could finance their own expenditure responsibilities from their own revenue sources, financing capacity. The extent of the financing capacity of

[24] Basic allocation is to be used to finance wage and salary of the government employees. This arrangement is made due to significant transfers of government employees from central government to provinces, districts and cities since the decentralisation era. Salary and wage of such employees are mostly paid by the general allocation funds under the basic allowance formula. The basic allocation in general allocation fund was actually relative similar with the scheme of subsidy to autonomous regions (Subsidi Daerah Otonom) which given to local government to finance wage and salaries prior to decentralisation in 2001. In addition to SDO, local government also received Dana funding from central government under President Instruction which so-called Dana Inpres which used to finance some development sectors such as education, health and infrastructure with local jurisdictions.

[25] Under the current formula, actual revenues are used as opposed to potential revenues to calculate the own-source revenues of each local government in general allocation funds formula. This technique has created disincentive to local governments in improving their own revenue collection locally because any increase in taxes collection that lead increase of own-source revenues will offset by decrease in general funds entitlements to be received (Shah, Qibthiyyah, & Dita, 2012, p.9).

[26] Local governments may be very reluctant to develop efficiency in their administration, for example by tighten personnel size due to the basic allowance which they receive in general allocation funds. As analysed by Fadliya & McLeod (2010) local governments do not have willingness to reduce or avoid the number of their personnel as any reduction in the personnel costs such as wage and salaries will be offset by an equal reduction in the general allocation funds.

provincial governments is well above that of district and city governments. In the early days of fiscal decentralisation the total expenditures of provincial governments was 23.9 trillion IDR, and their own-source revenue was only 9.9 trillion IDR. Hence own-source revenue covered only about 41.5% of the provincial expenditures. The financing capacity of provincial governments increased over the following years and peaked in 2009.

Table 9. Financing capacity of provincial governments (Trillion IDR)

	Own-source revenues	Total expenditures	Financing Capacity (%)
2001	9,941	23,968	41.5
2002	14,232	30,652	46.4
2003	17,727	33,545	52.8
2004	22,576	32,034	70.5
2005	27,905	57,243	48.7
2006	30,553	47,037	65.0
2007	35,108	63,256	55.5
2008	37,277	76,934	48.5
2009	42,507	105,595	40.3
2010	56,267	51,364	109.5
Average	29,409	52,163	57.9

Source: own calculations based on data from Ministry of Finance.

Intergovernmental fiscal transfers to Provincial Governments

Under fiscal decentralisation, local governments, especially those producing regions, are receiving higher amounts of taxes and natural resources revenues. According to fiscal decentralisation law, local governments will receive shares of revenues from taxes and natural resources which collected by the central government from their jurisdiction disproportionally where producing regions receive higher amount of the revenue collected. As a result of this arrangement, natural-resources rich regions, which are mostly located in Kalimantan Timur, Papua and Riau, will gain substantial amount of revenue sharing. Taxes shared consist of property tax (land and building tax, or PBB, acquisition rights to land and buildings tax (BPHTB) and personal income tax, while natural resources revenue comes from forestry, fishery oil, gas, and general mining. As indicated in Table 10, revenue sharing between the central and provincial government is also considered as an important component of balancing funds ranging from 27.7% and 40.4% with an average about 32.9% annually between 2001 and 2010.

Revenue sharing fluctuated from 2001 to 2010. In 2001, revenue sharing was about 31.7% of the balancing funds, falling to 29.5% in 2002 before increasing back to about 31.2% and 34.5% in 2003 and 2004 respectively. In 2005, the revenue sharing increased significantly to about 40% of the balancing funds due to increase in the oil price since revenue sharing from oil provides the biggest contribution to revenue sharing from natural resources. Revenue sharing funds decreased to about 32.7% in 2006, 27.7% in 2007, and 29.9% in 2008 before increasing to 31.4% and 40.4% of the total balancing funds in 2009 and 2010. This increase was due to the increase in the land and building tax sharing and also increase in the general mining sharing during that period (Francis, 2012). Specific allocation grants made the least proportion of the balancing funds accounted to about 2.2% every year during 2001 to 2010. The amount of specific allocation funds was relatively until 2007. During that period, the specific allocations fund can only be used to finance education sector, health, road, irrigation, government infrastructure, marine and fisheries. Since 2008, the specific allocation fund had considerably increased due to the increase of the areas of development under the national priorities[27] that can be funded with the Specific Allocation Fund. In 2008, the new sector that can be funded with specific allocation funds were family planning, forestry and trade, while in 2009,

[27]The national priorities are stipulated on Article 39, Law No. 33 of 2004 which further are explained on Article 51, Government Regulation No 55 of 2005.

infrastructure of rural areas were also added (Decentralisation Support Facility, 2011). Although specific allocation funds transferred to provinces were significantly lower than the general allocation funds, the specific allocation funds have been more effective than the general allocation fund in boosting capital spending at local government level (Lewis, 2013). Between 2003 and 2009, every additional rupiah of the special allocation given to local government created approximately 1.20 rupiah of capital expenditure, while an additional rupiah in general allocation funds only stimulate about 0.09 rupiah increase in the capital spending at local level (Lewis, 2013, p.9).

Table 10. Composition of balancing funds at provincial level, average 2001-2010 (%)

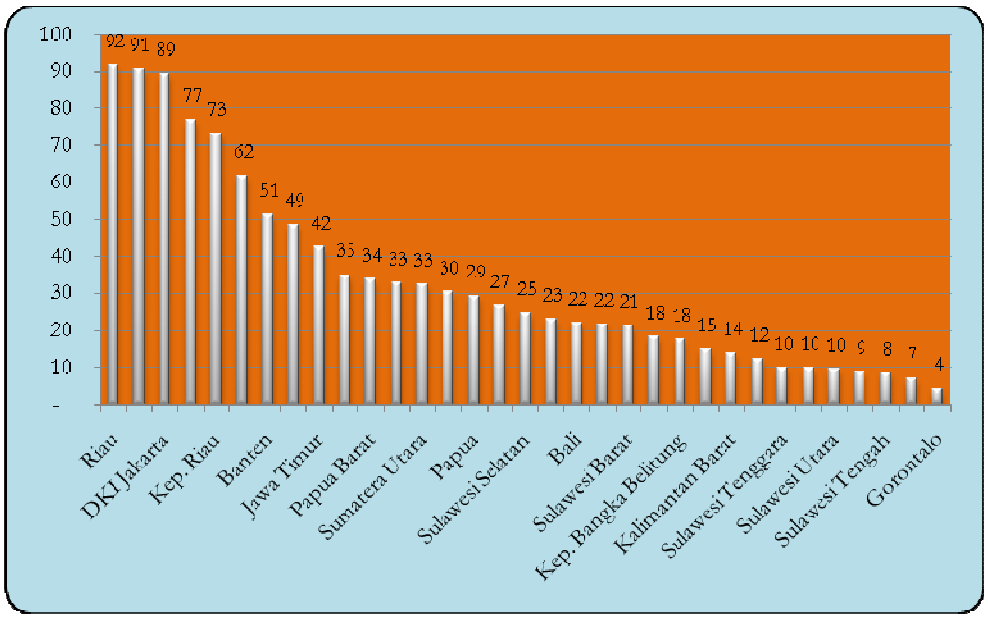
	General Allocation Fund	Specific Allocation Fund	Revenue Sharing Funds
2001	67.3	1.0	31.7
2002	67.0	3.5	29.5
2003	67.1	1.7	31.2
2004	65.3	0.2	34.5
2005	59.8	0.1	40.0
2006	67.2	0.1	32.7
2007	70.6	1.7	27.7
2008	65.2	4.9	29.9
2009	63.4	5.2	31.4
2010	55.8	3.8	40.4

Source: own calculations based on data from Ministry of Finance.

The following discussion addresses the dynamic of revenue sharing and general allocation funds across provinces in Indonesia. Specific allocation funds are excluded from the analysis as most local governments only began to receive the specific allocation funds by 2009. Due to the disproportionate arrangement of the revenue sharing, it is anticipated that natural-resources rich provinces will gain more benefit from revenue sharing shown by the proportion of revenue sharing in their balancing funds. As seen in Figure 21, it is evident that natural resources rich provinces, except for DKI Jakarta, have gained substantial amount of revenue sharing. Five provinces on the top of revenue sharing proportion include Riau, Kalimantan Timur, Nanggore Aceh Darussalam and Kepulauan Riau which split off from Riau in 2004.

Riau, which has abundant oil and gas resources and contributes substantial amount of the oil and gas output in Indonesia, has the highest proportion of revenue sharing with approximately 92% of its balancing funds coming from the revenue sharing during 2001 and 2010. Another province which obtained huge revenue sharing is Kalimantan Timur. As one of the major producers of oil and gas in Indonesia, Kalimantan Timur recorded about 91% of revenue sharing between 2001 and 2010.In the next place was DKI Jakarta where about 89% of the balancing funds received by the province were from revenue sharing. Between 2001 and 2010, DKI Jakarta received significant amount of revenue sharing from taxes. As a centre of economy activity and development and also a very densely populated area, DKI Jakarta is one of the provinces which grow faster than the national average growth (Kuncoro, 2013). As such, it has been able to collect substantial revenues from various taxes in its jurisdiction; hence, one can say that DKI Jakarta is an income tax-rich province. Nanggroe Aceh Darussalam and Kepulauan Riau also obtained significant revenue sharing from oil and gas which more than 70% of their balancing funds from 2001 and 2010. By contrast, natural-resources poor provinces which are mostly located in the eastern islands of Indonesia have gained no more than 10% revenue sharing every year from 2001 and 2010. Of five provinces with the least revenue sharing, four are located in eastern of Indonesia including Gorontalo (4%), Sulawesi Tengah (8%), Nusa Tenggara Timur (9%) and Sulawesi Utara (10%). Bengkulu was the only province in Sumatera that received an abysmally low revenue sharing.

Figure 21. Provinces in Indonesia ranked by revenue sharing as a percentage of respective balancing funds*



* average, 2001-2010

Source: own calculations based on data from Ministry of Finance.

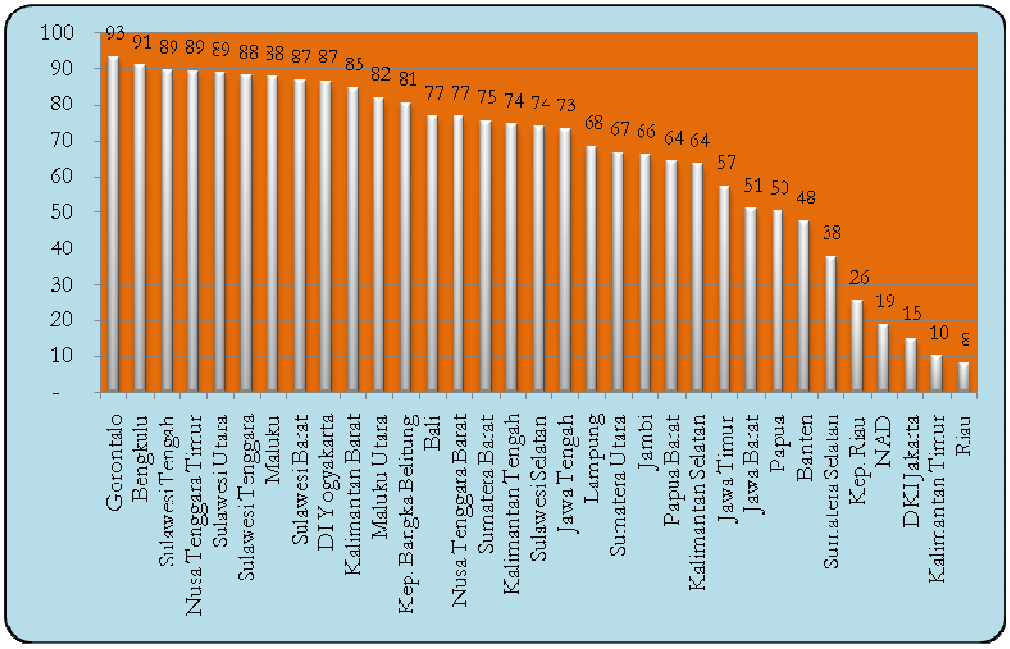
As discussed earlier, one fiscal issue of the implementation of fiscal decentralisation in Indonesia is the higher dependency of most local governments' budget on intergovernmental fiscal transfer from the central government. Rich regions had benefited from the revenue sharing arrangement, while poor regions have not been able to maximise local revenue sources. Figure 22 shows that provinces which had smaller revenue sharing in their balancing funds indeed received larger amount of general allocation funds. Gorontalo and Bengkulu which received the lowest general allocation funds from 2001 to 2010 were the top recipients of general allocation funds which constituted more than 90% of the balancing funds at the same period. Sulawesi Tengah, Nusa Tenggara Timur and Sulawesi Utara had more 80% of their balancing funds from general allocation funds.

Provinces which received higher revenue sharing will receive less general allocation funds, vice versa, is partly due to the fiscal gap approach used on the intergovernmental fiscal transfers in Indonesia. The fiscal gap approach determines the amount of general allocation funds given to particular local government by calculating the fiscal capacity (own-source revenues and revenue sharing) and fiscal need (number of population, size area, construction price index, GDRP, and Human Development Index) in each respective local government (Law No. 33/2004, Article 28).Based on the fiscal gap approach, the general allocation funds received by province will vary depending on the size of fiscal needs and fiscal capacity. If fiscal capacity is larger than its fiscal needs in one province, then the province will receive zero general allocation funds. This implies that higher fiscal needs compared to fiscal capacity will be offset by a higher general allocation funds.

Despite the new arrangement on the balancing funds under fiscal desentralisation policy which meant as one of policies to achieve fiscal equalization, horizontal and vertical imbalances seem to be an issue across local governments in Indonesia. This could be explained with some reasons. First, the formula in determining the balancing funds was simply based on fiscal gap approach. Under the formula, there would be an asymmetric or an opposite direction in the amount of two major sources of balancing funds: revenue sharing and general allocation funds. As shown by an algebraic analysis of balancing funds in Fadliya and McLeod (2010), any amount of balancing funds received as revenue sharing is deducted from the general allocation funds entitlement to be tranferred to each local governments. Therefore, natural-rich resources local governments which receive higher share of revenue sharing from natural resources revenue collected within their regions are able to cover their basic allowance (wage and salaries). As a result, the larger revenue sharing received by the rich regions is offset by reduction in their general allocation entitlements. Second, rather to use the balancing fund, especially the general allocation funds, to reduce the fiscal imbalances across local governments, the general allocation funds as the major

component of the balancing funds are largely allocated to finance routine expenditure such as wage and salaries. This could exacerbate fiscal imbalances and regional disparities across Indonesia in the future.

Figure 22. Provinces in Indonesia ranked by general allocation funds as a percentage of balancing funds*



* average, 2001-2010
Source: own calculations based on data from Ministry of Finance.

Concluding Remarks: Sustainability and Local Development under Fiscal Decentralisation

The practice of decentralisation in Indonesia has shown that various reforms have affected the arrangements of authority and financial responsibility between the central government, and the local governments (province and district/city). One objective of such fiscal decentralistion is to improve fiscal capacity of local government by raising own-source revenues thus increase the financing capacity of local governments. However, the study on practice of fiscal decentralization in Indonesia has not indicated an improvement on the public financing capacity of local governments. Results from local budget analysis show that a higher proportion of balancing funds in the total revenue of local governments indicating that local governments are largely financed by fiscal transfers from higher government levels. As such, one can argue that local governments fail to increase revenue locally and mobilise local economy on their own resources. Although there are increasing trends on total local government revenues, but such increase does not necessarily imply improvement of financing capacity of local governments, because the local governments can only generate a small amount of own-source revenue to finance their expenditure. Local budgets rely heavily on balancing funds from central government, the balancing funds are not directly linked to the improvement in local development because majority of the funds are largely spent to cover routine/current expenditure of the local governments.

Dependency of local governments on fiscal transfers from the central government is mainly driven by a large gap between fiscal capacity and fiscal needs of local governments in Indonesia. In the long run, this would lead to fiscal mismatch or fiscal unsustainability. One consequence of such a mismatch is the dominant role of intergovernmental transfers in local budgets that influencing local governments performance in delivering decentralised functions given to them. Furthermore, intergovernmental transfers from the central government to local governments are generally given to ensure that local governments can achieve the basic priorities of the development goals set by the central government in all local government areas, not to finance the local specific-development goals. A higher fiscal mismatch is an evidence of a weakness of fiscal sustainability which refers to the ability of local governments to

finance expenditure using own-source revenues and at the same time reduce dependency on fiscal transfers from higher levels of government (Bird, 2003). Fiscal sustainability also indicates long-term ability of government to fulfill their responsibilities to stakeholders, community (Chapman, 2008). If local governments have not been able to achieve fiscal sustainability, it will affect their ability to implement public services provision at local jurisdictions which at the end would hinder the local economic development and sustainable provision of public services.

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