

**FISCAL DECENTRALIZATION: A CASE OF INDONESIA**

**By**

**Maman Suhendra**

**THESIS**

Submitted to  
KDI School of Public Policy and Management  
in partial fulfillment of the requirements  
for the degree of

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**Professor Jeong-Ho KIM**

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## **ABSTRACT**

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Using 214 out of 440 data set in 2004, it is found that most of local governments in Indonesia showed poor performance in generating local own revenues. Some reasons can explain this situation. Beside the weak local taxation power, the dominant role of central government in revenue-generating also led to the poor performance. However, the Indonesian decentralization is still in process toward the more ideal form. The “big-bang” decentralization approach has changed one of the most centralized countries into one of the more decentralized ones without any significant interruption.

**Dedicated to Emak, Ummi, Abang, and Adek**

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## List of Abbreviations

APBD	Regional Budget
APBN	National Budget
Bappenas	National Development Planning Agency
Bapekki	Agency for Economic and Finance Research, and International Cooperation
DAK	Special Allocation Grant
DAU	General Allocation Grant
DIPENDA	Local Tax Agency
DJAPK	Directorate General of Budget and Finance
DPRD	Regional Council
FY	Fiscal Year
Kab. (Kabupaten)	Regency/Rural District
Kota	Municipality/Urban District
MPR	Consultative Assembly
PAD	Regional Own Revenue

# CHAPTER I

## INTRODUCTION

### **I.1 Background**

Indonesia has implemented decentralization since January 1, 2001. Upon a radical and rapid decentralization program, regional autonomy is transforming one of the most centralized countries in the world into one of the more decentralized ones. If managed well, Indonesia will benefit greatly from decentralization.

The transition to a significantly more decentralized mode of governance was smooth. Many indicators showed the well-going transition process. First, local governments assumed responsibility for their new functions as scheduled. More than 2.5 million civil servants were successfully reassigned to the jurisdiction of sub-national governments. Second, the central government has continuously increased the pool of resources transferred to sub-national governments, both in relative and absolute terms. Third, in 2004 the second round of democratic elections, at both national and sub-national levels took place without any major interruptions and local governments are now headed by democratically elected mayors. Finally, at the same time, the most significant risks associated with decentralization were minimized. The transition also did not result in a breakdown of service delivery chains, neither triggered macro-economic instability. However, there are some

crucial issues come into consideration such as the weak local taxing power, the controversial intergovernmental transfers, and the low local accountability for service delivery.

## **I.2 Objectives of the study**

The objectives of this study are to examine the recent fiscal decentralization process in Indonesia and to identify the problems arisen by the decentralization program. Several recommendations will be suggested as policy alternative for the government, both national and sub-national level.

More specifically, this study aims:

1. To provide a brief description of the fiscal decentralization process in Indonesia since the beginning up to the recent.
2. To assess the current fiscal decentralization status in Indonesia.
3. To understand the local government (district-level) financial ability.
4. To figure out some issues and problem in the fiscal decentralization program.
5. To give several recommendations on the problems arisen in the fiscal decentralization program.

## **1.3 Methodology**

Methods used to examine the study's objectives are both descriptive qualitative and quantitative methods, in that all information and data collected are critically examined and described in order to achieve the

research objectives. Type of data collected is secondary data. The secondary data is collected from institutions and agencies including Ministry of Finance, National Development Planning Agency, and Central Statistics Agency at provincial and regency/municipality levels. The purpose of collecting secondary data is to provide a description of the fiscal decentralization trend and progress of local governments since 2001. Others related information and secondary data are also collected from many sources.

#### **1.4 Outline of the Study**

The outline of the thesis is divided into five chapters. The second chapter deals with the theoretical concept of fiscal decentralization. It provides an overview of the basic concept of decentralization. Furthermore, it guides to the ideal view of decentralization.

Chapter three examines the fiscal decentralization in Indonesia. In this chapter, a brief trend and progress of the Indonesian fiscal decentralization will be discussed. This chapter will lead to the concise (but adequate) understanding in the decentralization program from the past up to the recent.

Chapter four then examines how to manage the fiscal decentralization better for Indonesia context. Lessons, issues, and problems will be discussed, so that it will be clear how to optimize the benefit of fiscal decentralization to the Indonesians.

Finally, chapter five discusses conclusion and recommendation for the better decentralization program. It will figure out the existing crucial issues in

the Indonesian decentralization policy. Some recommendations then will be suggested as alternatives for the future decentralization policy.

## CHAPTER II

### THEORITICAL CONCEPT

#### II.1 Decentralization: Pros and Cons

Decentralization has been proposed as a way of managing conflict that arises from politicized cultural pluralism (Crook 2002). Rubinfeld (1994) quoted that decentralization allows individuals a variety of bundles to choose among, as well as two means of expressing preferences: voting within a jurisdiction and migrating between jurisdictions. The advantages of decentralization correspond to the advantages of the competitive market system; to the extent that there exists competition, it can be expected that decentralization outcomes will be economically efficient because sub-national governments are better positioned than central government to deliver public services as a result of information advantage. Therefore, decentralization has been promoted not only to accommodate cultural diversity but also to enhance democracy, mollify separatist tendencies, help restrain a central government from excessive concentration of power, foster economic development, improve government efficiency, and facilitate modernization. These powerful arguments help explain why decentralization has become so popular in the recent decades.

Some, however, have advanced counterarguments that challenge some of the promising conclusions or, at least, outline conditions in which



decentralization could be less attractive policy (Tanzi 1995). As stated by McLure (1995), decentralization is not a panacea. It is subject to limitations, many of which Tanzi (1995) described. In fact, fiscal decentralization tends to detach spending decision further from taxing decision. Tanzi (2000), Prud'hume (1995), and Alesia and Perotti (1995) warned that sub-national governments may overspend in anticipation of receiving additional resources from general purpose grant. Geographically dispersed interests also present the danger that some sub-national governments to the central government could collude to extract more resources from general purpose grant allocation. Thus, they point towards efficiency and equity considerations whereby decentralization could lead to problems of macroeconomic management. Therefore, if decentralization is done badly, it could cause undesirable consequences, leading to macroeconomic disequilibrium, exacerbating regional differences and conflicts, reducing welfare, and economic efficiency. But if done well, it could promote many economic benefits as well, producing greater efficiency, responsiveness, and accountability in the service delivery desired by citizen. Moreover, it could improve welfare by increasing citizen participation in decisions that affect them.

Prud'homme (1995) described that decentralization is fashionable today. Many discussions about centralization and decentralization relate with capitalism and socialism. The trick of Marxist economist was so simple. They did not compare actual capitalism with actual socialism – and thus they had an easy time to prove the socialism's superiority. Similarly, many people

today compare actual centralization with ideal decentralization. They see that in many developing countries, centralization has failed to deliver welfare and democratization process to society. They look at theories of decentralization, mostly based on the US, Canada, and European countries experiences. They conclude that decentralization is highly desirable. On the other hand, their perception of failures of centralization is much more acute in Latin America, Africa as well as East Asia countries. As stated by Rubinfield (1994) that the assumption of competitive market system in which public goods and services are provided in multiple jurisdictions is not equivalent to the model of the perfectly competitive economy. Thus, the miserable consequence that must be anticipated is decentralization does not ensure efficiency.

Tanzi (2000) claimed that, in all decentralized countries, similar problems tend to arise. He concludes that decentralization has not worked well, except in the most developed countries such as Canada, Germany, Switzerland, and the United States. The question then, the political economists leave with a difficult choice; should they support a decentralized fiscal economy without the first-best welfare theorems, or should they urge centralization which introduces a new set of political complication and a new set of potential inefficiency? In addition, the World Bank (2001) also warned that the risks of decentralization may lead to the following situations:

- Macroeconomic stability is threatened by lack of fiscal discipline at decentralized level leading to higher government debt.

- Inefficient service provision at local level due to decentralization of corruption, unqualified staff, and unbridled spending by local authorities.
- Unequal development opportunities for regions (and for individual population groups in the region) due to different costs of service provision in the regions despite the same tax revenue base and lack commitment of decentralized government agencies to poverty reduction and compensatory social transfer payment.
- Developing democracy, securing peace, and finding long-term solutions to conflict are jeopardized by nepotism and consolidation of local elite, increasing of local corruption, insufficient consideration of the losers in the decentralization process, dissatisfaction within population due to deteriorating local service provision and perpetuation of ethnic divisions, reinforcement of autonomy movements, weakening of central government, and new lines of conflict or exacerbation of ongoing conflicts, even hostilities.

Based on the above controversy arguments, although decentralization may be rather simplistically defined as opposite of centralization, the concept is far more complex in reality, not least because in the real world perfect decision autonomy and hence pure decentralization do not exist (Leonard 1982). Decentralization then must be understood as a process, rather than as a final goal or objective that can be fully attained in a set period of time. Instead of being something that can be accomplished, it must be regarded as a series of measures that are followed in an attempt to eliminate or at least to reduce

over concentration.

## **II.2 Economic Rationale of Decentralization**

The fundamental theorem of welfare economics – Adam Smith’s “invisible hand” – implies that in the absence of market failure, the economy will be Pareto efficient. Individuals, acting in their own self-interest, will make decisions that lead to Pareto efficiency. Competition among producers leads them to supply the goods that individuals want at the lowest possible cost.

An analogous argument can be made for the provision of local public goods and services by state and local governments as distinct from federal government. It is argued competition among communities will supply and produce goods and services in an efficient manner. The theory of fiscal federalism suggests that decentralization improves public service delivery because of greater allocative efficiency (matching public goods to local preferences), as well as improved productive efficiency (in part because of greater accountability, less bureaucracy, and better knowledge of local costs), and better cost recovery (greater willingness of citizens to pay fees and taxes for improved public services). Against this, some have argued that decentralization may lead to local decisions that have adverse inter-jurisdictional spillovers and undermine national policy objectives, and that the advantages of greater authority for local government could be offset by elite capture.

The allocative efficiency analysis (Oates 1972) holds that local

governments will likely be better able to match public goods to local preferences than will higher-level governments. The sub-national governments are closer to the people than the central government. They are thought to have better information about the preferences of local populations than the central government (Hayek 1945, Musgrave 1959). Hence, they are expected to have better information about variations in demands for goods and services. Moreover, under decentralization authority moves to jurisdictions that encompass less social diversity and fractionalization. For these reasons, sub-national governments are also considered to be more responsive than central government.

Another strand of the argument is that decentralization is thought to increase the likelihood that governments respond to the demand of the local citizens by promoting competition among sub-national governments. This can be obtained from a model developed by Charles M. Tiebout (1956). Tiebout points out that level and mix of local expenditures and taxes are likely to exhibit wide variations among local political jurisdictions. Therefore, many citizens will choose to live in communities whose government budget best satisfies their own preferences for public services, given that they are not restricted in their mobility among communities. Thus, government expenditure and revenue patterns tend to be set on the local level; and the mobile citizens maximizes his well-being by choosing to live in some particular political jurisdictions.

Tiebout was originally concerned with the problem of preference

revelation. While individuals reveal their preferences for private goods simply by buying goods, how are they to reveal their preferences for public goods? When individuals vote, they choose candidates who reflect their overall values, but they cannot express in detail their views about particular categories of expenditures. Only limited use of referenda is made in most states. And even if individuals were asked to vote directly on expenditures for particular programs, the resulting equilibrium would not, in general, be Pareto efficient. Tiebout argued that individuals could “vote with their feet”, that their choices of product reveal their preferences for private goods.

Tiebout’s model suggests that competition among communities is not only healthy, but necessary to attain Pareto optimality. But there is another view of competition among communities which is far more negative. This view sees different communities competing to attract business, with the associated tax base and employment opportunities. Gains in one community are partly at the expense of losses in other communities. But more generally, the competition to attract businesses is the ultimate beneficiary. In this perspective, it would appear preferable for communities to agree not to compete. People would congregate together, and services would be provided at minimum cost. No cost differences could persist across localities offering identical services because people would naturally gravitate from high-cost to low-cost towns. In effect, the market for local services would be perfectly competitive (Tresch 1981; Hyman 1993; Stiglitz 2000).

### **II.3 Fiscal Decentralization Requires Significant Local Government Taxing Power**

Fiscal decentralization should be viewed as a comprehensive system. The system covers both necessary and desirable conditions. The necessary conditions include: 1) elected local council; 2) locally appointed chief officers; 3) significant local government discretion to raise revenue; 4) significant local government expenditure responsibilities; 5) budget autonomy; and 6) a hard budget constraint transparency. In addition, the desirable conditions comprise: 1) freedom from excessive central expenditure mandates; 2) unconditional transfers from higher-level governments; and 3) borrowing powers.

Voters will hold their elected officials more accountable if local public services are financed to a significant extent from locally imposed taxes, as opposed to the case where financing is primarily by central government transfers. To do so, the tax must be visible to local voters, large enough to impose a noticeable burden, and the burden must not be easily imported to residents outside the jurisdiction (Bahl 1999).

Furthermore, to capture the benefits of fiscal decentralization, Bahl (1999) suggested that there must be significant local autonomy given not only on the expenditure side but also on the taxing side. If local governments do not have the power to set tax rates, then their officials cannot be held fully accountable by voters for the quality of public services delivered. In addition, it is also necessary for local councils and chief officers to be elected. Otherwise,

they will not be accountable to the local voting population, and the efficiency gains of decentralization will be lost.



## CHAPTER III

### FISCAL DECENTRALIZATION IN INDONESIA

#### III.1 Long Way toward Decentralization

Indonesia is a nation of huge territorial area. It has not only enormously diverse ethnic and cultural groups but also different resources endowments from one region to another. As a consequence, the economic development levels differ considerably. In all this diversity, Indonesia has sought to build nationhood since its independence in the form of unitary state, with a strong sentiment of aversion towards the notion of federalism deeply rooted in its history of struggle for independence.

However, given the vastness of, and diversity in, the country, the need for decentralizing government function has long been recognized, although with a varying intensity. There existed fluctuation between decentralization and centralization in the political thinking and sentiment. But, generally speaking, in the earlier days of Republic, the attempts made have been mostly for deconcentration of government functions to satisfy diverse regional needs.

In 1970s, there was a more serious effort to promote regional development and to decentralize as a means of doing so. Following the MPR State Guidelines and the second 5-Year Development Plan for 1973-1978, Law 5 of 1974 on Regional Autonomy was passed. However, the effort was brought to an end. The law was never followed up by any government

regulation for implementing it, in spite of the fact that the next third 5-Year Plan also gave pertinent emphasis to regional development.

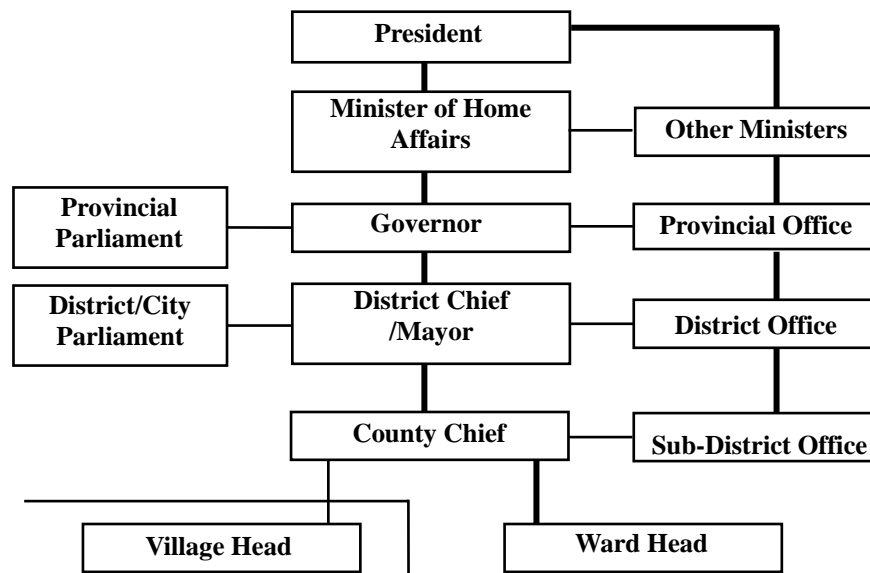
Law 5 of 1974 has been the principle means by which Indonesia's regions have been governed for almost 30 years. Before the decentralization policy of the late 1990s, the organizing principle in intergovernmental relations was strictly hierarchical with the central government exercising significant control not only over the appointment of local officials but also over the use of funds for each sub-national government. Sub-national governments mainly functioned as implementing agencies of national policies and programs. As a result, officials in local governments faced strong political and fiscal incentives to be accountable upwards to superiors at higher levels of governments rather than to their communities. With regard to the performance the highly centralized fiscal structure increasingly contributed to reduce accountability, adversely affected the rates of return on public sector projects, and constrained the development of local institutions (Van den Ham and Hady 1998). As Dick and Jaya observed, "... despite initial high expectations, Law 5 of 1974 did not reverse the trend towards the centralization of political and financial power ...." (Jaya and Dick 2001).

In addition, Law 5 of 1974 emphasized autonomy in the second level of regional (i.e. regency/municipality) governments since this level was closer, in general, to local society than the central government. Therefore, regency/municipality in theory played an important role in providing services to the public. However, due to the highly hierarchical structure of the

Indonesian government at that time, this law did not work well and seemed to be useless. The Regional Assembly (DPRD) had no power as a community agent in representing public interests. In addition, most government expenditures did not match with public needs and preferences. As a result, the local people kept their distance from officials and considered them as outsiders. That's why it was difficult for the local people and government officials to develop a functional relationship and cordial communications (Matsui and Kuncoro 2003).

The figure of inter-governmental relationship under law no. 5/1974, or the so-called "old system," can be described as follows:

**Figure III.1**  
**Inter-governmental Relationship under the Old System**



Source: Matsui and Kuncoro (2003)

This chart shows the clear vertical-order relationship. By exploiting this relationship, the central government could control regencies/municipalities.

Such a top-down approach, from center to province, from province to regency/municipality, from regency/municipality to sub-district/county, and from sub-district to ward or village, was the common means by which policies had been implemented. Even though provincial and district government had local autonomous functions, final decisions were still determined by the central government. Provincial governments received tasks from the central government, which were delegated downwards to the regency/municipality level. These were then further delegated downwards to the sub-district level, which finally delegated them to the village/ward-level.

In conclusion, under Law 5 of 1974 the central government was the most powerful institution, and the country became highly centralized since the Minister of Home Affairs (as the central government representative) controlled all regional affairs and activities. Furthermore, at the regional level governors had great stature as the heads of territorial units and enjoyed higher positions than the heads of district government. As the only executive branch manager in every region, the governors had the authority to control, manage, lead, supervise, as well as coordinate subordinates in their region. Laws had been used as instruments for the government to dictate and order the lower levels of government or society. Laws were utilized for political purposes; therefore at that time, Indonesia was far from democratic. Despite of the implementation of decentralization, first-level regional governments and even second-level regional governments had limited authority to

organize and manage their own regions or districts. In fact, the objective of delegating increased responsibility to the first and second level of regional governments was to implement centralization from the center. It was also used by the central government to mobilize local resources without allowing local governments to manage and organize their own resources.

Law 22 of 1999 on Local Government Administration and Law 25 of 1999 on Central and Local Fiscal Balance have changed the inter-governmental relationship. These two laws are used as the legal basis for the decentralization process in Indonesia by establishing a stronger role for district-level governments (regencies and municipalities) as opposed to province-level governments (Brodjonegoro and Asanuma 2000). Since Law 22 of 1999 was enacted, Indonesia has changed drastically from a highly centralized government to a very heavily decentralized system (Usui and Alisjahbana 2003).

### **III.2 Fiscal Decentralization: Objectives and Recent Status**

In Indonesia, the implementation of the fiscal decentralization program are intended to: (1) increase national allocation and regional government efficiency; (2) meet regional aspirations, improve overall fiscal structure, and mobilize regional and therefore national revenues; (3) enhance accountability, increase transparency, and expand constituent participation in decision-making at the regional level; (4) lessen fiscal disparities among regional governments, assure the delivery of basic public services to citizens across the

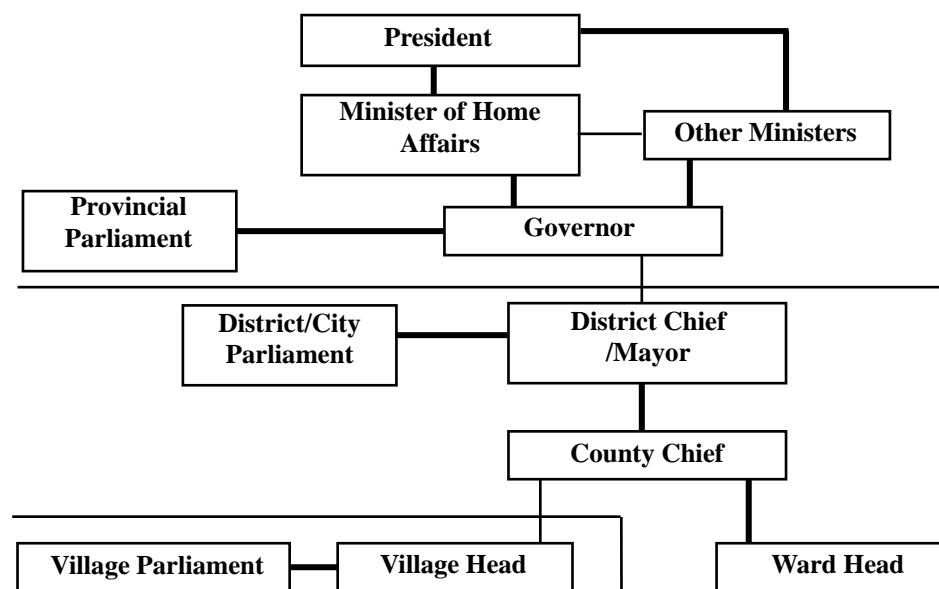
country and promotion of government efficiency objectives; and (5) improve social welfare of Indonesians.

Law 22 of 1999 eliminated the hierarchical relationship between provincial and district governments. The regency/municipality governments, so-called Kabupaten and Kota, have more authority to govern their own districts. As government has three important functions (i.e. stabilization, distribution, and allocation), the central government will take responsibility for the first two functions, while regional governments (provinces and districts) will implement the third function.

According to Law 22 of 1999, district governments have total administrative authority except for five sectors: 1) defense and security, 2) monetary and fiscal policy, 3) diplomacy, 4) religion, and 5) judiciary. Local government authority covers all sectors other than those conducted by the central and provincial governments (Usman 2002). At the other side, the autonomous authority of provincial governments includes power over matters that cannot be or have not been handled by the districts. These include inter-district government coordination as well as control over certain other fields of governance. The provincial administrative authorities include all administrative authority given to governors. Moreover, according to Government Regulation 25 of 2000, the central government only creates decisions and planning related to the principal and basic things (policy and guidance), while provincial governments create more concrete plans for broader regional development (Matsui and Kuncoro 2003).

As stated by Smoke (2002), even though many decentralization laws are officially promulgated, the central government (especially certain ministries) is still reluctant to transfer its authority fully to local governments. Theoretically, the hierarchical relationship between provincial and local governments, after inaugurating Law 22 of 1999, has been eradicated, and all local governments have become fully autonomous and responsible for planning, management, financing, and delivery for various sectors. However, although provincial governments also act as autonomous regions, they still maintain their hierarchical relationships with the central government (Usui and Alisyahbana, 2003). Figure 2.2 describes the inter-governmental relationship under the new system.

**Figure III.2**  
**Inter-governmental Relationship under the New System**



Source: Matsui and Kuncoro (2003)

Law 22 of 1999 has changed the nature of vertical linkages in the government system. According to this law, the hierarchical relationship between

provincial and district government (regency/municipality) is no longer clear. The implementation of deconcentration<sup>1</sup> has occurred only up to the provincial level, in which provincial governments cannot overstep their responsibilities by ordering district governments to take certain actions.

Compared to the old system, the structure of local government organization in the new system has changed quite substantially. Some district governments are becoming larger while others have grown smaller. By this fact alone, we can observe that the uniform local government organization of the past no longer exists today. Every regency/municipality has a different organizational structure. In addition, because of decentralization, provincial governments are not as powerful as before, while local governments (regencies and municipalities) play a more important role in planning and development due to their proximity to the local populace.

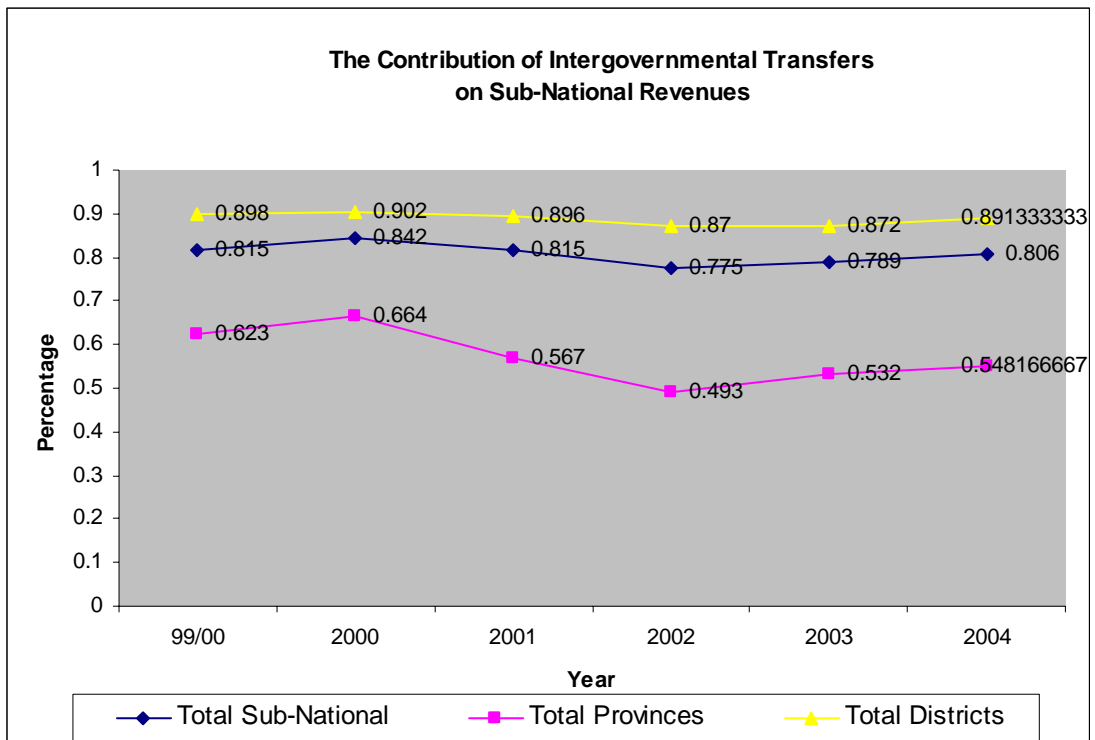
Even though decentralization has continued since 2001, and local governments have the higher priority, most of their sources of funding are still dependent upon the central government. In fact, dependency on the central government has increased since the start of decentralization. Monetary transfers, in nominal and real values, from the central government to the sub-regions increased from FY 2001 to the recent FY 2005, even though the central government's expenditures did not decrease.

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<sup>1</sup> Deconcentration is a delegation of authority from the Government or Head of the Territory or Head of the Vertical Office of the Government to its government officials (Law 25 of 1999).



Figure III.3



Source: DJAPK, Ministry of Finance

As depicted by Figure III.3, the transfers from the central government, consisting of shared revenue, general allocation fund (DAU), and special allocation fund (DAK) are the major sources of funding for sub-national governments. The figure shows that the districts are more relied on the intergovernmental transfers than the provinces. On average, the districts relied almost 90 percent on the intergovernmental transfers to fund their expenditures. On the other hand, the provinces relied only about 55 percent on average on the transfers. In addition, as can be seen in the following table, the total national spending for the sub-national levels increased during the five years implementation of the decentralization.

**Table III.1****Sub-National Spending in the State Budget  
FY 2000 to 2005**

Fiscal Year	Sub-National Spending (Rp trillion)	GDP (Rp trillion)	% of GDP	National Revenues (Rp trillion)	% of National Revenues	National Spending (Rp trillion)	% of National Spending
2000	32.9	997.0	3.30	205.6	16.00	220.8	14.90
2001	82.4	1615.7	5.10	305.2	27.00	355.2	23.20
2002	94.5	1688.0	5.60	302.0	31.30	343.8	27.50
2003	116.9	1948.0	6.00	336.2	34.77	377.5	30.96
2004	119.0	2017.6	5.90	349.9	34.02	373.4	31.88
2005	129.9	2201.7	5.90	378.2	34.35	392.8	33.07

Source: DJAPK, Ministry of Finance

Furthermore, according to Usui and Alisjahbana (2003), the key objective of decentralization is to make public service distribution more responsible for fulfilling local needs by moving public decisions closer to society. To do so, there are two principles that must be satisfied: (a) Functions should follow capacities. This implies that local governments should have enough human resources capacity to fulfill their newly delegated functions. (b) Revenues should follow functions. This means that there should be a reasonable balance between expenditure responsibilities and revenue instruments available to local government.

According to Law 25 of 1999, afterward revised by Law 33 of 2004, there are several revenue instruments that can be used to fund the expenditure assignments. Among the revenue instruments, transfers still remain the main source of local government revenues, but as will be discussed later that the current system relies primarily on untied transfer (general allocation fund - the DAU) over which local governments have full discretion. Specifically, the current revenue framework defines four principle

revenue categories (1) Regional Own Revenues, consisting of tax and non-tax revenues; (2) the intergovernmental transfers, consisting of the shared taxes and revenues, the general allocation grant (DAU) and the special allocation grant (DAK); (3) loans and other forms of local borrowing; and (4) other local revenues. The main thrust of the decentralization policy was on the devolution of expenditure responsibilities. The tax assignments remain largely unchanged by the decentralization policy. All significant tax bases, including value added tax (VAT), personal, and corporate income taxes remain under the control of the central government.

In this and next chapter, regional own revenue and intergovernmental transfers will be discussed deeper since their relative importance in understanding the Indonesian fiscal decentralization policy.

**Table III.2  
The Regional Budget Composition**

REGIONAL BUDGET	
<b>Revenue Side (1)</b>	
<i>Regional Own Revenue</i>	xxxxx
<i>Intergovernmental Transfers</i>	xxxxx
<i>Others</i>	<u>xxxxx</u> xxxxxx
<b>Expenditure Side (2)</b>	
<i>Various Kinds of Spending</i>	xxxxxx
<b>Financing Side (1)-(2)</b>	
<i>Various Kinds of Financing</i>	xxxxxx

Source: Law 25 of 1999

### III.3 Regional Own Revenue (PAD)

Local taxing power could be reflected in the regional own revenue. In the era of decentralization the revenue from this source, ideally, must be increasing over time. However, some empirical evidences showed that the regional own revenues from local governments in Indonesia were still very small compared to the total local revenues.

**Table III.3**  
**The District Own Revenue Contribution from Total Revenues**  
**Before and After Decentralization Era**

Region	Before Desentralization (%)			After Desentralization (%)		
	98/99	99/00	<i>Average</i>	2001	2002	<i>Average</i>
Java	14.2	12	13.1	8	13.2	10.6
Non Java	8.5	8.2	8.4	6	7	6.5
Java plus Non Java	10.6	9.8	10.2	6.7	9.4	8.1

Source: Bapekki, Ministry of Finance

In the beginning period of decentralization, the average regional own revenue contribution was decreasing. Overall, the contribution before decentralization was 10,2 from total revenue while after decentralization was 8.1 percent. It means that there happened a 2.1 percent decrease in the own revenue contribution. In other words, the fiscal ability to fund expenditures decreased in the beginning period of decentralization. However, in the decentralization era, the nominal amount of own revenue increased significantly compared to periods before the decentralization era. The average own revenue before decentralization was Rp 7.9 billion. This amount changed to Rp 21.5 billion in the decentralization era (170.2 percent increase). Before decentralization, the own revenue growth was only 7.7 percent, while in the decentralization era was 68.3 percent. This fact shows that the local

governments have done significant efforts to find out the revenue sources seriously.

It is important to note that the non Java region showed lower efforts than Java region. This is because the economic activities in Java are much bigger than non Java. In addition, Java has adequate infrastructures and human resources to support such activities.

**Table III.4**  
**Average District Own Revenue before and after Decentralization**  
(Rp million)

Region	Before Decentralization			After Desentralization				Average Growth (%)	
	98/99	99/00	Growth (%)	Average	2001	2002	Growth (%)		
Java	11,452	14,048	22.7	12,750	24,001	50,138	108.9	37,069	190.7
Non Java	5,791	5,830	0.7	5,810	12,797	17,499	36.7	15,148	160.7
Java + Non Java	7,691	8,285	7.7	7,988	16,088	27,077	68.3	21,583	170.2

Source: Bapekki, Ministry of Finance

Before decentralization, the local tax growth was 31.4 percent while user-charge growth was -11,6 persen. In the decentralization era, the growth changed to 87.8 percent and 24.5 percent, respectively.

**Table III.5**  
**District Own Revenue Components before and after Decentralization**  
(Rp million)

Region	Before Decentralization			After Decentralization		
	98/99	99/00	Growth (%)	2001	2002	Growth (%)
<b>Java</b>						
Local Tax	4,083	5,777	41.5	9,204	26,463	187.5
User-Charges	5,347	6,372	19.2	10,270	12,752	24.2
Profit from Local Owned Enterprises	319	390	22.2	519	1,154	122.4
Others	1,703	1,509	-11.4	4,008	9,769	143.7
<b>Non Java</b>						
Local Tax	2,802	3,594	28.2	6,395	8,199	28.2
User-Charges	2,232	1,419	-36.4	3,093	3,871	25.1
Profit from Local Owned Enterprises	119	160	34.2	260	487	87.5
Others	637	657	3.1	3,049	4,941	62.1
<b>Java + Non Java</b>						
Local Tax	3,232	4,246	31.4	7,221	13,559	87.8
User-Charges	3,278	2,899	-11.6	5,202	6,477	24.5
Profit from Local Owned Enterprises	186	229	22.8	336	683	103.3
Others	995	912	-8.4	3,330	6,358	90.9

Source: Bapekki, Ministry of Finance

Local tax and user-charge are the main sources in the regional own revenue in Indonesia. Sub-national taxation is regulated by Law 34 of 2000 on regional taxes. There are four provincial taxes, 1) motor vehicle tax, 2) motor vehicle transfer tax, 3) fuel excise tax, and 4) ground water extraction and use tax. For local government, there are seven kinds of taxes, 1) hotel tax, 2) restaurant tax, 3) street lighting tax, 4) advertisement tax, 5) entertainment tax, 6) mining tax for class c minerals and 7) parking tax. The tax bases and caps are determined by the national government. In relation with these, the sub-national government can set their rates up to the determined caps.

**Table III.6**  
**Sub-National Taxes**

Type of Tax	Level	Tax Base	Cap
Motor Vehicle Tax	Provincial	Based on Vehicle Value (annual)	5%
Motor Vehicle Transfer Tax	Provincial	Based on Vehicle Re-Sale Price (annual)	10%
Fuel Excise Tax	Provincial	Based on Fuel Consumption (Retail Price excl. VAT)	5%
Water Excise Tax	Provincial	Based on Water Consumption	20%
Hotel Tax	Local	Based on Turn Over	10%
Restaurant Tax	Local	Based on Turn Over	10%
Entertainment Tax	Local	Based on Turn Over (Admission Price)	35%
Advertisement Tax	Local	Based on Advertisement Rent	25%
Street Lighting	Local	Based on Electricity Consumption (Retail Price excl. VAT)	10%
Mining of C-Class Minerals	Local	Based on Market Value of Extracted Minerals	20%
Parking Tax	Local	Based on Parking Fees	20%

Source: Law 34 of 2000, (Worldbank 2003), PWC (2005)

Furthermore, Art 2 of Law 34 of 2000 states that local governments have the right to impose new local taxes as long as these taxes comply with eight general “good tax” principles:

- They are taxes, not levies.
- Tax base is located in the region and immobile.
- Taxes do not conflict with public interest.
- Tax base is not taxed by provincial and national taxation.
- Adequate revenue potential.
- Taxes do not exert economic distortions.
- Equity concerns are taken into account.
- Environmental sustainability is taken in account.

Law 33 of 2004 also prohibits local governments from establishing own revenue sources that impose high costs on the economy or restrict the mobility of people and goods and services across (internal) borders or constrain (international) imports and exports. This provision was introduced in reaction to imposition of taxes on interjurisdictional trade by some local

governments. The right to impose new taxes and user charges is a new sub-national authority introduced by Law 34 of 2000 and was accompanied by fears of mushrooming local taxes. In order to prevent the issuing of a plethora of sub-national charges and taxes, review and retrospective approval by the central government is required. The oversight function resides with an inter-ministerial review team of the Ministry of Home Affairs and Ministry of Finance. To deal with such problem, the government is currently preparing a revision of Law 34 of 2000, which apparently includes a positive list of local taxes and user charges in order to reduce the administrative burden of the review process and prevent inefficient taxation practices. The following table shows how Indonesian local revenue is administered.

**Table III.7  
Indonesian Local Revenue Administration**

- Revenues are administered according to a multilevel model:
  - The central government administers national taxes.
  - Local tax agencies, generally known as DIPENDAs, play a minor role in administering the property tax.
  - Vehicle and vehicle transfer taxes are jointly administered by the provincial DIPENDA, the national police (as the coordinator), and a state-owned insurance firm.
- Regional own revenues are administered directly by DIPENDA's of the cities, regencies, and provinces except for street lighting and fuel taxes. However, by issuing permits and licenses, local departments actually collect the user charges coordinated by the DIPENDAs.
- The administrative performance of the DIPENDAs varies widely.
- DIPENDAs have few cooperative agreements or information exchanges with other agencies within the same government, except for property tax field offices of the Directorate General of Taxation.
- DIPENDAs may use a certain percentage of total tax revenues to pay allowances to staff, despite the fact that these bonuses are not usually based on performance.
- The quality of tax administration varies. Most DIPENDAs receive takes directly in their offices, while others use partially government-owned



regional development banks.

- One of the highest priorities of most DIPENDAs is developing the ability to professionally audit taxpayers, considered the weakest link in the system. The approach to taxpayer auditing varies by local government. DIPENDAs tried to introduce information technology in the early 1990s, but few local governments are still operating the computer systems because of lack of training.

Source: World Bank, 2005

### **III.3.1 Recent Performance of District-Level Own Revenue**

To understand the recent regional own revenue performance for the district-level governments, a research was conducted. Considering the data availability and consistency, this research used 214 out of 440 local governments' data in FY 2004. This amount is relatively adequate to represent all districts in Indonesia since it covered all provinces in Indonesia.

The focus of the research is to portrait the performance of local own revenue collection for FY 2004, the fourth implementation year of decentralization. This research is important because in the future, ideally, the local governments should not very much rely on the intergovernmental transfers to support the spending as happened up to the recent. The local governments should seek the way to optimize the revenues from own-sources. This effort should be done because the intergovernmental transfers are more fluctuated than the local own revenues (Bappenas 2003). The intergovernmental transfers could be difference from time to time due to the existing policy or the other factors. Therefore, it is quite important to increase the role of the local own revenue on the local spending to guarantee the fiscal

sustainability for the localities. Similar research for provincial-level governments has been conducted by National Development Planning Agency (Bappenas) in 2003. At that time, it was found that in FY 2002 most of the provinces had poor performance in generating the regional own revenues.

In 2004, the average own revenue growth was 25.24 percent. It means that the local government could increase the own revenue growth to slightly more than a quarter on average from the previous fiscal year (2003). Unfortunately, from 214 local governments, 50 local governments had negative growth (See Appendix A.1). Another interesting finding is that non-Java local governments could lead the own revenues growth. This means that they performed well-efforts to identify their own revenues then executed well-organize management to capture the sources. The following table shows the fact.

**Table III.8**  
**More than 100% Growth in District Own Revenue**

No.	Regency/Municipal	Province	Own Revenue Growth (%)*
1	Kab. Aceh Tamiang	NAD	437.70
2	Kab. Penajam Paser Utara	Kaltim	367.55
3	Kab. Aceh Barat Daya	NAD	334.00
4	Kab. Paniai	Papua	310.12
5	Kab. Fak-Fak	Papua	261.39
6	Kab. Lombok Tengah	NTB	221.99
7	Kota Ambon	Maluku	167.73
8	Kab. Banyuasin	Sumsel	136.72
9	Kota Tanjung Pinang	Riau	129.56
10	Kab. Nagan Raya	NAD	128.15
11	Kab. Rokan Hulu	Riau	121.66
12	Kota Tebing Tinggi	Sumut	118.24
13	Kab. Bekasi	Jabar	117.48
14	Kab. Banggai	Sulteng	105.14

*\*the growth of own-source revenue year i from year i-1*

The table depicts that of the leading in-growth local governments (i.e. those could reach more than 100% growth), there was only one local government in Java, i.e. Kabupaten Bekasi (Province West Java), could reach such level. The rest are non-Java local governments. However, it should be noted that the high growth of own revenue does not always mean the high share to the local spending. It is found that in 2004, the leading - in growth governments were different from the leading - in share governments.

**Table III.9**  
**The Big 14 in Share on Total Spending**

No.	Regency/Municipal	Province	Share to Spending 2004*
1	Kab. Badung	Bali	60.44
2	Kota Cilegon	Banten	35.52
3	Kab. Bekasi	Jabar	33.96
4	Kota Denpasar	Bali	26.06
5	Kota Medan	Sumut	25.68
6	Kota Semarang	Jateng	23.56
7	Kota Yogyakarta	Yogya	21.58
8	Kota Bandung	Jabar	21.02
9	Kota Tangerang	Banten	19.60
10	Kab. Sidoarjo	Jatim	19.45
11	Kota Kupang	NTT	18.49
12	Kab. Bogor	Jabar	17.20
13	Kab. Tangerang	Banten	17.16
14	Kab. Fak-Fak	Papua	16.97

*\*the ratio between the own-source revenue and the total spending*

On average, the own revenue supported about 8.17 percent of the total spending. Kabupaten Badung, located in Province Bali, accounted more than 60 percent. On the other hand, Kabupaten Penajam Paser Utara accounted only about 1 percent (See Appendix A.2). It means that this regency depended very much on the other revenue sources other than its local own revenue to support the total spending.

In order to get the local financial ability status more precisely, the Quadrant and Index method will be used. In doing so, some measures will be determined first. Elasticity (E), share (S), and growth (G) are chosen to represent the local financial ability (Bappenas 2003). *Elasticity* is the ratio between the own revenue growth and the gross domestic regional product (GDRP) growth. *Share* is the ratio between the own revenue and total spending. Finally, *growth* is the growth of own revenue year i from year i-1.

### III.3.1.1 Quadrant Method

This method will show the financial ability map. The map will be divided into 4 quadrants. Each quadrant will explain better the financial condition of each local government in terms of share (S) and growth (G). To obtain the map, first of all, the share (S) and the growth (G) for each local government are calculated using the following formulas.

$$S = \frac{PAD}{totspending} \times 100\% \dots 1)$$

$$G = \frac{PAD_i - PAD_{i-1}}{PAD_i} \times 100\% \dots 2)$$

Where:

S = share of local own revenue on total spending (in percent)

PAD = local own revenue

*totspending* = total spending for the respective fiscal year

G = local own revenue growth (in percent)

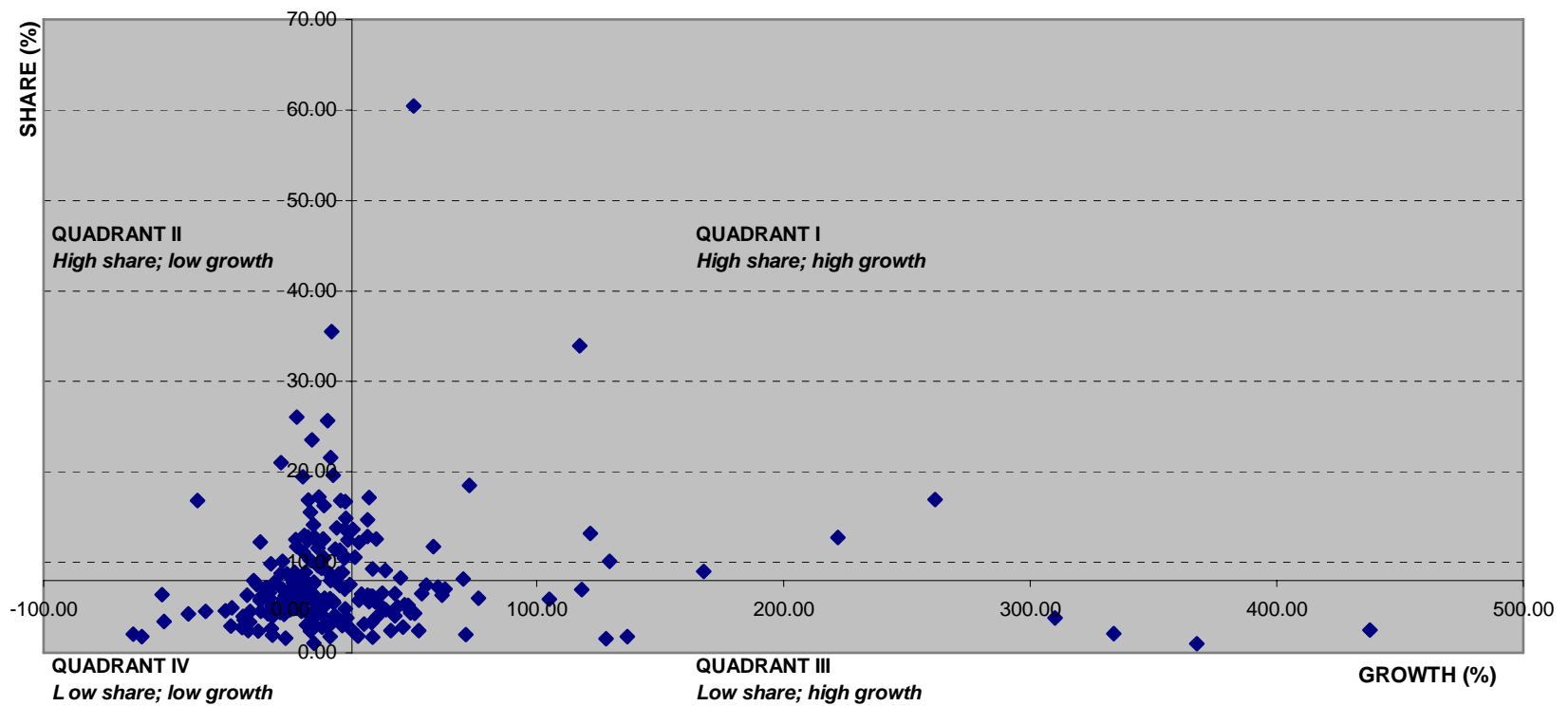
$PAD_i$  = PAD year i

$$PAD_{i-1} = \text{PAD year } i-1$$

After obtaining the share and growth for each local government, an average share and growth were determined. Based on this average point, the quadrant for each local government could be determined. From the 214 local governments observed, it is found that almost 50 percent were still in the Quadrant IV. Meanwhile, only around 9 percent were in the Quadrant I. Slightly over 25 percent were in the Quadrant II. Finally, around 20 percent were in the Quadrant III (See the following Figure III.4 for the brief and Appendix B for the detailed).

**Figure III.4**  
**The Map of Local Governments Financial Ability-Quadrant Method**  
**(Average Point: Growth=25.24; Share=8.17)**

**Regency/Municipality Own Revenue: Share (%) and Growth (%) in 2004**



The following table gives explanations for each quadrant.

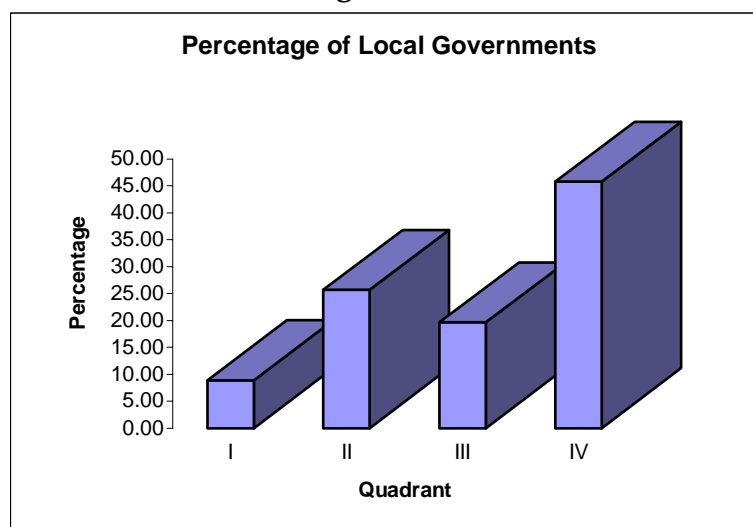
**Table III.10**  
**Quadrant Descriptions**

Quadrant	Description
I	This is an ideal condition. Own revenue has a significant share in the total spending. In addition, the local government also has the ability to improve local potency. This condition is showed by the high share and growth.
II	This condition is not ideal yet. The relative high share of own revenue has chance to decrease due to the low growth of own revenue. Here, the share of own revenue to total spending is high, but the own revenue growth is low.
III	This condition is also not ideal yet, but the local government has ability to improve the local potency so that own revenue has chance to have larger share in total spending. Here, the share of own revenue is low but the growth is high.
IV	This is the worst condition. The own revenue has not had significant share in total spending. Also, local government has not had ability to improve the local potency. Both the share and growth of own revenue are low.

Source: National Development Planning Agency (2003)

From 214 local governments observed, 8.88% local governments had high share and growth, 25.70% high share but low growth, 19.63% low share but high growth, and 45.79% low share and growth (See Figure III.5).

Figure III.5



Of 19 local governments in the Quadrant I, there were 7 local governments come from the Eastern Part of Indonesia (See Appendix B). It indicates that the fiscal decentralization had stimulated those regions to increase their ability to support their own-spending. It is well-known that years before the enactment of the fiscal decentralization, most of the eastern part of Indonesia showed poor performance in generating their own revenue due to the highly centralization policy. In addition, Table III.11 informs that the Java local governments' domination had been decreased. It is indeed a good signal of equalization as one of the basic fiscal decentralization purposes. However, most of the local governments were still in the Quadrant IV. Both the share and the growth of own revenue were still low. The local governments in the Eastern part of Indonesia accounted almost 46 percent while the Western part accounted almost 54 percent (See Appendix B).



**Table III.11**  
**List of Districts in Quadrant I**

No.	Regency/Municipal	Share Criterion	Growth Criterion
1	Kab. Badung	HIGH	HIGH
2	Kab. Bekasi	HIGH	HIGH
3	Kab. Fak-Fak	HIGH	HIGH
4	Kab. Lombok Tengah	HIGH	HIGH
5	Kab. Lombok Timur	HIGH	HIGH
6	Kab. Pasuruan	HIGH	HIGH
7	Kab. Pati	HIGH	HIGH
8	Kab. Rokan Hulu	HIGH	HIGH
9	Kab. Tabanan	HIGH	HIGH
10	Kab. Tangerang	HIGH	HIGH
11	Kota Ambon	HIGH	HIGH
12	Kota Banjarmasin	HIGH	HIGH
13	Kota Blitar	HIGH	HIGH
14	Kota Depok	HIGH	HIGH
15	Kota Gorontalo	HIGH	HIGH
16	Kota Jambi	HIGH	HIGH
17	Kota Kupang	HIGH	HIGH
18	Kota Pangkal Pinang	HIGH	HIGH
19	Kota Tanjung Pinang	HIGH	HIGH

### III.3.1.2 Index Method

The next method used to determine the financial ability among regions is the Index Method. Beside the two measures (share (S) and growth (G)) which used in the previous method, elasticity (E) is added in this method. The following formula is used to calculate the elasticity.

$$E = \frac{\frac{PAD_i - PAD_{i-1}}{PAD_i}}{\frac{GDRP_i - GDRP_{i-1}}{GDRP_i}} \dots 3)$$

Where:

$E$  = the ratio between PAD growth and GDRP growth

$GDRP_i$  = gross domestic regional product year i

$GDRP_{i-1}$  = gross domestic regional product year i-1

After calculating the measures, then each measure is transformed to the index number using the following formula.

$$IndexX = \frac{X - X \text{ min}}{X \text{ max} - X \text{ min}} \dots\dots 4)$$

Finally to have the Index of Financial Ability (IFA), the following formula is used.

$$IFA = \frac{X_G + X_E + X_S}{3} \dots\dots 5)$$

Where:

$X_G$  = Growth Index

$X_E$  = Elasticity Index

$X_S$  = Share Index

From the elasticity analysis, it is found that almost 120 local governments had elasticity  $E \geq 1$  (See Appendix C). It means that any change in the GDRP is sensitive over the change (i.e. increasing) in own revenue. However, there were 25 local governments that had  $E \geq 1$  with negative sign. This means that any change in the RGDP is sensitive over the change (i.e. decreasing) in own revenue. Finally, the rest local governments had  $E < 1$  which means the change in RGDP is not sensitive over the change in own revenue (See Appendix C).

**Table III.12**  
**The Big 10 Districts with  $E \geq 1$**

No.	Regency/Municipal	Province	Elasticity
1	Kab. Aceh Tamiang	NAD	35.64
2	Kab. Aceh Barat Daya	NAD	31.67
3	Kab. Fak-Fak	Papua	28.75
4	Kab. Penajam Paser Utara	Kaltim	23.89
5	Kab. Lombok Tengah	NTB	20.92
6	Kota Ambon	Maluku	16.73
7	Kab. Paniai	Papua	16.48
8	Kab. Bekasi	Jabar	14.69
9	Kota Kupang	NTT	12.44
10	Kab. Nagan Raya	NAD	11.03

Comparing to the Quadrant Method, the Index Method accommodates more measure than the Quadrant Method since it used the elasticity (E) of own revenue growth over the gross domestic regional product (GDRP) growth together with the previous ones. The big ten local governments that had high IFA in 2004 are as follow.

**Table III.13**  
**The Big 10 High IFA Districts**

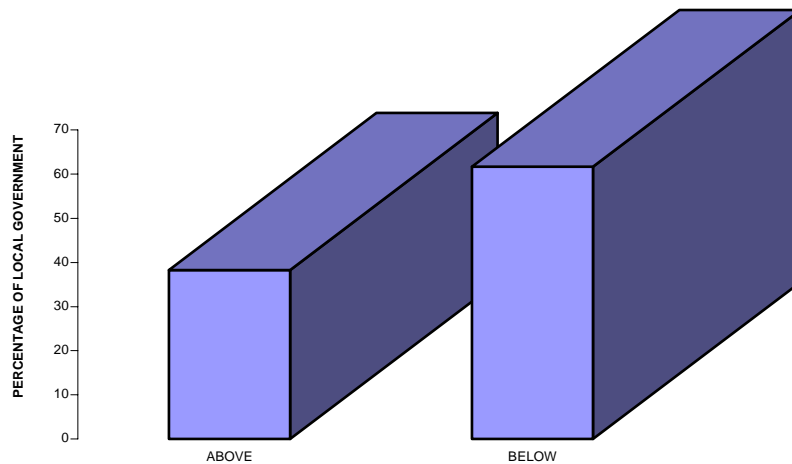
No.	Regency/Municipal	Province	IFA
1	Kab. Aceh Tamiang	NAD	0.68
2	Kab. Fak-Fak	Papua	0.58
3	Kab. Aceh Barat Daya	NAD	0.57
4	Kab. Penajam Paser Utara	Kaltim	0.53
5	Kab. Badung	Bali	0.50
6	Kab. Lombok Tengah	NTB	0.47
7	Kab. Bekasi	Jabar	0.47
8	Kab. Paniai	Papua	0.44
9	Kota Ambon	Maluku	0.38
10	Kota Kupang	NTT	0.34

Consistent with the previous method, the Index Method shows that

most of the local governments (68%) still had below-the average IFA. Even after considering the elasticity of GDRP growth over the PAD growth, the financial ability of most local governments was relatively low.

**Figure III.6**

**THE LOCAL GOVERNMENT PERCENTAGE OF ABOVE AND BELOW THE AVERAGE IFA**



### **III.4 Intergovernmental Transfers**

The system of intergovernmental transfers in Indonesia comprises three basic types of transfer schemes. These are revenue sharing, a general allocation grant (Dana Alokasi Umum - DAU), and grants for special allocation (Dana Alokasi Khusus - DAK).

The following table describes the main objectives of intergovernmental transfers system in Indonesia.

**Table III.14**  
**The Main Objectives of Intergovernmental Transfers**

Intergovernmental Transfers' Objectives	Instruments
1 Address vertical fiscal imbalances between government levels	shared revenue, DAU
2 Equalize 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
7 Stimulate revenue mobilization	shared revenue, DAU, DAK

Source: Sidik (2003)

Shared revenue, DAU, and DAK can be used to stimulate revenue mobilization. Moreover, DAK is also used to address some local matters. At the same time, DAU is used to equalize regional development fiscal capacities. Finally, both shared revenue and DAU can be used to address vertical imbalances between government levels.

**Table III.15**  
SPENDING FOR SUB-NATIONAL GOVERNMENTS FY 2001 TO 2005

(Rp trillion)

Item	State Budget				
	2001	2002	2003	2004	2005
<i>Intergovernmental Transfers</i>	<b>81.48</b>	<b>94.53</b>	<b>109.93</b>	<b>112.19</b>	<b>124.31</b>
<b>Revenue Sharing</b>	<b>20.26</b>	<b>24.60</b>	<b>29.93</b>	<b>26.93</b>	<b>31.22</b>
Tax	8.55	11.95	15.83	16.42	19.50
Personal Income Tax	3.10	4.07	5.47	6.04	6.40
Property Tax (PBB)	4.27	5.67	8.52	7.71	9.80
Property Title Transfer Tax (BPHTB)	1.18	2.21	1.85	2.67	3.20
Natural Resources	11.71	12.66	14.09	10.51	11.80
Oil	5.90	5.79	6.23	3.84	4.70
Gas	3.84	4.78	5.67	4.66	4.60
Mining	0.74	1.07	1.19	1.30	1.60
Forestry	1.00	0.79	0.57	0.23	0.30
Fishery	0.23	0.23	0.43	0.48	0.60
<b>General Purpose Grant (DAU)</b>	<b>60.52</b>	<b>69.11</b>	<b>76.98</b>	<b>82.13</b>	<b>88.77</b>
<b>Specific Purpose Grant (DAK)</b>	<b>0.70</b>	<b>0.82</b>	<b>3.02</b>	<b>3.13</b>	<b>4.32</b>
Special Autonomy Fund and Adjustment	-	<b>3.77</b>	<b>9.39</b>	<b>6.86</b>	<b>7.24</b>
Special Autonomy Fund	-	1.38	1.54	1.64	1.78
Adjustment Fund	-	2.38	7.85	5.21	5.47

Source: DJAPK, Ministry of Finance

From FY 2001 to FY 2005, intergovernmental transfers had steadily increased. General Allocation Fund took the highest contribution in the transfers. It accounted slightly over 70 percent for the recent fiscal year. On the other hand, the shared revenue took the second high in the transfer. It was a little over 25 percent in the FY 2005. Lastly, the Special Allocation Fund took only less than 5 percent of the transfers.

### III.4.1 Revenue Sharing

Revenue sharing means the transfer of specified shares of the certain national revenues to the sub-national budgets. This transfer is intended to respond the regional aspirations for increasing access to and controlling over certain revenues. As well known, many regions have long felt that they have not

benefited sufficiently from the significant revenues generated in their regions. For this reason, these sharing schemes constitute an attempt to meet these legitimate demands.

This sharing may also be potentially helpful to stimulate the increase in regional revenue mobilization since people may be more likely to pay a particular tax if they are assured that they are getting a fair share of such revenue. In addition, regions may be more inclined under such conditions. As a result, they further enhance resource mobilization.

**Table III.16**  
**Arrangements Natural Resource and Tax Revenue Sharing**

No.	Revenue Type	Law 25 of 1999					Law 33 of 2004				
		Central Govt.	Originating Provincial Government	Originating Local Governments	All Local Govts. in Originating Province	All Local Govts. (Equal Share)	Central Govt.	Originating Provincial Government	Originating Local Governments	All Local Govts. in Originating Province	All Local Govts. (Equal Share)
1	Oil										
	Base rate	85	3	6	6	84.5	3	6	6		
	Commission rate (Education)						0.1	0.2	0.2		
2	Natural Gas										
	Base rate	70	6	12	12	69.5	6	12	12		
	Commission rate (Education)						0.1	0.2	0.2		
3	Mining Landrent	20	16	64	-	20	16	64	-		
4	Mining Royalty	20	16	32	32	20	16	32	32		
5	Fishery Royalty	20	-	-	80	20	-	-	80		
6	Forestry License	20	16	64	-	20	16	64	-		
7	Forestry Royalty	20	16	32	32	20	16	32	32		
8	Geothermal Mining	-	-	-	-	20	16	32	32		
9	Reforestration Fund	60	-	40	-	60	-	40	-		
10	Property Tax	9	16.2	64.8	-	9	16.2	64.8	-	10	
11	Property Transfer Tax		16	64	-	20	16	64	-		
12	Personal Income Tax	-	-	-	-	80	8	12	-		

Source: Directorate General of Budget and Finance Balancing, Ministry of Finance



The table shows that while most of tax sharing is primarily based on upon derivation principle, fishery royalty, and property related taxes also use equal shares as an added criterion. The 9 percent national share in the property tax is simply “the administrative fee” to compensate the national tax administration for the collection and administering of the tax. It is worth mentioning that for apportionment of personal income taxes, place of work criterion is used rather than the almost universally criterion, i.e. the used place of residence.

In Indonesia, it is well-known that the arrangements for natural resource revenue sharing are not a new feature of Law 25/1999, but they had been in place for mining and forestry proceeds in the pre-reform period. However, the decentralization increased the relative share of local governments. Most of the revenues from these two resources are returned to the originating provincial/local jurisdictions.

The revised Law 33 of 2004 introduces some slight changes to current sharing arrangements. It introduces a new type of shared revenue, namely proceeds from geothermal mining. The new law also slightly increases the sub-national share of oil and natural gas revenues. Starting FY 2009, 84.5% of oil revenues will accrue to the central budget and 15.5% to sub-national governments. For gas revenues, 69.5% will go to the central and 30.5% to the regions. Sub-national governments will receive an extra 0.5% of both oil and gas revenues which are earmarked to increase local expenditures on primary education.

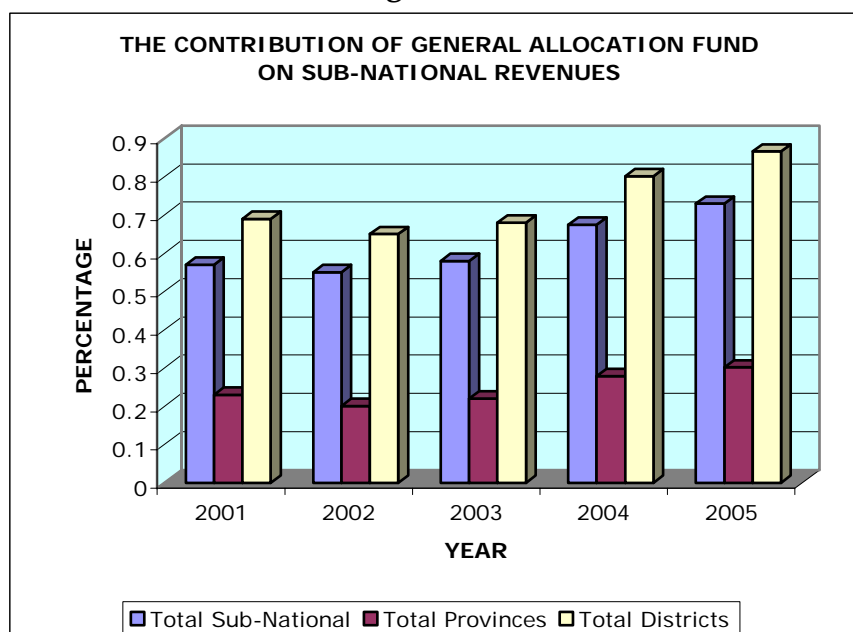
In dealing with the oil and gas sharing, it is worth to know that there are at least two important objectives related to the sharing. The first objective is to redress grievances of the resource rich provinces that while they face the development costs and environmental consequences of resource exploitation, all benefits from such exploitation accrue only to the central government. Current revenue sharing arrangements for oil and gas attempt to strike an insubstantial balance among the genuine grievances of resource rich provinces and national equity objectives. The later objective calls for resource revenue to accrue to the national government for use in an equalization program.

Beside the sharing arrangements for national revenues, local governments also receive shares from the four provincial taxes, namely the motor vehicle tax (30%), vehicle transfer tax (30%), fuel excise tax (70%) and ground water extraction and use tax (70%). Nonetheless, the contributions of these taxes to overall local revenues are relatively small (World Bank 2005).

#### **III.4.2 General Allocation Grant (DAU)**

The general allocation grant, Dana Alokasi Umum (DAU), is the main source of revenue for most local governments. At the same time, the DAU grant is the principal instrument for both vertical (across levels of government) and horizontal equalization (across sub-national governments). The allocation of the DAU grant follows a formula based approach aimed at aligning fiscal capacity to fiscal needs of local governments.

Figure III.7



Source: DJAPK, Ministry of Finance

As shown by Figure III.6, it can be seen that the contribution of the general allocation fund in the district - level revenues from FY 2001 to FY 2005 were quite significant. For the FY 2005, the general allocation fund accounted more than 80 percent in overall district-level governments' revenues. It indicates the significant reliance of district-level governments on the central government in terms of the funding resources. The district-level governments' reliance on the general allocation fund is quite different comparing with the provincial-level. The provincial-level governments do not depend as much as the districts. They accounted less than 30 percent in FY 2005. From this fact, it can be concluded that the provinces are more independent in this context than the districts.

Under Law 25 of 1999 the general allocation fund formula was based on two components: (1) a minimum allocation (allocation that local governments receive regardless of their fiscal gap), consisting of a lump sum

equal across all local governments and a compensation of civil service wage bills; (2) a fiscal gap component estimating the difference between own fiscal capacity and fiscal needs. To smoothen the transition from the pre-reform system, the results of the formula based allocation were adjusted to comply with the so called hold harmless provision that ensured that under the actual allocation no local government would receive less than in pre-reform period taking into account SDO and INPRES<sup>2</sup> grants of FY 2000 for the FY 2001 calculation and previous DAU allocations for subsequent years.

There exist some revisions on the DAU formula in the Law 33 of 2004. First, the revised law gave the new list of variables to be considered in the fiscal needs of DAU formula. The poverty variable in the previous law is replaced by two new variables, the Gross Domestic Regional Product (GDRP) per capita and Human Development Index (HDI). The fiscal needs variable now contains of population, area, construction price index, GDRP per capita, and HDI. The fiscal capacity variable remains the same, consisting of revenue sharing and local own revenue. Another major revision on the DAU formula is the clear statement that the DAU allocation formula has to be based on fiscal gap concept that is fiscal needs minus fiscal capacity. In addition to formula based calculation, the DAU has another component namely the basic allocation that is equivalent to local government employee salary.

Under the new DAU formula which will be applied in FY 2006 for the first time, the DAU allocation for an individual district (and equally for a province for which the structure of the formula is practically identical),

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<sup>2</sup> Both SDO and INPRES grants are the former general allocation funds.

denoted  $DAU_i$  consists of two components, a base allocation compensating for civil service wage costs, denoted as  $Wage_i$  and an equalizing amount to address the fiscal gap by taking into consideration fiscal capacity and expenditure needs denoted as  $Equal_i$  (Eckardt and Shah 2006).

$$(1) DAU_i = Wage_i + Equal_i$$

Law 33 of 2004 requires that DAU compensates for the total of civil service wages, implying that  $Wage_i$  equals the actual wage costs of a given district. Following from that the total DAU pool is reduced by the aggregate sub-national wage costs effectively reducing the amount available for the equalizing component. The equal per municipality lump sum component that existed under Law 25 of 1999 is abolished by the new rules and the basic allocation is supposed to be entirely based on the regional civil service wage bill.

The amount regions received under the equalizing component depend on the fiscal gap of a given district ( $FiscalGap_i$ ) which is defined as the disparity between fiscal needs and fiscal capacity:

$$(2) FiscalGap_i = FiscalCapacity_i - FiscalNeed_i$$

$FiscalCapacity_i$  is defined as the sum of potential own revenues ( $PAD_i$ ), the revenues from shared taxes ( $SharedTaxes_i$ ) and shared natural resource revenues ( $SDA_i$ ) in a given district.

$$(3) FiscalCapacity_i = PAD_i + SharedTaxes_i + Weight_{SDA} \times SDA_i$$

There are two important aspects of the part of the formula. First, note that

own revenue component ( $PAD_i$ ) does not refer to actual but potential own revenues which are estimated as a linear function of the average local tax effort and the local GDP. The average local tax in turn is estimated on the basis of a regression of real own revenue against local GDP per district from the previous fiscal year. This trait of the formula was introduced to make fiscal capacity neutral to own tax effort. Second, as can be seen from the formula, only revenues from shared natural resource royalties are discounted in the calculation of fiscal capacity in recognition of the fact that resource extraction places additional costs on resource rich jurisdictions in terms for infrastructure and services and environmental degradation.

The fiscal need for each district ( $FiscalNeed_i$ ) is estimated as a function of five expenditure need indicators: population size, area, Human Development Index, regional per capita GDP and regional price differentials reflecting the assumption that these five factors drive expenditure needs. Under the given framework, districts with larger than average population, higher than average poverty, larger than average area or higher than average prices are assumed to have higher expenditure needs. Specifically the indicators are: (1) the proportional population size of the district ( $Pop_i$ ) divided by the average population size of all districts ( $Pop_{MEAN}$ ); (2) the relative area calculated as the district area ( $Area_i$ ) divided by the national average area ( $Area_{MEAN}$ ); (3) the relative Human Development Index estimated as Human Development Index ( $HDI_i$ ) divided by the national average Human Development Index ( $HDI_{MEAN}$ ); (4) the relative per capita

GDP estimated as district per capita GDP ( $PCGDP_i$ ) divided by national average per capita GDP ( $PCGDP_{MEAN}$ ) and (5) an indicator to account for price differential in providing similar services across districts calculated as the construction index for each district ( $Price_i$ ) divided by the average construction price index ( $Price_{MEAN}$ ). This way of estimating fiscal needs assumes that more populous, larger, less developed regions have higher expenditure needs. In formal terms the fiscal need amount can be expressed as follows:

$$(4) \text{ FiscalNeed}_i = \left[ \alpha \frac{Pop_i}{Pop_{MEAN}} + \beta \frac{Area_i}{Area_{MEAN}} + \gamma \frac{HDI_i}{HDI_{MEAN}} + \delta \frac{PCGDP_i}{PCGDP_{MEAN}} + \varepsilon \frac{Price_i}{Price_{MEAN}} \right] \times \frac{APBD_{TOTAL}^{PREVIOUS}}{N}$$

Where  $\alpha, \beta, \gamma, \delta, \varepsilon$  denote the weight assigned to each factor and the summation of the weights must be 1 ( $\alpha + \beta + \gamma + \delta + \varepsilon = 1$ ). The specific weights assigned to the individual indicators. To receive the actual amount of estimated expenditure needs the combined need index is multiplied with the average expenditure need, which is calculated as the average local government spending in the previous fiscal year.

The calculation of the equalizing component of the formula varies for districts depending on whether they have a fiscal gap or excess capacity, as defined in equation (2). For districts with excess capacity or fiscal surplus the equalizing amount is equal to the negative of their fiscal surplus:

$$(5) \text{ Equal}_i = -\text{FiscalGap}_i \text{ if } \text{FiscalGap}_i \geq 0$$

For those regions the amount will be directly subtracted from the wage based allocation ( $Wage_i$ ) in equation (1). This reduces not only the

individual allocation but by definition the aggregate of the wage based allocation. The excess resources resulting from this step will be added to the pool available for the equalizing component for districts that face fiscal gaps. Unlike the previous DAU formula, there is no minimum allocation that local governments receive regardless of the fiscal capacity.

For districts with negative fiscal gaps, where fiscal needs surpass fiscal capacity in equation (2) the DAU pool available for equalizing component is distributed as a function of their proportional fiscal gap. To arrive at the actual allocation the total pool defined as the sum of residual of the total DAU pool ( $DAU_{Residual}$ ) after subtracting total wage costs and the sum of excess capacities from district with positive fiscal gaps ( $\sum ExcessFiscalCapacity_i$ ) is multiplied with the proportional fiscal gap. The proportional fiscal gap is calculated as the  $FiscalGap_i$  of a given district divided by the mean fiscal gap of all districts where expenditure needs exceed fiscal capacity ( $FiscalGap_{MEAN}$ )

$$(6) Equal_i = \frac{FiscalGap_i}{|FiscalGap_{MEAN}|} \times \frac{(DAU_{Residual} + \sum ExcessFiscalCapacity_i)}{N}$$

if  $FiscalGap_i < 0$

Note however, that due to the hold harmless condition which will be applied to the formula based allocations until FY 2006 the distribution is changed in significant ways. In order to arrive at the hold harmless allocation, the original formula based allocation for each unit of sub-national government is compared to the allocation of the previous fiscal year. The surplus for regions that were net beneficiaries of the formula approach is



deducted. The accumulated surplus is then re-distributed to those regions that would have received less according to the formula approach. Law 33 of 2004 requires that hold harmless condition will be phased out starting in FY 2007.

**Table III.17**  
**The Calculation of General Allocation Grant (DAU) for FY 2001 to 2004**

Item	DAU FY 2001	DAU FY 2002	DAU FY 2003	DAU FY 2004
DAU Components	BF + FG	MA + FG	MA + FG	MA + FG
BF/MA	DRD + DPD TA 2000	Lumpsum + $\alpha$ Salary	Lumpsum + $\alpha$ Salary	Lumpsum + $\alpha$ Salary
Coefficient of variation; Williamson Index	0.49;0.63	0.45;0.62	0.44;0.61	0.48;0.63
Composition of BF/MA and FG	20% FG	<b>Province</b>	<b>Province</b>	<b>Province</b>
	80% BF	•20% Lumpsum	•10% Lumpsum	•5% Lumpsum
		•30% $\alpha$ Salary	•30% $\alpha$ Salary	•30% $\alpha$ Salary
		•50% FG	•60% FG	•65% FG
		•75% NRRS	•75% NRRS	•100% NRRS
		•100% Estimated OSR	•50% Estimated OSR	•50% Estimated OSR
		<b>District</b>	<b>District</b>	<b>District</b>
		•10% Lumpsum	•5% Lumpsum	•5% Lumpsum
		•50% $\alpha$ Salary	•45% $\alpha$ Salary	•40% $\alpha$ Salary
		•40% FG	•50% FG	•55% FG
		•75% NRRS	•75% NRRS	•100% NRRS
		•100% Estimated OSR	•50% Estimated OSR	•50% Estimated OSR

Where: (BF=Balancing Factor, MA=Minimum Allocation, FG=Fiscal Gap, NRRS=Natural Resource Revenue Sharing, OSR=Own-Source Revenue)

Source: DJAPK, Ministry of Finance

The DAU calculation from FY 2001 to FY 2004 (under Law 25 of 1999) is shown by Table III.17. The DAU components consisted of balancing factor (since FY 2002 called minimum allocation) and fiscal gap. The fiscal gap was determined by DAU formula. It is important to note that the role of formula in determining the fiscal gap increased year to year. In the first year of decentralization, the role of formula accounted only about 20% of total DAU. Later years, both for province and district level governments the role of formula increased. It is also important to highlight the equalization indicators for the above period. There are two indicators mentioned: the coefficient of variation and the Williamson Index. The smaller indicators mean the more equalized allocation (Hamid 2005). From FY 2001 to FY 2003, both indicators decreased which mean the more equalized allocation existed. However, there happened slight increase of both indicators in FY 2004.

#### **III.4.3 Special Allocation Grant (DAK)**

In addition to the formula driven block grant (DAU), Law 25 of 1999 and subsequently Law 33 of 2004 authorize earmarked grants, so called special allocation grants (DAK). The central government can use DAK to finance special needs, including emergencies, and to promote special national priorities in the regions. The DAK funding is supposed to be prioritized to finance special needs of local governments with lower than average fiscal capacity.

Government Regulation No. 104 of 2000 defines the criteria for DAK.

These funds can be used to fund activities that are related to national priorities or that cannot be included in the calculation of DAU because they are specific needs of particular regions, for example, emergency relief, or specific investments needs in remote localities. DAK funds are usually earmarked to finance capital expenditures administrative costs, project allowances, research, training, and the like cannot be financed by DAU. Moreover, DAK are designed as matching grants to ensure they truly meet local demand by shifting marginal costs to local budgets.

Formally, local governments need to match at least 10 percent of the total cost through own resources. They also need to prove that DAK projects cannot be financed through their own budgets. In FY 2001 and 2002 the use of DAK is limited to a reforestation fund. Starting 2003, the central government has extended DAK grants to finance the maintenance of health and education facilities, infrastructure, including road, irrigation and water facilities, government property, and to finance projects in the fishery sector. The following table informs the detailed allocation of DAK for the period beginning FY 2003 to FY 2006. It should be noted that there happened significant DAK increase in FY 2006 (comparing to the previous year, there increased by almost three times).

**Table III.18**  
**Specific Purpose Grant (DAK) Allocation FY 2003 to 2006 (Rp million)**

No.	Sector	Allocation			
		2003	2004	2005	2006
1	Infrastructure	1,181,000.00	1,196,250.00	1,533,000.00	3,811,380.00
	a. Road	842,500.00	357,200.00	945,000.00	2,575,705.00
	b. Irrigation	338,500.00	839,050.00	384,500.00	627,675.00
	c. Water Supply			203,500.00	608,000.00
2	Health	375,000.00	456,180.00	620,000.00	2,406,795.00
3	Education	625,000.00	652,600.00	1,221,000.00	2,919,525.00
4	Government Infrastructure	88,000.00	228,000.00	148,000.00	448,675.00
5	Fishery		305,470.00	322,000.00	775,675.00
6	Farming			170,000.00	1,094,875.00
7	Environment				112,875.00
		2,269,000.00	2,838,500.00	4,014,000.00	11,569,800.00

Source: Directorate General of Budget and Finance, Ministry of Finance

The allocation of the various DAK grants is based on three sets of criteria, general criteria, special criteria, and technical criteria. The first two sets of criteria are set uniformly for all sectors by Ministry of Finance.

The general criteria is an index capturing the net fiscal position of a given district ( $FNI_i$ ), which is calculated by subtracting civil service wages ( $Wages_i$ ) from total revenues (sum of Own Revenue, DAU, DAK and shared revenues, and taxes excluding surpluses), denoted as  $Rev_i$  divided by national average of the same measure (Eckardt and Shah 2006).

$$(7) FNI_i = \frac{Rev_i - Wage_i}{\sum Rev_i - Wage_i} \times N$$

Districts which score higher than one on this measure are eligible for DAK grants. This measure is sensitive to how much resources a region has to its disposal to finance capital expenditures.

The special criteria directly refer to a number of provinces, including Papua, Aceh, and province in East Indonesia that are eligible for DAK grants.

In addition, coastal areas, conflict regions, less developed, and regions that experience floods and other natural disasters are supposed to receive DAK grants. The regulations remain unclear about how and to what extent these criteria are included in allocation process.

The technical criteria are set by the respective sectoral departments in consultation with Ministry of Finance and Ministry of Home Affairs. As a consequence, this criteria differs across sectors. In the education sector for example the number of class rooms in bad condition and the construction price index are used. Meanwhile, the technical criteria in health sector states the Human Poverty Development Index (HPI), the number of health service facilities, and the construction price index.

### **III.5 Local Government Borrowing**

In Indonesia, concerns about macro-economic instability have led the government to carefully regulate access of regional governments to capital markets. Both Law 25 of 1999 and Law 33 of 2004 allow for regional borrowing from both domestic and international sources and to issue denominated municipal bonds on domestic capital markets. In addition, regional governments may also guarantee third party debt. However, at the same time the related government regulation on regional borrowing sets tight limits for debt-revenue ratios. The total debt is limited to 75 percent of revenues minus necessary expenditures<sup>3</sup>. On the other hand, service is limited

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<sup>3</sup> This condition is now directly included in Law 33 of 2004.

to 35 percent of revenues minus necessary expenditures. Moreover, the short term borrowing (less than one year maturity) is limited to 1/6 of current spending and can only be used for cash flow management. Long term borrowing (more than one year maturity) can only be used for capital expenditures in projects with cost recovery potential. Any long and medium term borrowing of local governments requires approval by both the local representative council (DPRD) and by the central government (via Ministry of Finance). The regulation also gives the central government the right to intercept the transfer of DAU grants in the event sub-national governments fail to serve their service obligations (Government Regulation 107 of 2000).

Local governments do not have direct access to capital from international resources but can borrow from foreign sources through on-lending through the Ministry of Finance. Law 33 of 2004 does explicitly state that there is no sovereign guarantee for regional bonds, but the law remains unclear on defaulted regional government loans. In practice, a ministerial decree of the Ministry of Finance has suspended the implementation of these rules and has effectively eliminated local borrowing until 2004.

As a matter of fact, regional government debt in Indonesia has been insignificant comparing to the international standards. The cumulative sub-national debt to GDP ratio for the years 1978 – 2004, reported by Lewis (2005) is 0.33% of GDP, significantly lower than for example in the Mexico (4.9% of GDP), South Africa (4.0% of GDP), or Brazil (18.8% of GDP) (Lewis 2003). Borrowing has not recovered after a sharp drop during the financial crisis in

1998. At the aggregate local borrowing accounts for a mere 0.2% of the total sub-national revenues in FY 2001-2003. This is mainly a consequence of the uncertain legal environment that potentially undermined both demand and supply for municipal credit. In the same vein, the market for local government bonds remains underdeveloped (Eckardt and Shah 2006).

Since 1991 six local government development banks that are jointly owned by provincial and local governments have issued municipal bonds (with medium to long term maturities ranging from 3-7 years) to finance local infrastructure projects. Most of the local government debt is indirect debt of sub-national public enterprises, mainly regional water suppliers, accounting for more than three quarters of the outstanding debt. It is also known that repayment performance is poor with only about half of payments due being settled. Lewis (2003) has shown that repayment problems are largely a function of regional unwillingness, rather than inability to repay debts.<sup>4</sup> In addition to the outlined legal complications, the limited creditworthiness hampers the expansion of credit access of sub-national governments. In effect, the low level of sub-national borrowing potentially constrains infrastructure development, efficient public service delivery and economic growth. If managed properly, raising capital through loans and the issuance of municipal bonds could enhance infrastructure development, in particular in better off regions without exerting more pressure on the already stressed national budget.

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<sup>4</sup> Estimating a typical debt service ratio 9.5%, Lewis concludes that local governments have borrowed well within their fiscal capacities to repay (Lewis, 2003).



## CHAPTER IV

### MANAGING BETTER FISCAL DECENTRALIZATION

More than five years have passed since major local government reforms were first implemented in the beginning of FY 2001. Regional autonomy has transformed Indonesia, as one of the most centralized countries in the world, into one of the more decentralized ones. Although it is too early to overtake conclusive judgment on the effects of these reforms, some early results require some comments.

The transition to a significantly more decentralized mode of governance was smooth. As well-known, the transition from centralized to more decentralized system needed many action-plans. Fortunately, many of the important ones could be realized well. Local governments assumed responsibility for their new functions as scheduled. More than 2.5 million civil servants were successfully reassigned to the jurisdiction of sub-national governments. The central government also has continuously increased the pool of resources, both in relative and absolute terms, transferred to sub-national governments. In 2004, the second round of democratic elections, at both national and sub-national levels took place without any major interruptions. Moreover, local governments are headed by democratically elected mayors nowadays. At the same time, the most significant risks associated with decentralization were minimized. The transition also did not

result in a breakdown of service delivery chains, neither triggered macro-economic instability. Nevertheless, there is always a room for improvement in a number of areas that can further enhance the positive effects of decentralization in the Indonesian context.

#### **IV.1 Strengthening Local Taxing Power**

Although both provincial and local governments have more variety on collecting taxes, it is quite clear that more significant taxes such as income tax, value added tax, land and property tax are all under control of the central government. In general, the local taxing power in Indonesia considered weak due to the absence of one of those major taxes at the local level, even through the piggy-backed system. The current fiscal decentralization system, through the revised Law 25 of 1999 (i.e. Law 33 of 2004), still emphasizes on the tax revenue sharing of property tax, land transfer tax, and personal income tax.

While the local governments receive certain part of the respective tax revenue, they do not have authority in setting tax rate and tax base. As a result, the local governments have little room to provide incentive for local investors. Moreover, the total of the local own revenue is relatively insignificant to the central tax revenue. In 2003, for example, the total own revenue was only around 6% of the net domestic revenue (tax revenue plus other revenue) in central budget (APBN). The percentage was even lower than 2002 figure. That implied that the local taxing power was not getting stronger and the trend might continue for another three years after the

revision of Law 25 of 1999.

**Table IV.1**

<b>Local Government Revenue in Indonesia, 2001-2003</b>			
Indicator	2001	2002	2003
Local Own Revenue / Net Domestic Revenue	5.04%	7.04%	6.08%
Local Own Revenue / GDP	1.00%	1.30%	1.05%
Local Revenue / Net Domestic Revenue	36.38%	44.69%	35.63%
Local Revenue / GDP	7.20%	8.24%	6.17%

Source: Ministry of Finance, Central Statistics Agency

Having the fact that most districts are still low both in the share and growth of local own revenue (i.e. being classified in the Quadrant IV by the Quadrant Method), it is worth to address such issue in a more balanced view. Ideally, the decentralization of expenditure responsibilities should gradually be accompanied with enhanced taxing power at local levels. However, it is very obvious to see that the current approach devolves expenditure authority more seriously than tax authority and supports a strong role of the central government on the revenue side. While the decentralization of expenditures allows for some of the gains from decentralization, such as lower cost of production, informational advantages and matching of services with local demand, substantial benefits of fiscal decentralization require the devolution of the power to tax. The existing reliance on unconditional transfers (general allocation grants-DAU) to finance local government operations creates incentives that potentially undermine accountability of sub-national governments.<sup>5</sup> Therefore, broadening local tax bases has a number of potential benefits. If service delivery is more closely linked to local tax

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<sup>5</sup> See Rodden (2002) for some theoretical considerations and across country analysis. In FY 2005, it is found that the DAU accounted more than 80% of the districts' revenue.

payments, citizens face greater incentives to monitor government performance, and demand accountability from local governments. At the same time, it can further enhance interjurisdictional competition and people choosing low tax – low spending jurisdictions over high tax – high spending jurisdictions could create powerful incentives to increase spending efficiency. If Indonesia wants to benefit from these effects greater, the sub-national taxation autonomy is indeed a necessary institutional prerequisite.

The assignment of some significant tax bases, like property tax or a piggy-backed income tax, to finance marginal public good provision has the potential to increase efficiency and accountability in local government operations. Only by choosing to pay higher or lower taxes at the margin can residents of sub-national jurisdictions choose the level of public services they want. At the same time, the assignment of more taxation power to lower levels would further reduce revenues of poor regions and thus strengthen existing disparities in the region's economic base. Resulting gaps in income and fiscal endowments arguably necessitate a strong national role in financing national minimum standards of merit goods and equalizations payments (Eckardt and Shah 2006).

Up to the recent, it can be concluded that decentralization in Indonesia is more on decentralization in expenditure, financed mostly by intergovernmental transfers with limited local taxing power. The local governments still heavily rely on the central government transfers to finance their expenditure. The current reliance on transfers in their myriad forms

creates dependence on the national government and weaken sub-national incentives to improve own revenue. This is, of course, one type of decentralization and nothing is wrong with that. Nevertheless, some Indonesians believed that the real decentralization should also include the decentralization of revenue by giving more local taxing power to local governments. Last attempt to strengthen local taxing power by shifting the land and property tax from central tax into local tax failed due to strong resistance of the land and property tax part in the central taxation office.

Finally, there are at least four key messages that merit emphasis in this context. First, local governments have limited control over tax policy, including the ability to set rates and define tax base. Therefore, decentralization is more political than fiscal. Lack of control over taxation at the margin breaks the tax-accountability link, undermining the expenditure efficiency promised by decentralization. While the general limit on own revenues is not the only constraint, policy autonomy is essential for significant improvement to occur over the medium term. Second, the lack of authority over tax policy seems to have spurred local governments to seek unofficial tax and non-tax sources of revenue, with deleterious consequences. The resort to informal and illegal fees is even more unfortunate considering that sub-national governments in the region are unable to avail themselves of many taxing options open to government in other regions. Third, despite the lack of opportunity to raise revenues and the apparent interest in unofficial avenues, sub-national governments do not appear to have exhausted all their

options. Moreover to the extent that the quality of local tax administration reflects both capacity and interest, then many sub-national governments prefer weak administration. Fourth, improvements in local tax administration would greatly strengthen sub-national finance systems. Yet the relative roles of local and national governments have not been well designed, resulting in both capacity and incentive challenges. Local governments tend to underperform on own collection and administration, reducing the credibility of the local tax system and contributing to a culture of non-compliance by raising compliance costs for tax payers. Local administrative capacity is thus quite weak in many cases, and the binding constraint on improving revenue performance (World Bank 2005).

Challenges remain for improving local tax policy and administration. The lack of autonomy undermines the ability of local governments to realize the benefits of decentralization by tapping significant revenue sources to satisfy local preferences regarding the level and quality of services. Fiscal sustainability requires improvements in own revenue collection and administration more generally. Weak administration undermines local tax systems by contributing to high rates of non-compliance, high administrative costs for local governments. Getting the relationship between the national and local government right – in both policy and administrative terms – is crucial (World Bank 2006).

## IV.2 Shared Revenue: Providing Trade-Off for Asymmetric Decentralization

Despite the spirit and commitment to make decentralization of Indonesia a success, the central government is doing some policies that might not look like in the support decentralization itself but actually to protect the unity of Indonesia. In 2002, along with the internal problems in the province of Aceh and Papua and the trauma of losing the East Timor province, the government decided to issue special autonomy laws for both provinces that not only gave special local political treatments, but also special intergovernmental transfer treatment, especially natural resources revenue sharing.

Unlike other oil and gas producing regions, those two provinces will receive 70% of government revenue share in oil and gas as contrary to others that will only receive 15% or 30%. In addition to the special natural resources revenue sharing scheme, the Papua province receives their special allocation fund with of 2% of total DAU. That fund has to be allocated for basic public services such as education, health and infrastructure.

**Table IV.2**  
**The Proportion of Revenue Sharing for Aceh & Papua**

No.	Revenue Type	Special Autonomy Laws (%)	
		Aceh	Papua
1	Oil	70	70
2	Gas	70	70
3	Landrent	80	80
4	Royalty	80	80
5	Fishery	80	80
6	Forestry Right to Operate Levy (IHPH)	80	80
7	Forestry Resources Commission (PSDH)	80	80
8	Reforestation Fund	40	40

Source: DJAPK, Ministry of Finance

The decision to apply asymmetric decentralization might be questionable from economic policy point of view. The political point of view might be more dominant here. As expected, the asymmetric decentralization generated similar aspiration in other resources rich, but not troubled, regions such as Riau and East Kalimantan. Those two provinces were trying to have similar treatment but the central government was determined that special autonomy laws will only be applied for Aceh and Papua, and not to be replicated in other provinces.

Complaints from Riau and East Kalimantan might have been accommodated through the additional 0.5% oil and gas revenue sharing in Law 33 of 2004. Yet, the more crucial problem is still unsolved. This is the issue about the transfer disbursement. During the three years period (2001 to 2003) the resources rich regions always had hard time in managing their cash flow since the central government always disbursed the oil and gas revenue sharing very late in a fiscal year. The first disbursement might not happen until the end of first semester and the following disbursement might continue as well toward the end of fiscal year.

This is certainly difficult for those regions that have major percentage of revenue coming from that resources revenue transfer. As a result, they ended up with relatively large surplus at the end of fiscal year and implicitly, they effectively utilized their excessive funding a year later. Other effects were delay of payment to contractors and suppliers working with local government or the short term local borrowing to bridge the financing of local



projects or programs. The central government prefers to do this disbursement scheme due to uncertainty in both price and volume of oil and gas in the revenue side of the budget. However, this cautious move will certainly result in the delay of disbursement since the volume prediction and hence, the revenue prediction will take some time. To deal with this problem, a better disbursement management must be made by the central, while the local must run well budget management to ensure better cash flow management to overcome such problem.

#### **IV.3 DAU: Addressing the Inequalities**

Indonesian experience suggests that decentralization does not by itself remove inequalities between localities of varying incomes, and quality in poorer communities continues to lag. The large horizontal imbalances in fiscal resources need to be addressed ensuring that in particular poor local governments have adequate resources to fund their newly acquired expenditure functions. The currently available fiscal instruments, in particular the DAU grant, which is used to pursue partly conflicting purposes (wage costs and horizontal equalization), may not be able to satisfy regional equity objectives. While compensating vertical fiscal gaps, the DAU is associated with positive yet unclear equalization outcomes. The desirable level of equality, or conversely the level of acceptable inequality is essentially a political question.

Therefore a fiscal equalization system must utilize an explicit standard

of equalization that is used to determine total pool as well as allocation across jurisdictions. The DAU does not embody an explicit standard of equalization, its total pool is arbitrarily determined and its formula combines multiple factors with arbitrary that work at across purposes. The equity of the final impact therefore remains uncertain. Identifying a politically sustainable way of reforming the fiscal systems naturally involve tradeoffs. In particular, the combination of measures that increase local tax autonomy and strengthen the revenue base of fiscally strong regions with a more equalizing DAU system might be a politically suitable trade off.

The DAU distribution formula has the objective of ensuring that additional financing of local governments compensates fiscal capacity deficiencies without rewarding grantmanship. Recent refinements such as elimination of equal per municipality component support this objective by eliminating incentives for local governments to split up to receive additional assistance. Nevertheless, there are several limitations of this formula. First, while expenditure need factors used are defensible, their weights are quite arbitrary and indefensible. Combing these fiscal capacity and need factors in a formula may lead to inequitable outcomes across jurisdictions and local governments with identical fiscal capacity may receive widely varying grants. Second, rationale for the inclusion of the wage factor is not clear. It has the potential of creating a perverse incentive for padding up civil service payrolls resulting in higher local wage bills. While this problem existed under previous formula it is exacerbated through the required full compensation of

wage cuts under the new formula. Provisions introduced to circumvent this such as zero growth policy in civil service and central government clearances for new local positions undermine local autonomy in resource allocation. Finally and most importantly, the formula lacks an explicit standard of equalization and its allocation is not guided by this standard. As a result, while DAU allocations are expected to vary positively with fiscal need and inversely with fiscal capacity, there would not be any clarity in the degree of equalization achieved by this formula.

As can be seen from Table III.17, the role of the formula from 2001 to 2004 had steadily increased both for provincial and district level. However, the role was not significant yet relatively. There were still many things came into consideration in determining the amount of DAU for each government level. Beside non-formula factors, the *hold-harmless*<sup>6</sup> provision must be considered too. All these affected the inequalities. Nevertheless, this situation can not be avoided due to some reasons. First is the economic reason. It is actually not an easy task to have variables that can measure the precise needs of each local government. What could be done is only how to develop better approach to have such measure. The other one is the political reason. As a matter of fact, this reason often became more important than the others in the DAU allocation.

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<sup>6</sup> The fund receipt in the current fiscal year should be at least the same as or more than last year.

### IV.3.1 Ideal Future DAU

The major breakthrough in Law 33 of 2004 regarding the hold-harmless provision and DAU allocation is the elimination of hold-harmless provision beginning 2008. As well known, that the hold-harmless provision has certainly disrupted the DAU performance significantly, especially in improving horizontal fiscal imbalance during the first three years of decentralization. However, the elimination of hold harmless provision is still linked to the existence of basic allocation.

The local governments that have positive fiscal gap will certainly receive DAU higher than its basic allocation. The ones with negative fiscal gap will still receive DAU as long as the absolute value of the gap is still less than the basic allocation. Most interestingly, if the absolute value of negative fiscal gap is higher than the basic allocation, the respective local governments will not receive DAU at all. This zero DAU policy is certainly the bravest movement the central government has ever made during the fiscal decentralization process amid the constant pressures and protest from natural resources rich regions that will affected significantly by the policy. However, this scheme can only be considered as the second best approach in ensuring horizontal fiscal equalization. Some simulations proved that the first best approach will be the DAU allocation using pure formula approach without the constraint of basic allocation.

The ideal fiscal decentralization will divide clearly the responsibilities of central and local. With this clarity, theoretically, the expenditures of each

level of government could be calculated based on the Standard of Spending Assessment (SSA). However, the national calculation guidance for this standard has not been made yet. Therefore, this decentralization has not had valid calculation. For this reason, the allocation of intergovernmental transfers is done without the accurate calculation. Finally, all the transfers, especially general allocation grant (DAU), the most important transfer, is allocated based on variables which are assumed could represent the local fiscal needs.

It is obvious to see that the previous problem is one of the existing problems that has not been solved during the 5 (five) years implementation of fiscal decentralization. This problem arose because Indonesia does not have the Minimum Service Standard (MSS) yet. MSS is the important source in determining the SSA.

It is important to know that MSS is built based on Obligatory Functions (OF). MSS are found in many countries. They may be self-imposed standards for a given level of government. On the other hand, OF are discernible in many countries under various technology or formulations. For instance, they may be described in legal documents as mandatory or essential functions, or as duties of sub-national governments.

Whether the Government of Indonesia is able to craft a suitable prescriptive system is doubtful at the moment. Difficulties of data and measurement are technical constraints that are amenable to solutions. Difficulties with sectoral cooperation, institutional interests that hinder allocation shifts and the general reluctance to increase accountability in

spending pose more significant hurdles. To solve these issues and to allow a coherent OF/MSS model will take considerable political will.

The search for an OF/MSS model in Indonesia indicates that more attention needs to be paid in decentralization efforts to the challenge of retaining the levers for exerting national influence over local government on important national and international commitments to key public services. In this respect, even if the Indonesian model is not properly elaborated and executed, it does suggest that there may be alternatives worth exploring to the current mainstream use of conditional grants/special allocation grant (DAK) that historically have tended to proliferate and unduly limit local autonomy.

The establishment of detailed service standards, minimum or otherwise, may be left until after actual experience of several years has been accumulated. In the meantime, the government should use the currently existing standards for the purposes of planning, programming and budgeting. More importantly, efforts should be made to construct the mechanisms for monitoring and evaluation of local governments' performance in public service provisions, and the mechanism for the central government's assistance or interventions in cases of egregiously poor performances on the part of local governments (e.g. through the use of DAK). This approach would not only obviate time and efforts for working out the minimum service standard now, but also serve the spirit of local autonomy better.

#### **IV.4 Addressing Better DAK Management**

Two brief comments on DAK are in order. First, despite significant increases in recent years the DAK expenditures remain relatively limited compared to the regular sectoral development expenditures of the central governments (DIP). In the medium run sectoral development funds (DIP) should be migrated into DAK. Whether this is a suitable option will depend to a significant degree on the willingness of sector departments to shift resources from DIP to the DAK, over which they have considerably less control. Increasing DAK funds that are regionally and functionally targeted could provide an important instrument to establish common minimum service standards and to address disparities in expenditure needs across Indonesia. In comparison to DIP funds that are not part of the local budgets (APBD), DAK funds are more transparent and can be used as complementary to local spending.

The second point refers to the distribution of the DAK. With the notable exception of the DAK to finance government infrastructure that was allocated to finance government infrastructure in newly established governments, the DAK grants are widely dispersed across large numbers of receiving districts, for example in FY 2005, 333 local governments received education DAK. Allegedly, the allocation process of the DAK funds remain vulnerable to political interference, by regional governments, sectoral departments, and budgeting commissions of the parliament (DPR). In effect, the DAK grants seem to be used to cross-subsidize capital expenditures rather

than as transfers specifically targeted to districts with serious infrastructure deficiencies.

#### **IV.5 Local Accountability for Service Delivery**

The Indonesian reforms have emphasized a gap filling approach to fiscal transfers that stress local autonomy with little concern for local accountability for service delivery (Eckardt and Shah, 2006). Analyzing the impacts of fiscal decentralization to the quality of local public service is complicated since measuring the appropriate indicators that can clarify those impacts is not an easy task.

To assess the quality of local public services, the focus should be on the indicators such as poverty rate and human development index (HDI). During the first three years of fiscal decentralization, those two indicators apparently showed improving figures. HDI in most regions, for example, was higher in 2002 compared to 1999. The poverty rate in most regions also showed significant decline in the same period. These promising figures might imply that the quality of basic public services during the decentralization era better fit local needs and well-targeted. However, that good performance might be more contributed by national program than local government programs. The poverty reduction program is more well-known as the national program that is cross-sectoral and cross-regional. Moreover, Indonesia has not clarified the health roles and responsibilities of central and lower governments after three years of decentralization. Nor has the country moved to emphasize core



public health functions, or seen marked improvements in specific areas such as infectious disease control, pharmaceuticals, and human resources.

Also in the education sector, despite on average, districts governments in Indonesia do have more resources at their disposal than in the past, and allocation formula stipulates that poorer districts should receive larger transfers. Nevertheless, the central government expects districts to mobilize more of their own resources to supplement the transfers.

#### **IV.6 Issues and Problems of Fiscal Decentralization**

The revised Law 22 of 1999 (Law 32 of 2004) and Law 25 of 1999 (Law 33 of 2004) are clearly a promising step to make the Indonesian decentralization work and to navigate the decentralization process into a right direction. There are several important spirits toward this direction. The main spirits of revised Law 22 of 1999 are to promote local democracy and local good governance that are consistent with the issues at national level. On the other hand, the revised Law 25 of 1999 encourages the idea of fiscal sustainability and more equalized intergovernmental transfers. Although, the spirits are basically what the government of Indonesia needs during the decentralization process, those main spirits were less addressed on the original version of the laws.

A crucial thing that might still be missing from the revised law process is the law integration spirit that has caused, to some extent, difficult coordination between Ministry of Home Affairs (MOHA) and Ministry of Finance (MOF). Coordination is certainly a key word in decentralization

process in Indonesia that needs a lot of improvement both among government ministries and between central and local governments. The sectoral laws, in the spirit of coordination, should, in turn, be adjusted to decentralized environment.

The implementation of revised laws is then becoming a next difficult issue. The original laws of 22 of 1999 and 25 of 1999 still had a lot of unfinished homeworks with many necessary government regulations did not exist or have not been finished yet. The incoming of revised laws could help in certain cases but potentially, they could create more complication by having to make the new regulations or adjusting the old ones. The political will of both central and local governments will be a basic requirement to succeed in this tiring and exhausting step. Strong political will then has to be accompanied by competent human resources and managerial capacity, especially at local level. The revised Law 22 of 1999 has touched the issue of human resources by allowing the movement of civil servant among regions but the most fundamental case is the quality of civil servant themselves. A continuing capacity building is still a must after about five years of decentralization onward.

Another implementation problem that needs to be revolved is the administrative duplication or competition between central government (through line ministries) and local government. The experience of Government Regulation (PP) 25 of 2000 that failed to clearly define devolution of authorities has to be a lesson to be improved in the government

regulations following the issuance of revised Law 22 of 1999 and 25 of 1999. The PP should be detailed enough to avoid the duplication or conflict between levels of government. The better government regulations could be a good start toward the realization of “finance follows functions” principle that implicitly demonstrates the consistency between the decentralization laws. At the same time, more political will from central government will be really needed to adjust first the sectoral laws with revised Law 22 of 1999 and 25 of 1999, and then to reduce the power of line ministries in relation with local governments. Line ministries should promote the gradual transfer from deconcentration activities (also known as DIP activities) into decentralization activities. The empowerment of specific allocation fund (DAK) will be a good solution for that.

Aside from potential political and administrative decentralization problems, there will be some fiscal decentralization problems to be watched for. First is the proposed implementation of no hold-harmless DAU provision in the beginning 2008. The central governments should anticipate the possible resistance of those local governments since there will be some zero DAU local governments. It is better if the central government beginning the socialization of the process earlier before 2008 and preparing better disbursement mechanism of natural resources revenue sharing to ensure better cash flow management of the resources rich local governments that could be the ones with zero DAU. Second, the relatively weak local taxing power substantiated by the failure of shifting the land and property tax authority to the local

governments. This could imply to various different effects. One of them is no existence of the “tax price” to local residents where they have less incentive to hold the local governments accountable in delivering basic public services. Another is no existence of appropriate local fiscal incentives that potentially discourage the local governments in pursuing the GDRP growth, and instead, focusing on APBD growth. Third is the possible implementation of local borrowing and local bond issuing in the near future following more detailed explanation in the revised Law 25 of 1999. Since the needs for local borrowing, especially to build and maintain the deteriorating infrastructures, could be unavoidable, the central government has issued some safety guards in the revised Law 25 of 1999 through hard budget constraint concept and limitation of cumulative central and local borrowings. The commitments from both central and local governments in maintaining the principle will be very crucial in avoiding Indonesia to be the “second Brazil” .

Despite some missing important parts and skepticism over the government political will, the revised Law 22 of 1999 and 25 of 1999 has contributed quite significantly to maintain the Indonesian decentralization path toward a more ideal form. The revised laws are quite responsive in some issues that have been continuing problems during the first three years of implementation. Some parts of the laws even deal with small but quite important thing such as the new regulation to protect the fishermen when they have to sail to another local governmental coastal territory. The spirit to promote investment at local level is also a quick response over the business

sector complaints toward behavior of some local governments. It is not overstating if ones can conclude that the government has not really wasted their time and energy in revising the laws and they might have reached sub-optimal solution to keep the decentralization process at the right track (Brodjonegoro 2006).

## CHAPTER V

### CONCLUSION AND RECOMMENDATION

#### V.1 CONCLUSION

The previous entire analysis leads to a conclusion that fiscal decentralization in Indonesia is still in the process toward the more ideal form of decentralization. After five years of decentralization, both national and international communities praised the big-bang approach of Indonesian decentralization as a success. However, in spite of the success, there are some important issues come into consideration.

*First*, the Indonesian local taxing power is still weak. The current approach devolves expenditure authority more seriously than tax authority and supports a strong role of the national government on the revenue side. This leads to the condition of local governments' high reliance on transfers from the central. Moreover, there is also no adequate incentive for the local governments to upgrade their capacity in generating more local revenues since most of important taxes are managed by the central. As a result, the empirical evidence showed that in FY 2004 the performance of local own revenue was very poor in term of share and growth.

*Second*, the hold-harmless provision, in fact, has worsened the equalization objective of the general allocation fund (DAU). The inclusion of this provision in the DAU allocation could not be avoided due to political

reason. As a result, the role of the DAU formula was relatively not significant. Fortunately, this provision will be eliminated in the beginning FY 2008. However, the elimination of hold harmless provision is still linked to the existence of basic allocation. It was found that from FY 2001 to 2004, due to the increasing role of the Fiscal Gap Formula (as a part of the DAU Components), the equalization became better year to year.

*Third*, although the Indonesian reforms have emphasized a gap filling approach to fiscal transfers that stress local autonomy but there is still only little concern for local accountability for service delivery. There is need to have a more balanced approach which further strengthens autonomy while creating incentives for accountable local governance.

*The last* but also an important issue is the weak coordination among the levels of government. This is issue even has not been addressed totally by the newly revised local autonomy and fiscal decentralization although its importance in the success implementation of the local governments reform.

## **V.2 RECOMMENDATION**

Addressing the previous issues, there are some recommendations come into consideration.

*First*, if Indonesia is to benefit from the fiscal decentralization effects greater, sub-national taxation autonomy is indeed a necessary institutional prerequisite. The assignment of some significant tax bases, like property tax or a piggybacked income tax, to finance marginal public good provision has

the potential to increase efficiency and accountability in local government operations. Only by choosing to pay higher or lower taxes at the margin can residents of sub-national jurisdictions choose the level of public services they want.

*Second*, to retain the equalization objective, the hold-harmless provision should be gradually eliminated. At the same time the role of the DAU Formula (i.e. Fiscal Gap Formula) should be gradually increased. In order to attain the equalization objective better, the existence of non-formula components in the future DAU allocation should be limited since they are biased to the equalization.

*Third*, dealing with the accountability matters, the local accountability for service delivery can be achieved by instituting out-put oriented national minimum standards grants for merit good such as education, health and roads. These grants could be allocated to local jurisdictions on the basis of simple service population (such as school age population for education grants) and onward distributed to local public and private providers based upon objective indicators of clients served (e.g. school enrollment) but continuation of grant in future years would depend upon meeting or improving on baseline service standards monitored directly by citizen-customers. Indonesia in the pre-reform was a pioneer in instituting simple and objective performance oriented grants for education, health and roads and it would be useful to reintroduce similar transfers again.

*Finally*, it should be understood that the success of fiscal



decentralization cannot be achieved without proper coordination among the government levels. Indonesia needs a lot of improvement both among government ministries and between central and local governments. As well known, many sectoral laws have not amended since the enactment of the decentralization. They still refer to the pre-reform paradigm (i.e. centralization). Therefore, more coordination is required to ensure proper direction of decentralization toward the more ideal form. In doing so, the sectoral laws, in the spirit of coordination, should be adjusted to decentralized environment.

## BIBLIOGRAPHY

- Agency for Economic and Finance Research, and International Cooperation, 2005, *"Evaluation on the Implementation of Law 34 of 2000 on Local Tax and Charge"*, Research Report, Jakarta.
- Bahl, Roy, W., 1999, *"Implementation Rules for Fiscal Decentralization"*, Published of the World Bank, New York.
- Brodjonegoro, Bambang (2006), *"The Indonesian Decentralization after Law Revision: Toward a Better Future?"*, International Conference on Responsive and Accountable Local Governance, Hotel Nikko, Jakarta, 21-22 February 2006.
- Central Statistics Agency (2005), *"Gross Regional Domestic Product Regencies/Municipalities in Indonesia"*, BPS-Statistics Indonesia, Jakarta.
- Eckardt, Sebastian and Anwar Shah (2006), *"Local Government Organization and Finance in Indonesia"*, International Conference on Responsive and Accountable Local Governance, Hotel Nikko, Jakarta, 21-22 February 2006.
- Ferrazi, Gabriel (2005), *"Obligatory Functions and Minimum Service Standards for Indonesian Regional Government: Searching for A Model"*, Journal of Public Administration and Development 25, p. 227-238.
- Fisher, Ronald C. (1987), *"State and Local Public Finance"*, Scott, Foresman and Company, Michigan.
- Hamid, Edy Suandi (2005), *"Alternative Formula for General Allocation Grant (DAU)"*, UII Press, Yogyakarta.
- Kwon, Osung (2001), *"The Effect of Fiscal Decentralization on Public Spending: the Korean Case"*, Paper Prepared for Presentation at 13<sup>th</sup> Annual Conference on Public Budgeting and Financial Management, January 2002, Washington DC.
- Mahi, B. Raksaka (2004), *"Four Years Review of Fiscal Decentralization in Indonesia"*, Paper Presented at Annual Economic Seminar, December 2004, Jakarta.
- National Development Planning Agency (2003), *"Provinces Financial Ability Map in the Era of Autonomy"*, Directorate of Regional Autonomy Development, National Development Planning Agency, Jakarta.

- Rodden, J. (2002), *"The Dilemma of Fiscal Federalism: Grants and Fiscal Performance around the World"*, *American Journal of Political Science* 46 (3), p. 670-687.
- Sidik, Machfud (2003), *"Fiscal Decentralization: A Long Way Process, Caveat, Challenge, and Its Smooth Path"*, A Paper for Magister Ekonomi Pembangunan (MEP), University of Gajah Mada, Yogyakarta.
- Sidik, Machfud and others (2002), *"General Allocation Grant (DAU): Concept, Constraint and Prospect in the Era of Autonomy"*, Penerbit Kompas, Jakarta.
- Subkhan (2004), *"The Optimal Size of Local Government and Fiscal Decentralization in Indonesia"*, *Jurnal Keuangan Publik* 2 (1), p. 69-87.
- Stiglitz, Joseph, E. (2000), *Economic of Public Sector*, Third Edition, W.W. Norton & Company, New York.
- The World Bank (2005), *"East Asia Decentralizes: Making Local Government Work"*, The World Bank, Washington DC.
- Tiebout, Charles (1956), *"A Pure Theory of Public Expenditures"*, *Journal of Political Economy* LXIV (Oct., 1956), p. 416-424.
- Usui, Norio and Armida Alisjahbana (2003), *"Local Development Planning and Budgeting in Decentralized Indonesia: Key Issues"*, A Paper for Tokyo Symposium, Indonesian-Japanese Joint Study on Indonesia's Joint Study.

## **APPENDICES**

**APPENDIX A.1****LOCAL OWN REVENUE (PAD) GROWTH**

No.	Regency/Municipality	Province	Part of Indonesia	PAD GROWTH (%)
1	Kab. Aceh Tamiang	NAD	Western Part	437.70
2	Kab. Penajam Paser Utara	Kaltim	Eastern Part	367.55
3	Kab. Aceh Barat Daya	NAD	Western Part	334.00
4	Kab. Paniai	Papua	Eastern Part	310.12
5	Kab. Fak-Fak	Papua	Eastern Part	261.39
6	Kab. Lombok Tengah	NTB	Eastern Part	221.99
7	Kota Ambon	Maluku	Eastern Part	167.73
8	Kab. Banyuasin	Sumsel	Western Part	136.72
9	Kota Tanjung Pinang	Riau	Western Part	129.56
10	Kab. Nagan Raya	NAD	Western Part	128.15
11	Kab. Rokan Hulu	Riau	Western Part	121.66
12	Kota Tebing Tinggi	Sumut	Western Part	118.24
13	Kab. Bekasi	Jabar	Western Part	117.48
14	Kab. Banggai	Sulteng	Eastern Part	105.14
15	Kab. Pasir	Kaltim	Eastern Part	76.29
16	Kota Kupang	NTT	Eastern Part	72.68
17	Kab. Nabire	Papua	Eastern Part	71.11
18	Kab. Rokan Hilir	Riau	Western Part	70.13
19	Kota Bitung	Sulut	Western Part	62.75
20	Kab. Batanghari	Jambi	Western Part	61.46
21	Kota Bengkulu	Bengkulu	Western Part	59.98
22	Kota Jambi	Jambi	Western Part	58.16
23	Kab. Tanah Laut	Kalsel	Eastern Part	55.10
24	Kota Sibolga	Sumut	Western Part	53.37
25	Kab. Lampung Tengah	Lampung	Western Part	52.18
26	Kab. Takalar	Sulsel	Eastern Part	50.43
27	Kab. Badung	Bali	Western Part	50.07
28	Kota Banda Aceh	NAD	Western Part	48.87
29	Kab. Polewali Mamasa	Sulsel	Eastern Part	47.74
30	Kab. Banjar	Kalsel	Eastern Part	46.45
31	Kab. Pelalawan	Riau	Western Part	45.76
32	Kab. Lombok Timur	NTB	Eastern Part	44.71
33	Kota Dumai	Riau	Western Part	43.43
34	Kab. Padang Pariaman	Sumbar	Western Part	42.54
35	Kab. Timor Tengah Utara	NTT	Eastern Part	42.46
36	Kab. Lampung Barat	Lampung	Western Part	40.73
37	Kab. Luwu	Sulsel	Eastern Part	38.71
38	Kota Gorontalo	Gorontalo	Eastern Part	38.64
39	Kab. Lahat	Sumsel	Western Part	37.71
40	Kab. Kampar	Riau	Western Part	37.54
41	Kab. Sinjai	Sulsel	Eastern Part	37.37
42	Kab. Sambas	Kalbar	Eastern Part	35.14
43	Kab. Pati	Jateng	Western Part	34.79
44	Kab. Lebak	Banten	Western Part	34.50
45	Kota Jayapura	Papua	Eastern Part	33.47
46	Kota Pangkal Pinang	Babel	Western Part	33.45
47	Kab. Aceh Selatan	NAD	Western Part	33.39
48	Kab. Tapanuli Tengah	Sumut	Western Part	32.99
49	Kota Metro	Lampung	Western Part	32.53
50	Kota Ternate	Maluku Utara	Eastern Part	32.00
51	Kab. Tangerang	Banten	Western Part	31.98
52	Kota Banjarmasin	Kalsel	Eastern Part	31.41
53	Kota Blitar	Jatim	Western Part	31.37
54	Kab. Tapin	Kalsel	Eastern Part	31.31
55	Kab. Kuantan Singingi	Riau	Western Part	29.98
56	Kab. Tanah Datar	Sumbar	Western Part	28.99
57	Kota Depok	Jabar	Western Part	27.91
58	Kab. Sumba Timur	NTT	Eastern Part	27.82
59	Kab. Tulang Bawang	Lampung	Western Part	27.41

60	Kab. Pasuruan	Jatim	Western Part	26.18
61	Kab. Tabanan	Bali	Western Part	25.37
62	Kab. Tanggamus	Lampung	Western Part	24.70
63	Kota Padang Panjang	Sumbar	Western Part	24.24
64	Kab. Kotawaringin Timur	Kalteng	Eastern Part	23.45
65	Kab. Tanah Karo	Sumut	Western Part	22.96
66	Kota Pekanbaru	Riau	Western Part	22.50
67	Kab. Gresik	Jatim	Western Part	22.36
68	Kab. Ngada	NTT	Eastern Part	22.34
69	Kota Bogor	Jabar	Western Part	22.17
70	Kab. Cianjur	Jabar	Western Part	22.10
71	Kab. Magelang	Jateng	Western Part	22.00
72	Kab. Kotawaringin Barat	Kalteng	Eastern Part	21.40
73	Kab. Lampung Utara	Lampung	Western Part	21.10
74	Kab. Banjarnegara	Jateng	Western Part	21.02
75	Kota Solok	Sumbar	Western Part	20.88
76	Kota Tegal	Jateng	Western Part	20.52
77	Kab. Purworejo	Jateng	Western Part	20.08
78	Kab. Sumedang	Jabar	Western Part	20.04
79	Kab. Pekalongan	Jateng	Western Part	19.75
80	Kab. Ketapang	Kalbar	Eastern Part	18.98
81	Kota Malang	Jatim	Western Part	18.80
82	Kota Bukit Tinggi	Sumbar	Western Part	18.18
83	Kab. Kapuas	Kalteng	Eastern Part	17.99
84	Kab. Alor	NTT	Eastern Part	17.67
85	Kota Tangerang	Banten	Western Part	17.41
86	Kab. Hulu Sungai Selatan	Kalsel	Eastern Part	17.40
87	Kota Sawahlunto	Sumbar	Western Part	17.03
88	Kab. Karanganyar	Jateng	Western Part	17.02
89	Kab. Musi Rawas	Sumsel	Western Part	16.92
90	Kota Cilegon	Banten	Western Part	16.88
91	Kota Yogyakarta	Yogya	Western Part	16.45
92	Kab. Tabalong	Kalsel	Eastern Part	16.35
93	Kab. Ciamis	Jabar	Western Part	16.19
94	Kota Langsa	NAD	Western Part	16.17
95	Kota Pekalongan	Jateng	Western Part	15.97
96	Kota Medan	Sumut	Western Part	15.12
97	Kab. Barru	Sulsel	Eastern Part	14.59
98	Kab. Barito Selatan	Kalteng	Eastern Part	14.48
99	Kab. Tana Toraja	Sulsel	Eastern Part	13.97
100	Kab. Banyumas	Jateng	Western Part	13.72
101	Kota Bekasi	Jabar	Western Part	13.62
102	Kab. Sleman	Yogya	Western Part	13.46
103	Kota Manado	Sulut	Western Part	13.32
104	Kota Bontang	Kaltim	Eastern Part	13.01
105	Kab. Jeneponto	Sulsel	Eastern Part	13.00
106	Kab. Boyolali	Jateng	Western Part	12.75
107	Kota Palangka Raya	Kalteng	Eastern Part	12.53
108	Kab. Maros	Sulsel	Eastern Part	12.46
109	Kota Bau-Bau	Sultra	Eastern Part	11.76
110	Kab. Bogor	Jabar	Western Part	11.64
111	Kota Pare-Pare	Sulsel	Eastern Part	11.63
112	Kota Balikpapan	Kaltim	Eastern Part	11.33
113	Kab. Kupang	NTT	Eastern Part	11.25
114	Kota Pontianak	Kalbar	Eastern Part	11.03
115	Kab. Bone	Sulsel	Eastern Part	10.89
116	Kab. Semarang	Jateng	Western Part	10.84
117	Kab. Sumba Barat	NTT	Eastern Part	10.80
118	Kab. Tasikmalaya	Jabar	Western Part	10.40
119	Kab. Serang	Banten	Western Part	9.87
120	Kab. Landak	Kalbar	Eastern Part	9.71
121	Kab. Blora	Jateng	Western Part	9.64

122	Kab. Lombok Barat	NTB	Eastern Part	9.32
123	Kab. Tuban	Jatim	Western Part	9.32
124	Kab. Lampung Selatan	Lampung	Western Part	9.02
125	Kab. Sukoharjo	Jateng	Western Part	8.89
126	Kota Semarang	Jateng	Western Part	8.85
127	Kab. Jember	Jatim	Western Part	8.83
128	Kab. Kapuas Hulu	Kalbar	Eastern Part	8.18
129	Kota Makassar	Sulsel	Eastern Part	8.12
130	Kab. Ende	NTT	Eastern Part	8.09
131	Kota Bandar Lampung	Lampung	Western Part	7.95
132	Kab. Sidenreng Rappang	Sulsel	Eastern Part	7.53
133	Kota Padang	Sumbar	Western Part	7.37
134	Kab. Kudus	Jateng	Western Part	7.14
135	Kota Salatiga	Jateng	Western Part	7.12
136	Kab. Madiun	Jatim	Western Part	6.90
137	Kota Tanjung Balai	Sumut	Western Part	6.68
138	Kab. Pontianak	Kalbar	Eastern Part	6.63
139	Kab. Asahan	Sumut	Western Part	6.41
140	Kab. Mojokerto	Jatim	Western Part	6.16
141	Kab. Majalengka	Jabar	Western Part	6.02
142	Kab. Pangkajene dan Kepulauan	Sulsel	Eastern Part	5.64
143	Kab. Barito Utara	Kalteng	Eastern Part	5.57
144	Kab. Temanggung	Jateng	Western Part	5.34
145	Kab. Subang	Jabar	Western Part	5.29
146	Kab. Lamongan	Jatim	Western Part	5.25
147	Kab. Sidoarjo	Jatim	Western Part	5.11
148	Kab. Agam	Sumbar	Western Part	4.45
149	Kab. Timor Tengah Selatan	NTT	Eastern Part	4.06
150	Kab. Tanjung Jabung Barat	Jambi	Western Part	3.69
151	Kab. Karawang	Jabar	Western Part	2.68
152	Kota Denpasar	Bali	Western Part	2.57
153	Kota Binjai	Sumut	Western Part	2.36
154	Kab. Rembang	Jateng	Western Part	2.30
155	Kota Sukabumi	Jabar	Western Part	2.29
156	Kab. Brebes	Jateng	Western Part	1.77
157	Kab. Tegal	Jateng	Western Part	1.76
158	Kota Kendari	Sultra	Eastern Part	1.58
159	Kab. Batang	Jateng	Western Part	1.30
160	Kab. Karangasem	Bali	Western Part	1.28
161	Kab. Ngawi	Jatim	Western Part	1.05
162	Kab. Aceh Utara	NAD	Western Part	0.67
163	Kab. Enrekang	Sulsel	Eastern Part	0.32
164	Kab. Barito Kuala	Kalsel	Eastern Part	0.01
165	Kab. Bandung	Jabar	Western Part	-1.26
166	Kab. Bangkalan	Jatim	Western Part	-1.46
167	Kab. Yapen Waropen	Papua	Eastern Part	-1.79
168	Kab. Malang	Jatim	Western Part	-2.07
169	Kab. Belu	NTT	Eastern Part	-2.48
170	Kab. Klungkung	Bali	Western Part	-2.62
171	Kab. Wonogiri	Jateng	Western Part	-2.72
172	Kab. Muara Enim	Sumsel	Western Part	-3.02
173	Kota Palembang	Sumsel	Western Part	-3.05
174	Kota Samarinda	Kaltim	Eastern Part	-3.76
175	Kota Bandung	Jabar	Western Part	-3.80
176	Kab. Sikka	NTT	Eastern Part	-4.13
177	Kab. Indragiri Hilir	Riau	Western Part	-4.55
178	Kab. Kutai Barat	Kaltim	Eastern Part	-4.97
179	Kab. Bantul	Yogya	Western Part	-6.40
180	Kab. Bangli	Bali	Western Part	-7.12
181	Kab. Majene	Sulsel	Eastern Part	-7.21
182	Kab. Sukabumi	Jabar	Western Part	-7.52
183	Kab. Selayar	Sulsel	Eastern Part	-7.61

184	Kab. Bungo	Jambi	Western Part	-7.74
185	Kab. Wajo	Sulsel	Eastern Part	-8.37
186	Kab. Bima	NTB	Eastern Part	-8.38
187	Kab. Sangihe Talaud	Sulut	Eastern Part	-9.17
188	Kab. Gowa	Sulsel	Eastern Part	-9.26
189	Kab. Cirebon	Jabar	Western Part	-9.94
190	Kab. Kebumen	Jateng	Western Part	-11.88
191	Kab. Jembrana	Bali	Western Part	-12.04
192	Kab. Jepara	Jateng	Western Part	-12.05
193	Kab. Hulu Sungai Tengah	Kalsel	Eastern Part	-12.06
194	Kab. Bondowoso	Jatim	Western Part	-12.21
195	Kab. Aceh Tenggara	NAD	Western Part	-12.96
196	Kab. Banyuwangi	Jatim	Western Part	-13.56
197	Kab. Kendal	Jateng	Western Part	-14.80
198	Kab. Situbondo	Jatim	Western Part	-16.16
199	Kab. Soppeng	Sulsel	Eastern Part	-16.52
200	Kab. Tapanuli Selatan	Sumut	Western Part	-17.00
201	Kab. Kulon Progo	Yogya	Western Part	-17.49
202	Kab. Simalungun	Sumut	Western Part	-18.71
203	Kab. Dompu	NTB	Eastern Part	-19.12
204	Kab. Tanjung Jabung Timur	Jambi	Western Part	-19.47
205	Kota Lhokseumawe	NAD	Western Part	-23.57
206	Kab. Pesisir Selatan	Sumbar	Western Part	-24.11
207	Kab. Indramayu	Jabar	Western Part	-26.34
208	Kota Lubuk Linggau	Sumsel	Western Part	-34.29
209	Kab. Karimun	Riau	Western Part	-37.65
210	Kab. Lima Puluh Kota	Sumbar	Western Part	-41.36
211	Kab. Muaro Jambi	Jambi	Western Part	-51.11
212	Kota Magelang	Jateng	Western Part	-52.04
213	Kab. Musi Banyuasin	Sumsel	Western Part	-60.26
214	Kab. Halmahera Tengah	Maluku Utara	Eastern Part	-63.63



**APPENDIX A.1****LOCAL OWN REVENUE (PAD) SHARE ON LOCAL SPENDING FOR FY 2004**

No.	Regency/Municipality	Province	Part of Indonesia	SHARE 2004 (%)
1	Kab. Badung	Bali	Western Part	60.44
2	Kota Cilegon	Banten	Western Part	35.52
3	Kab. Bekasi	Jabar	Western Part	33.96
4	Kota Denpasar	Bali	Western Part	26.06
5	Kota Medan	Sumut	Western Part	25.68
6	Kota Semarang	Jateng	Western Part	23.56
7	Kota Yogyakarta	Yogya	Western Part	21.58
8	Kota Bandung	Jabar	Western Part	21.02
9	Kota Tangerang	Banten	Western Part	19.60
10	Kab. Sidoarjo	Jatim	Western Part	19.45
11	Kota Kupang	NTT	Eastern Part	18.49
12	Kab. Bogor	Jabar	Western Part	17.20
13	Kab. Tangerang	Banten	Western Part	17.16
14	Kab. Fak-Fak	Papua	Eastern Part	16.97
15	Kota Padang	Sumbar	Western Part	16.88
16	Kab. Karimun	Riau	Western Part	16.82
17	Kota Tegal	Jateng	Western Part	16.81
18	Kab. Gresik	Jatim	Western Part	16.69
19	Kota Bekasi	Jabar	Western Part	16.27
20	Kota Makassar	Sulsel	Eastern Part	15.56
21	Kota Pekanbaru	Riau	Western Part	14.85
22	Kota Blitar	Jatim	Western Part	14.69
23	Kab. Tuban	Jatim	Western Part	14.13
24	Kota Malang	Jatim	Western Part	13.81
25	Kota Bogor	Jabar	Western Part	13.68
26	Kab. Tabanan	Bali	Western Part	13.66
27	Kab. Rokan Hulu	Riau	Western Part	13.21
28	Kab. Pangkajene dan Kepulauan	Sulsel	Eastern Part	12.95
29	Kota Banjarmasin	Kalsel	Eastern Part	12.87
30	Kab. Serang	Banten	Western Part	12.82
31	Kota Salatiga	Jateng	Western Part	12.80
32	Kab. Lombok Tengah	NTB	Eastern Part	12.77
33	Kota Manado	Sulut	Western Part	12.61
34	Kab. Pati	Jateng	Western Part	12.58
35	Kota Sukabumi	Jabar	Western Part	12.52
36	Kab. Sleman	Yogya	Western Part	12.52
37	Kab. Kotawaringin Timur	Kalteng	Eastern Part	12.45
38	Kab. Kudus	Jateng	Western Part	12.40
39	Kota Pontianak	Kalbar	Eastern Part	12.36
40	Kab. Semarang	Jateng	Western Part	12.28
41	Kab. Jepara	Jateng	Western Part	12.26
42	Kota Depok	Jabar	Western Part	12.21
43	Kab. Karawang	Jabar	Western Part	11.76
44	Kota Jambi	Jambi	Western Part	11.74
45	Kota Balikpapan	Kaltim	Eastern Part	11.58
46	Kota Bukit Tinggi	Sumbar	Western Part	11.46
47	Kab. Sumedang	Jabar	Western Part	11.37
48	Kab. Subang	Jabar	Western Part	11.12
49	Kab. Kotawaringin Barat	Kalteng	Eastern Part	10.82
50	Kab. Pasuruan	Jatim	Western Part	10.58
51	Kab. Banyumas	Jateng	Western Part	10.49
52	Kab. Magelang	Jateng	Western Part	10.46
53	Kota Bandar Lampung	Lampung	Western Part	10.31
54	Kota Palembang	Sumsel	Western Part	10.14
55	Kota Tanjung Pinang	Riau	Western Part	10.13
56	Kab. Bungo	Jambi	Western Part	9.87
57	Kota Pare-Pare	Sulsel	Eastern Part	9.78
58	Kab. Kupang	NTT	Eastern Part	9.64
59	Kab. Boyolali	Jateng	Western Part	9.34

60	Kota Pangkal Pinang	Babel	Western Part	9.28
61	Kota Gorontalo	Gorontalo	Eastern Part	9.13
62	Kota Ambon	Maluku	Eastern Part	8.98
63	Kab. Mojokerto	Jatim	Western Part	8.89
64	Kab. Banjarnegara	Jateng	Western Part	8.88
65	Kab. Tegal	Jateng	Western Part	8.88
66	Kota Solok	Sumbar	Western Part	8.86
67	Kota Pekalongan	Jateng	Western Part	8.80
68	Kota Samarinda	Kaltim	Eastern Part	8.77
69	Kab. Pekalongan	Jateng	Western Part	8.74
70	Kab. Bandung	Jabar	Western Part	8.71
71	Kab. Karanganyar	Jateng	Western Part	8.40
72	Kota Sawahlunto	Sumbar	Western Part	8.38
73	Kab. Lombok Timur	NTB	Eastern Part	8.30
74	Kab. Lamongan	Jatim	Western Part	8.19
75	Kab. Rokan Hilir	Riau	Western Part	8.15
76	Kab. Tabalong	Kalsel	Eastern Part	7.99
77	Kab. Kendal	Jateng	Western Part	7.98
78	Kab. Blora	Jateng	Western Part	7.82
79	Kab. Tanjung Jabung Barat	Jambi	Western Part	7.81
80	Kab. Karangasem	Bali	Western Part	7.77
81	Kab. Bantul	Yogya	Western Part	7.76
82	Kab. Lombok Barat	NTB	Eastern Part	7.63
83	Kota Padang Panjang	Sumbar	Western Part	7.57
84	Kab. Banyuwangi	Jatim	Western Part	7.53
85	Kab. Tanah Laut	Kalsel	Eastern Part	7.50
86	Kab. Timor Tengah Selatan	NTT	Eastern Part	7.45
87	Kab. Purworejo	Jateng	Western Part	7.43
88	Kota Bengkulu	Bengkulu	Western Part	7.27
89	Kab. Batang	Jateng	Western Part	7.26
90	Kab. Cirebon	Jabar	Western Part	7.22
91	Kota Kendari	Sultra	Eastern Part	7.13
92	Kab. Muara Enim	Sumsel	Western Part	7.05
93	Kota Bitung	Sulut	Western Part	7.05
94	Kab. Cianjur	Jabar	Western Part	7.04
95	Kab. Gowa	Sulsel	Eastern Part	7.04
96	Kota Tebing Tinggi	Sumut	Western Part	6.98
97	Kab. Wajo	Sulsel	Eastern Part	6.63
98	Kab. Sinjai	Sulsel	Eastern Part	6.61
99	Kab. Sukoharjo	Jateng	Western Part	6.61
100	Kab. Jember	Jatim	Western Part	6.58
101	Kota Sibolga	Sumut	Western Part	6.56
102	Kab. Padang Pariaman	Sumbar	Western Part	6.54
103	Kab. Rembang	Jateng	Western Part	6.53
104	Kab. Tanah Datar	Sumbar	Western Part	6.50
105	Kab. Madiun	Jatim	Western Part	6.48
106	Kota Magelang	Jateng	Western Part	6.44
107	Kab. Tapin	Kalsel	Eastern Part	6.40
108	Kab. Temanggung	Jateng	Western Part	6.37
109	Kab. Kulon Progo	Yogya	Western Part	6.37
110	Kab. Ngawi	Jatim	Western Part	6.37
111	Kab. Batanghari	Jambi	Western Part	6.35
112	Kota Tanjung Balai	Sumut	Western Part	6.32
113	Kab. Malang	Jatim	Western Part	6.30
114	Kota Jayapura	Papua	Eastern Part	6.26
115	Kota Metro	Lampung	Western Part	6.25
116	Kab. Kebumen	Jateng	Western Part	6.14
117	Kab. Sidenreng Rappang	Sulsel	Eastern Part	6.07
118	Kab. Bima	NTB	Eastern Part	6.06
119	Kab. Tana Toraja	Sulsel	Eastern Part	6.06
120	Kab. Pasir	Kaltim	Eastern Part	6.03
121	Kab. Wonogiri	Jateng	Western Part	5.99

122	Kab. Ciamis	Jabar	Western Part	5.96
123	Kab. Bondowoso	Jatim	Western Part	5.94
124	Kab. Banggai	Sulteng	Eastern Part	5.93
125	Kab. Majalengka	Jabar	Western Part	5.90
126	Kab. Sumba Timur	NTT	Eastern Part	5.84
127	Kab. Enrekang	Sulsel	Eastern Part	5.83
128	Kab. Klungkung	Bali	Western Part	5.80
129	Kab. Hulu Sungai Tengah	Kalsel	Eastern Part	5.76
130	Kab. Asahan	Sumut	Western Part	5.75
131	Kab. Maros	Sulsel	Eastern Part	5.74
132	Kab. Hulu Sungai Selatan	Kalsel	Eastern Part	5.73
133	Kab. Lebak	Banten	Western Part	5.67
134	Kota Ternate	Maluku Utara	Eastern Part	5.65
135	Kab. Alor	NTT	Eastern Part	5.56
136	Kab. Brebes	Jateng	Western Part	5.41
137	Kab. Bangkalan	Jatim	Western Part	5.40
138	Kab. Sumba Barat	NTT	Eastern Part	5.37
139	Kab. Barru	Sulsel	Eastern Part	5.34
140	Kab. Banjar	Kalsel	Eastern Part	5.32
141	Kab. Polewali Mamasa	Sulsel	Eastern Part	5.26
142	Kota Palangka Raya	Kalteng	Eastern Part	5.23
143	Kab. Sukabumi	Jabar	Western Part	5.19
144	Kab. Aceh Utara	NAD	Western Part	5.18
145	Kab. Bone	Sulsel	Eastern Part	5.10
146	Kota Dumai	Riau	Western Part	5.09
147	Kab. Kutai Barat	Kaltim	Eastern Part	5.03
148	Kota Lhokseumawe	NAD	Western Part	4.98
149	Kab. Kampar	Riau	Western Part	4.95
150	Kota Binjai	Sumut	Western Part	4.90
151	Kab. Ngada	NTT	Eastern Part	4.87
152	Kab. Lahat	Sumsel	Western Part	4.84
153	Kota Bau-Bau	Sultra	Eastern Part	4.77
154	Kab. Luwu	Sulsel	Eastern Part	4.77
155	Kab. Barito Kuala	Kalsel	Eastern Part	4.76
156	Kab. Barito Utara	Kalteng	Eastern Part	4.67
157	Kab. Indragiri Hilir	Riau	Western Part	4.66
158	Kab. Indramayu	Jabar	Western Part	4.64
159	Kab. Agam	Sumbar	Western Part	4.61
160	Kab. Jembrana	Bali	Western Part	4.59
161	Kota Lubuk Linggau	Sumsel	Western Part	4.59
162	Kab. Situbondo	Jatim	Western Part	4.58
163	Kab. Sikka	NTT	Eastern Part	4.47
164	Kota Banda Aceh	NAD	Western Part	4.39
165	Kab. Takalar	Sulsel	Eastern Part	4.36
166	Kab. Lima Puluh Kota	Sumbar	Western Part	4.32
167	Kab. Sangihe Talaud	Sulut	Eastern Part	4.28
168	Kab. Belu	NTT	Eastern Part	4.26
169	Kota Bontang	Kaltim	Eastern Part	4.15
170	Kab. Kapuas	Kalteng	Eastern Part	4.13
171	Kab. Ende	NTT	Eastern Part	4.12
172	Kab. Tasikmalaya	Jabar	Western Part	4.12
173	Kab. Timor Tengah Utara	NTT	Eastern Part	4.07
174	Kab. Bangli	Bali	Western Part	4.03
175	Kab. Dompu	NTB	Eastern Part	4.03
176	Kab. Sambas	Kalbar	Eastern Part	3.99
177	Kab. Tanah Karo	Sumut	Western Part	3.86
178	Kab. Paniai	Papua	Eastern Part	3.86
179	Kab. Ketapang	Kalbar	Eastern Part	3.84
180	Kab. Simalungun	Sumut	Western Part	3.62
181	Kab. Muaro Jambi	Jambi	Western Part	3.46
182	Kab. Soppeng	Sulsel	Eastern Part	3.44
183	Kab. Musi Rawas	Sumsel	Western Part	3.38

184	Kab. Tapanuli Tengah	Sumut	Western Part	3.34
185	Kab. Lampung Selatan	Lampung	Western Part	3.25
186	Kab. Kuantan Singingi	Riau	Western Part	3.17
187	Kab. Pontianak	Kalbar	Eastern Part	3.06
188	Kab. Lampung Utara	Lampung	Western Part	2.99
189	Kab. Pesisir Selatan	Sumbang	Western Part	2.98
190	Kab. Barito Selatan	Kalteng	Eastern Part	2.93
191	Kab. Jeneponto	Sulsel	Eastern Part	2.87
192	Kab. Pelalawan	Riau	Western Part	2.86
193	Kab. Tanjung Jabung Timur	Jambi	Western Part	2.77
194	Kab. Selayar	Sulsel	Eastern Part	2.67
195	Kab. Tanggamus	Lampung	Western Part	2.58
196	Kab. Aceh Tamiang	NAD	Western Part	2.49
197	Kab. Lampung Tengah	Lampung	Western Part	2.48
198	Kab. Tapanuli Selatan	Sumut	Western Part	2.46
199	Kab. Lampung Barat	Lampung	Western Part	2.46
200	Kab. Kapuas Hulu	Kalbar	Eastern Part	2.41
201	Kab. Aceh Tenggara	NAD	Western Part	2.39
202	Kab. Aceh Barat Daya	NAD	Western Part	2.11
203	Kab. Halmahera Tengah	Maluku Utara	Eastern Part	2.08
204	Kab. Nabire	Papua	Eastern Part	2.03
205	Kab. Majene	Sulsel	Eastern Part	1.96
206	Kab. Tulang Bawang	Lampung	Western Part	1.82
207	Kab. Banyuasin	Sumsel	Western Part	1.82
208	Kota Langsa	NAD	Western Part	1.79
209	Kab. Musi Banyuasin	Sumsel	Western Part	1.79
210	Kab. Aceh Selatan	NAD	Western Part	1.73
211	Kab. Yapen Waropen	Papua	Eastern Part	1.60
212	Kab. Nagan Raya	NAD	Western Part	1.55
213	Kab. Landak	Kalbar	Eastern Part	1.07
214	Kab. Penajam Paser Utara	Kaltim	Eastern Part	0.99

**APPENDIX B**

**THE FINANCIAL ABILITY CLASSIFICATION OF INDONESIA LOCAL GOVERNMENTS - QUADRANT METHOD**

No.	Regency/Municipality	Province	Part of Indonesia	SHARE 2004	PAD GROWTH	SHARE CRITERION	PAD GROWTH CRITERION	QUADRANT
1	Kab. Badung	Bali	Western Part	60.44	50.07	HIGH	HIGH	I
2	Kab. Bekasi	Jabar	Western Part	33.96	117.48	HIGH	HIGH	I
3	Kab. Fak-Fak	Papua	Eastern Part	16.97	261.39	HIGH	HIGH	I
4	Kab. Lombok Tengah	NTB	Eastern Part	12.77	221.99	HIGH	HIGH	I
5	Kab. Lombok Timur	NTB	Eastern Part	8.30	44.71	HIGH	HIGH	I
6	Kab. Pasuruan	Jatim	Western Part	10.58	26.18	HIGH	HIGH	I
7	Kab. Pati	Jateng	Western Part	12.58	34.79	HIGH	HIGH	I
8	Kab. Rokan Hulu	Riau	Western Part	13.21	121.66	HIGH	HIGH	I
9	Kab. Tabanan	Bali	Western Part	13.66	25.37	HIGH	HIGH	I
10	Kab. Tangerang	Banten	Western Part	17.16	31.98	HIGH	HIGH	I
11	Kota Ambon	Maluku	Eastern Part	8.98	167.73	HIGH	HIGH	I
12	Kota Banjarmasin	Kalsel	Eastern Part	12.87	31.41	HIGH	HIGH	I
13	Kota Blitar	Jatim	Western Part	14.69	31.37	HIGH	HIGH	I
14	Kota Depok	Jabar	Western Part	12.21	27.91	HIGH	HIGH	I
15	Kota Gorontalo	Gorontalo	Eastern Part	9.13	38.64	HIGH	HIGH	I
16	Kota Jambi	Jambi	Western Part	11.74	58.16	HIGH	HIGH	I
17	Kota Kupang	NTT	Eastern Part	18.49	72.68	HIGH	HIGH	I
18	Kota Pangkal Pinang	Babel	Western Part	9.28	33.45	HIGH	HIGH	I
19	Kota Tanjung Pinang	Riau	Western Part	10.13	129.56	HIGH	HIGH	I
20	Kab. Bandung	Jabar	Western Part	8.71	-1.26	HIGH	LOW	II
21	Kab. Banjarnegara	Jateng	Western Part	8.88	21.02	HIGH	LOW	II
22	Kab. Banyumas	Jateng	Western Part	10.49	13.72	HIGH	LOW	II
23	Kab. Bogor	Jabar	Western Part	17.20	11.64	HIGH	LOW	II
24	Kab. Boyolali	Jateng	Western Part	9.34	12.75	HIGH	LOW	II
25	Kab. Bungo	Jambi	Western Part	9.87	-7.74	HIGH	LOW	II
26	Kab. Gresik	Jatim	Western Part	16.69	22.36	HIGH	LOW	II
27	Kab. Jepara	Jateng	Western Part	12.26	-12.05	HIGH	LOW	II
28	Kab. Karanganyar	Jateng	Western Part	8.40	17.02	HIGH	LOW	II
29	Kab. Karawang	Jabar	Western Part	11.76	2.68	HIGH	LOW	II
30	Kab. Karimun	Riau	Western Part	16.82	-37.65	HIGH	LOW	II
31	Kab. Kotawaringin Barat	Kalteng	Eastern Part	10.82	21.40	HIGH	LOW	II
32	Kab. Kotawaringin Timur	Kalteng	Eastern Part	12.45	23.45	HIGH	LOW	II
33	Kab. Kudus	Jateng	Western Part	12.40	7.14	HIGH	LOW	II
34	Kab. Kupang	NTT	Eastern Part	9.64	11.25	HIGH	LOW	II
35	Kab. Lamongan	Jatim	Western Part	8.19	5.25	HIGH	LOW	II
36	Kab. Magelang	Jateng	Western Part	10.46	22.00	HIGH	LOW	II
37	Kab. Mojokerto	Jatim	Western Part	8.89	6.16	HIGH	LOW	II
38	Kab. Pangkajene dan Kepulauan	Sulsel	Eastern Part	12.95	5.64	HIGH	LOW	II
39	Kab. Pekalongan	Jateng	Western Part	8.74	19.75	HIGH	LOW	II
40	Kab. Semarang	Jateng	Western Part	12.28	10.84	HIGH	LOW	II
41	Kab. Serang	Banten	Western Part	12.82	9.87	HIGH	LOW	II
42	Kab. Sidoarjo	Jatim	Western Part	19.45	5.11	HIGH	LOW	II
43	Kab. Sleman	Yogya	Western Part	12.52	13.46	HIGH	LOW	II
44	Kab. Subang	Jabar	Western Part	11.12	5.29	HIGH	LOW	II
45	Kab. Sumedang	Jabar	Western Part	11.37	20.04	HIGH	LOW	II
46	Kab. Tegal	Jateng	Western Part	8.88	1.76	HIGH	LOW	II
47	Kab. Tuban	Jatim	Western Part	14.13	9.32	HIGH	LOW	II
48	Kota Balikpapan	Kaltim	Eastern Part	11.58	11.33	HIGH	LOW	II
49	Kota Bandar Lampung	Lampung	Western Part	10.31	7.95	HIGH	LOW	II
50	Kota Bandung	Jabar	Western Part	21.02	-3.80	HIGH	LOW	II
51	Kota Bekasi	Jabar	Western Part	16.27	13.62	HIGH	LOW	II
52	Kota Bogor	Jabar	Western Part	13.68	22.17	HIGH	LOW	II
53	Kota Bukit Tinggi	Sumbar	Western Part	11.46	18.18	HIGH	LOW	II
54	Kota Cilegon	Banten	Western Part	35.52	16.88	HIGH	LOW	II
55	Kota Denpasar	Bali	Western Part	26.06	2.57	HIGH	LOW	II
56	Kota Makassar	Sulsel	Eastern Part	15.56	8.12	HIGH	LOW	II
57	Kota Malang	Jatim	Western Part	13.81	18.80	HIGH	LOW	II
58	Kota Manado	Sulut	Western Part	12.61	13.32	HIGH	LOW	II
59	Kota Medan	Sumut	Western Part	25.68	15.12	HIGH	LOW	II
60	Kota Padang	Sumbar	Western Part	16.88	7.37	HIGH	LOW	II
61	Kota Palembang	Sumsel	Western Part	10.14	-3.05	HIGH	LOW	II
62	Kota Pare-Pare	Sulsel	Eastern Part	9.78	11.63	HIGH	LOW	II
63	Kota Pekalongan	Jateng	Western Part	8.80	15.97	HIGH	LOW	II
64	Kota Pekanbaru	Riau	Western Part	14.85	22.50	HIGH	LOW	II
65	Kota Pontianak	Kalbar	Eastern Part	12.36	11.03	HIGH	LOW	II
66	Kota Salatiga	Jateng	Western Part	12.80	7.12	HIGH	LOW	II
67	Kota Samarinda	Kaltim	Eastern Part	8.77	-3.76	HIGH	LOW	II
68	Kota Sawahlunto	Sumbar	Western Part	8.38	17.03	HIGH	LOW	II
69	Kota Semarang	Jateng	Western Part	23.56	8.85	HIGH	LOW	II
70	Kota Solok	Sumbar	Western Part	8.86	20.88	HIGH	LOW	II
71	Kota Sukabumi	Jabar	Western Part	12.52	2.29	HIGH	LOW	II
72	Kota Tangerang	Banten	Western Part	19.60	17.41	HIGH	LOW	II
73	Kota Tegal	Jateng	Western Part	16.81	20.52	HIGH	LOW	II
74	Kota Yogyakarta	Yogya	Western Part	21.58	16.45	HIGH	LOW	II
75	Kab. Aceh Barat Daya	NAD	Western Part	2.11	334.00	LOW	HIGH	III
76	Kab. Aceh Selatan	NAD	Western Part	1.73	33.39	LOW	HIGH	III

77	Kab. Aceh Tamiang	NAD	Western Part	2.49	437.70	LOW	HIGH	III
78	Kab. Banggai	Sulteng	Eastern Part	5.93	105.14	LOW	HIGH	III
79	Kab. Banjar	Kalsel	Eastern Part	5.32	46.45	LOW	HIGH	III
80	Kab. Banyuasin	Sumsel	Western Part	1.82	136.72	LOW	HIGH	III
81	Kab. Batanghari	Jambi	Western Part	6.35	61.46	LOW	HIGH	III
82	Kab. Kampar	Riau	Western Part	4.95	37.54	LOW	HIGH	III
83	Kab. Kuantan Singingi	Riau	Western Part	3.17	29.98	LOW	HIGH	III
84	Kab. Lahat	Sumsel	Western Part	4.84	37.71	LOW	HIGH	III
85	Kab. Lampung Barat	Lampung	Western Part	2.46	40.73	LOW	HIGH	III
86	Kab. Lampung Tengah	Lampung	Western Part	2.48	52.18	LOW	HIGH	III
87	Kab. Lebak	Banten	Western Part	5.67	34.50	LOW	HIGH	III
88	Kab. Luwu	Sulsel	Eastern Part	4.77	38.71	LOW	HIGH	III
89	Kab. Nabire	Papua	Eastern Part	2.03	71.11	LOW	HIGH	III
90	Kab. Nagan Raya	NAD	Western Part	1.55	128.15	LOW	HIGH	III
91	Kab. Padang Pariaman	Sumbar	Western Part	6.54	42.54	LOW	HIGH	III
92	Kab. Paniai	Papua	Eastern Part	3.86	310.12	LOW	HIGH	III
93	Kab. Pasir	Kaltim	Eastern Part	6.03	76.29	LOW	HIGH	III
94	Kab. Pelalawan	Riau	Western Part	2.86	45.76	LOW	HIGH	III
95	Kab. Penajam Paser Utara	Kaltim	Eastern Part	0.99	367.55	LOW	HIGH	III
96	Kab. Polewali Mamasa	Sulsel	Eastern Part	5.26	47.74	LOW	HIGH	III
97	Kab. Rokan Hilir	Riau	Western Part	8.15	70.13	LOW	HIGH	III
98	Kab. Sambas	Kalbar	Eastern Part	3.99	35.14	LOW	HIGH	III
99	Kab. Sinjai	Sulsel	Eastern Part	6.61	37.37	LOW	HIGH	III
100	Kab. Sumba Timur	NTT	Eastern Part	5.84	27.82	LOW	HIGH	III
101	Kab. Takalar	Sulsel	Eastern Part	4.36	50.43	LOW	HIGH	III
102	Kab. Tanah Datar	Sumbar	Western Part	6.50	28.99	LOW	HIGH	III
103	Kab. Tanah Laut	Kalsel	Eastern Part	7.50	55.10	LOW	HIGH	III
104	Kab. Tapanuli Tengah	Sumut	Western Part	3.34	32.99	LOW	HIGH	III
105	Kab. Tapin	Kalsel	Eastern Part	6.40	31.31	LOW	HIGH	III
106	Kab. Timor Tengah Utara	NTT	Eastern Part	4.07	42.46	LOW	HIGH	III
107	Kab. Tulang Bawang	Lampung	Western Part	1.82	27.41	LOW	HIGH	III
108	Kota Banda Aceh	NAD	Western Part	4.39	48.87	LOW	HIGH	III
109	Kota Bengkulu	Bengkulu	Western Part	7.27	59.98	LOW	HIGH	III
110	Kota Bitung	Sulut	Western Part	7.05	62.75	LOW	HIGH	III
111	Kota Dumai	Riau	Western Part	5.09	43.43	LOW	HIGH	III
112	Kota Jayapura	Papua	Eastern Part	6.26	33.47	LOW	HIGH	III
113	Kota Metro	Lampung	Western Part	6.25	32.53	LOW	HIGH	III
114	Kota Sibolga	Sumut	Western Part	6.56	53.37	LOW	HIGH	III
115	Kota Tebing Tinggi	Sumut	Western Part	6.98	118.24	LOW	HIGH	III
116	Kota Ternate	Maluku Utara	Eastern Part	5.65	32.00	LOW	HIGH	III
117	Kab. Aceh Tenggara	NAD	Western Part	2.39	-12.96	LOW	LOW	IV
118	Kab. Aceh Utara	NAD	Western Part	5.18	0.67	LOW	LOW	IV
119	Kab. Agam	Sumbar	Western Part	4.61	4.45	LOW	LOW	IV
120	Kab. Alor	NTT	Eastern Part	5.56	17.67	LOW	LOW	IV
121	Kab. Asahan	Sumut	Western Part	5.75	6.41	LOW	LOW	IV
122	Kab. Bangkalan	Jatim	Western Part	5.40	-1.46	LOW	LOW	IV
123	Kab. Bangli	Bali	Western Part	4.03	-7.12	LOW	LOW	IV
124	Kab. Bantul	Yogya	Western Part	7.76	-6.40	LOW	LOW	IV
125	Kab. Banyuwangi	Jatim	Western Part	7.53	-13.56	LOW	LOW	IV
126	Kab. Barito Kuala	Kalsel	Eastern Part	4.76	0.01	LOW	LOW	IV
127	Kab. Barito Selatan	Kalteng	Eastern Part	2.93	14.48	LOW	LOW	IV
128	Kab. Barito Utara	Kalteng	Eastern Part	4.67	5.57	LOW	LOW	IV
129	Kab. Barru	Sulsel	Eastern Part	5.34	14.59	LOW	LOW	IV
130	Kab. Batang	Jateng	Western Part	7.26	1.30	LOW	LOW	IV
131	Kab. Belu	NTT	Eastern Part	4.26	-2.48	LOW	LOW	IV
132	Kab. Bima	NTB	Eastern Part	6.06	-8.38	LOW	LOW	IV
133	Kab. Blora	Jateng	Western Part	7.82	9.64	LOW	LOW	IV
134	Kab. Bondowoso	Jatim	Western Part	5.94	-12.21	LOW	LOW	IV
135	Kab. Bone	Sulsel	Eastern Part	5.10	10.89	LOW	LOW	IV
136	Kab. Brebes	Jateng	Western Part	5.41	1.77	LOW	LOW	IV
137	Kab. Ciamis	Jabar	Western Part	5.96	16.19	LOW	LOW	IV
138	Kab. Cianjur	Jabar	Western Part	7.04	22.10	LOW	LOW	IV
139	Kab. Cirebon	Jabar	Western Part	7.22	-9.94	LOW	LOW	IV
140	Kab. Dompu	NTB	Eastern Part	4.03	-19.12	LOW	LOW	IV
141	Kab. Ende	NTT	Eastern Part	4.12	8.09	LOW	LOW	IV
142	Kab. Enrekang	Sulsel	Eastern Part	5.83	0.32	LOW	LOW	IV
143	Kab. Gowa	Sulsel	Eastern Part	7.04	-9.26	LOW	LOW	IV
144	Kab. Halmahera Tengah	Maluku Utara	Eastern Part	2.08	-63.63	LOW	LOW	IV
145	Kab. Hulu Sungai Selatan	Kalsel	Eastern Part	5.73	17.40	LOW	LOW	IV
146	Kab. Hulu Sungai Tengah	Kalsel	Eastern Part	5.76	-12.06	LOW	LOW	IV
147	Kab. Indragiri Hilir	Riau	Western Part	4.66	-4.55	LOW	LOW	IV
148	Kab. Indramayu	Jabar	Western Part	4.64	-26.34	LOW	LOW	IV
149	Kab. Jember	Jatim	Western Part	6.58	8.83	LOW	LOW	IV
150	Kab. Jembrana	Bali	Western Part	4.59	-12.04	LOW	LOW	IV
151	Kab. Jenepono	Sulsel	Eastern Part	2.87	13.00	LOW	LOW	IV
152	Kab. Kapuas	Kalteng	Eastern Part	4.13	17.99	LOW	LOW	IV
153	Kab. Kapuas Hulu	Kalbar	Eastern Part	2.41	8.18	LOW	LOW	IV
154	Kab. Karangasem	Bali	Western Part	7.77	1.28	LOW	LOW	IV
155	Kab. Kebumen	Jateng	Western Part	6.14	-11.88	LOW	LOW	IV
156	Kab. Kendal	Jateng	Western Part	7.98	-14.80	LOW	LOW	IV
157	Kab. Ketapang	Kalbar	Eastern Part	3.84	18.98	LOW	LOW	IV
158	Kab. Klungkung	Bali	Western Part	5.80	-2.62	LOW	LOW	IV

159	Kab. Kulon Progo	Yogya	Western Part	6.37	-17.49	LOW	LOW	IV
160	Kab. Kutai Barat	Kaltim	Eastern Part	5.03	-4.97	LOW	LOW	IV
161	Kab. Lampung Selatan	Lampung	Western Part	3.25	9.02	LOW	LOW	IV
162	Kab. Lampung Utara	Lampung	Western Part	2.99	21.10	LOW	LOW	IV
163	Kab. Landak	Kalbar	Eastern Part	1.07	9.71	LOW	LOW	IV
164	Kab. Lima Puluh Kota	Sumbar	Western Part	4.32	-41.36	LOW	LOW	IV
165	Kab. Lombok Barat	NTB	Eastern Part	7.63	9.32	LOW	LOW	IV
166	Kab. Madiun	Jatim	Western Part	6.48	6.90	LOW	LOW	IV
167	Kab. Majalengka	Jabar	Western Part	5.90	6.02	LOW	LOW	IV
168	Kab. Majene	Sulsel	Eastern Part	1.96	-7.21	LOW	LOW	IV
169	Kab. Malang	Jatim	Western Part	6.30	-2.07	LOW	LOW	IV
170	Kab. Maros	Sulsel	Eastern Part	5.74	12.46	LOW	LOW	IV
171	Kab. Muara Enim	Sumsel	Western Part	7.05	-3.02	LOW	LOW	IV
172	Kab. Muaro Jambi	Jambi	Western Part	3.46	-51.11	LOW	LOW	IV
173	Kab. Musi Banyuasin	Sumsel	Western Part	1.79	-60.26	LOW	LOW	IV
174	Kab. Musi Rawas	Sumsel	Western Part	3.38	16.92	LOW	LOW	IV
175	Kab. Ngada	NTT	Eastern Part	4.87	22.34	LOW	LOW	IV
176	Kab. Ngawi	Jatim	Western Part	6.37	1.05	LOW	LOW	IV
177	Kab. Pesisir Selatan	Sumbar	Western Part	2.98	-24.11	LOW	LOW	IV
178	Kab. Pontianak	Kalbar	Eastern Part	3.06	6.63	LOW	LOW	IV
179	Kab. Purworejo	Jateng	Western Part	7.43	20.08	LOW	LOW	IV
180	Kab. Rembang	Jateng	Western Part	6.53	2.30	LOW	LOW	IV
181	Kab. Sangihe Talaud	Sulut	Eastern Part	4.28	-9.17	LOW	LOW	IV
182	Kab. Selayar	Sulsel	Eastern Part	2.67	-7.61	LOW	LOW	IV
183	Kab. Sidenreng Rappang	Sulsel	Eastern Part	6.07	7.53	LOW	LOW	IV
184	Kab. Sikka	NTT	Eastern Part	4.47	-4.13	LOW	LOW	IV
185	Kab. Simalungun	Sumut	Western Part	3.62	-18.71	LOW	LOW	IV
186	Kab. Situbondo	Jatim	Western Part	4.58	-16.16	LOW	LOW	IV
187	Kab. Soppeng	Sulsel	Eastern Part	3.44	-16.52	LOW	LOW	IV
188	Kab. Sukabumi	Jabar	Western Part	5.19	-7.52	LOW	LOW	IV
189	Kab. Sukoharjo	Jateng	Western Part	6.61	8.89	LOW	LOW	IV
190	Kab. Sumba Barat	NTT	Eastern Part	5.37	10.80	LOW	LOW	IV
191	Kab. Tabalong	Kalsel	Eastern Part	7.99	16.35	LOW	LOW	IV
192	Kab. Tana Toraja	Sulsel	Eastern Part	6.06	13.97	LOW	LOW	IV
193	Kab. Tanah Karo	Sumut	Western Part	3.86	22.96	LOW	LOW	IV
194	Kab. Tanggamus	Lampung	Western Part	2.58	24.70	LOW	LOW	IV
195	Kab. Tanjung Jabung Barat	Jambi	Western Part	7.81	3.69	LOW	LOW	IV
196	Kab. Tanjung Jabung Timur	Jambi	Western Part	2.77	-19.47	LOW	LOW	IV
197	Kab. Tapanuli Selatan	Sumut	Western Part	2.46	-17.00	LOW	LOW	IV
198	Kab. Tasikmalaya	Jabar	Western Part	4.12	10.40	LOW	LOW	IV
199	Kab. Temanggung	Jateng	Western Part	6.37	5.34	LOW	LOW	IV
200	Kab. Timor Tengah Selatan	NTT	Eastern Part	7.45	4.06	LOW	LOW	IV
201	Kab. Wajo	Sulsel	Eastern Part	6.63	-8.37	LOW	LOW	IV
202	Kab. Wonogiri	Jateng	Western Part	5.99	-2.72	LOW	LOW	IV
203	Kab. Yapen Waropen	Papua	Eastern Part	1.60	-1.79	LOW	LOW	IV
204	Kota Bau-Bau	Sultra	Eastern Part	4.77	11.76	LOW	LOW	IV
205	Kota Binjai	Sumut	Western Part	4.90	2.36	LOW	LOW	IV
206	Kota Bontang	Kaltim	Eastern Part	4.15	13.01	LOW	LOW	IV
207	Kota Kendari	Sultra	Eastern Part	7.13	1.58	LOW	LOW	IV
208	Kota Langsa	NAD	Western Part	1.79	16.17	LOW	LOW	IV
209	Kota Lhokseumawe	NAD	Western Part	4.98	-23.57	LOW	LOW	IV
210	Kota Lubuk Linggau	Sumsel	Western Part	4.59	-34.29	LOW	LOW	IV
211	Kota Magelang	Jateng	Western Part	6.44	-52.04	LOW	LOW	IV
212	Kota Padang Panjang	Sumbar	Western Part	7.57	24.24	LOW	LOW	IV
213	Kota Palangka Raya	Kalteng	Eastern Part	5.23	12.53	LOW	LOW	IV
214	Kota Tanjung Balai	Sumut	Western Part	6.32	6.68	LOW	LOW	IV
<b>AVERAGE</b>				8.17	25.24			

**APPENDIX C**

**THE FINANCIAL ABILITY CLASSIFICATION OF INDONESIA LOCAL GOVERNMENTS - INDEX METHOD**

No	Regency/Municipal	Province	Part of Indonesia	Share to Budget 2004 (%)	MIN	MAX	Xs	Regional Own Revenue Growth (%)	MIN	MAX	Xg	Elasticity	MIN	MAX	Xe	INDEX METHOD				ABOVE/BELOW THE AVERAGE
																Xg	Xe	Xs	IFA	
1	Kab. Aceh Tamiang	NAD	Western Part	2.49	0.99	60.44	0.03	437.70	-63.63	437.70	1.00	35.64	-5.98	35.64	1.00	1.00	1.00	0.03	0.68	ABOVE
2	Kab. Fak-Fak	Papua	Eastern Part	16.97	0.99	60.44	0.27	261.39	-63.63	437.70	0.65	28.75	-5.98	35.64	0.83	0.65	0.83	0.27	0.58	ABOVE
3	Kab. Aceh Barat Daya	NAD	Western Part	2.11	0.99	60.44	0.02	334.00	-63.63	437.70	0.79	31.67	-5.98	35.64	0.90	0.79	0.90	0.02	0.57	ABOVE
4	Kab. Penajam Paser Utara	Kaltim	Eastern Part	0.99	0.99	60.44	0.00	367.55	-63.63	437.70	0.86	23.89	-5.98	35.64	0.72	0.86	0.72	0.00	0.53	ABOVE
5	Kab. Badung	Bali	Western Part	60.44	0.99	60.44	1.00	50.07	-63.63	437.70	0.23	5.10	-5.98	35.64	0.27	0.23	0.27	1.00	0.50	ABOVE
6	Kab. Lombok Tengah	NTB	Eastern Part	12.77	0.99	60.44	0.20	221.99	-63.63	437.70	0.57	20.92	-5.98	35.64	0.65	0.57	0.65	0.20	0.47	ABOVE
7	Kab. Bekasi	Jabar	Western Part	33.96	0.99	60.44	0.55	117.48	-63.63	437.70	0.36	14.69	-5.98	35.64	0.50	0.36	0.50	0.55	0.47	ABOVE
8	Kab. Paniai	Papua	Eastern Part	3.86	0.99	60.44	0.05	310.12	-63.63	437.70	0.75	16.48	-5.98	35.64	0.54	0.75	0.54	0.05	0.44	ABOVE
9	Kota Ambon	Maluku	Eastern Part	8.98	0.99	60.44	0.13	167.73	-63.63	437.70	0.46	16.73	-5.98	35.64	0.55	0.46	0.55	0.13	0.38	ABOVE
10	Kota Kupang	NTT	Eastern Part	18.49	0.99	60.44	0.29	72.68	-63.63	437.70	0.27	12.44	-5.98	35.64	0.44	0.27	0.44	0.29	0.34	ABOVE
11	Kota Cilegon	Banten	Western Part	35.52	0.99	60.44	0.58	16.88	-63.63	437.70	0.16	1.42	-5.98	35.64	0.18	0.16	0.18	0.58	0.31	ABOVE
12	Kab. Rokan Hulu	Riau	Western Part	13.21	0.99	60.44	0.21	121.66	-63.63	437.70	0.37	5.49	-5.98	35.64	0.28	0.37	0.28	0.21	0.28	ABOVE
13	Kota Tanjung Pinang	Riau	Western Part	10.13	0.99	60.44	0.15	129.56	-63.63	437.70	0.39	6.94	-5.98	35.64	0.31	0.39	0.31	0.15	0.28	ABOVE
14	Kota Tebing Tinggi	Sumut	Western Part	6.98	0.99	60.44	0.10	118.24	-63.63	437.70	0.36	9.73	-5.98	35.64	0.38	0.36	0.38	0.10	0.28	ABOVE
15	Kab. Nagan Raya	NAD	Western Part	1.55	0.99	60.44	0.01	128.15	-63.63	437.70	0.38	11.03	-5.98	35.64	0.41	0.38	0.41	0.01	0.27	ABOVE
16	Kab. Banggai	Sulteng	Eastern Part	5.93	0.99	60.44	0.08	105.14	-63.63	437.70	0.34	9.16	-5.98	35.64	0.36	0.34	0.36	0.08	0.26	ABOVE
17	Kota Medan	Sumut	Western Part	25.68	0.99	60.44	0.42	15.12	-63.63	437.70	0.16	0.98	-5.98	35.64	0.17	0.16	0.17	0.42	0.25	ABOVE
18	Kota Denpasar	Bali	Western Part	26.06	0.99	60.44	0.42	2.57	-63.63	437.70	0.13	0.19	-5.98	35.64	0.15	0.13	0.15	0.42	0.23	ABOVE
19	Kota Semarang	Jateng	Western Part	23.56	0.99	60.44	0.38	8.85	-63.63	437.70	0.14	0.95	-5.98	35.64	0.17	0.14	0.17	0.38	0.23	ABOVE
20	Kota Blitar	Jatim	Western Part	14.69	0.99	60.44	0.23	31.37	-63.63	437.70	0.19	5.27	-5.98	35.64	0.27	0.19	0.27	0.23	0.23	ABOVE
21	Kab. Banyuasin	Sumsel	Western Part	1.82	0.99	60.44	0.01	136.72	-63.63	437.70	0.40	5.53	-5.98	35.64	0.28	0.40	0.28	0.01	0.23	ABOVE
22	Kota Yogyakarta	Yogya	Western Part	21.58	0.99	60.44	0.35	16.45	-63.63	437.70	0.16	1.42	-5.98	35.64	0.18	0.16	0.18	0.35	0.23	ABOVE
23	Kab. Tangerang	Banten	Western Part	17.16	0.99	60.44	0.27	31.98	-63.63	437.70	0.19	2.64	-5.98	35.64	0.21	0.19	0.21	0.27	0.22	ABOVE
24	Kota Jambi	Jambi	Western Part	11.74	0.99	60.44	0.18	58.16	-63.63	437.70	0.24	4.20	-5.98	35.64	0.24	0.24	0.24	0.18	0.22	ABOVE
25	Kota Tangerang	Banten	Western Part	19.60	0.99	60.44	0.31	17.41	-63.63	437.70	0.16	1.83	-5.98	35.64	0.19	0.16	0.19	0.31	0.22	ABOVE
26	Kab. Gresik	Jatim	Western Part	16.69	0.99	60.44	0.26	22.36	-63.63	437.70	0.17	2.71	-5.98	35.64	0.21	0.17	0.21	0.26	0.21	ABOVE
27	Kab. Timor Tengah Utara	NTT	Eastern Part	4.07	0.99	60.44	0.05	42.46	-63.63	437.70	0.21	9.72	-5.98	35.64	0.38	0.21	0.38	0.05	0.21	ABOVE
28	Kab. Pasir	Kaltim	Eastern Part	6.03	0.99	60.44	0.08	76.29	-63.63	437.70	0.28	4.86	-5.98	35.64	0.26	0.28	0.26	0.08	0.21	ABOVE
29	Kota Bitung	Sulut	Western Part	7.05	0.99	60.44	0.10	62.75	-63.63	437.70	0.25	5.22	-5.98	35.64	0.27	0.25	0.27	0.10	0.21	ABOVE
30	Kota Tegal	Jateng	Western Part	16.81	0.99	60.44	0.27	20.52	-63.63	437.70	0.17	1.82	-5.98	35.64	0.19	0.17	0.19	0.27	0.21	ABOVE
31	Kab. Pati	Jateng	Western Part	12.58	0.99	60.44	0.20	34.79	-63.63	437.70	0.20	3.47	-5.98	35.64	0.23	0.20	0.23	0.20	0.21	ABOVE
32	Kab. Sidoarjo	Jatim	Western Part	19.45	0.99	60.44	0.31	5.11	-63.63	437.70	0.14	0.94	-5.98	35.64	0.17	0.14	0.17	0.31	0.20	ABOVE
33	Kab. Rokan Hilir	Riau	Western Part	8.15	0.99	60.44	0.12	70.13	-63.63	437.70	0.27	3.32	-5.98	35.64	0.22	0.27	0.22	0.12	0.20	ABOVE
34	Kota Pekanbaru	Riau	Western Part	14.85	0.99	60.44	0.23	22.50	-63.63	437.70	0.17	2.42	-5.98	35.64	0.20	0.17	0.20	0.23	0.20	ABOVE
35	Kota Bengkulu	Bengkulu	Western Part	7.27	0.99	60.44	0.11	59.98	-63.63	437.70	0.25	4.53	-5.98	35.64	0.25	0.25	0.25	0.11	0.20	ABOVE
36	Kab. Pasuruan	Jatim	Western Part	10.58	0.99	60.44	0.16	26.18	-63.63	437.70	0.18	4.90	-5.98	35.64	0.26	0.18	0.26	0.16	0.20	ABOVE
37	Kota Malang	Jatim	Western Part	13.81	0.99	60.44	0.22	18.80	-63.63	437.70	0.16	3.22	-5.98	35.64	0.22	0.16	0.22	0.22	0.20	ABOVE
38	Kota Banjarmasin	Kalsel	Eastern Part	12.87	0.99	60.44	0.20	31.41	-63.63	437.70	0.19	2.81	-5.98	35.64	0.21	0.19	0.21	0.20	0.20	ABOVE
39	Kota Bandung	Jabar	Western Part	21.02	0.99	60.44	0.34	-3.80	-63.63	437.70	0.12	-0.22	-5.98	35.64	0.14	0.12	0.14	0.34	0.20	ABOVE
40	Kab. Lombok Timur	NTB	Eastern Part	8.30	0.99	60.44	0.12	44.71	-63.63	437.70	0.22	4.52	-5.98	35.64	0.25	0.22	0.25	0.12	0.20	ABOVE
41	Kota Bekasi	Jabar	Western Part	16.27	0.99	60.44	0.26	13.62	-63.63	437.70	0.15	1.46	-5.98	35.64	0.18	0.15	0.18	0.26	0.20	ABOVE



42	Kab. Bogor	Jabar	Western Part	17.20	0.99	60.44	0.27	11.64	-63.63	437.70	0.15	0.85	-5.98	35.64	0.16	0.15	0.16	0.27	0.20	ABOVE
43	Kab. Tanah Laut	Kalsel	Eastern Part	7.50	0.99	60.44	0.11	55.10	-63.63	437.70	0.24	3.97	-5.98	35.64	0.24	0.24	0.24	0.11	0.20	ABOVE
44	Kab. Tabanan	Bali	Western Part	13.66	0.99	60.44	0.21	25.37	-63.63	437.70	0.18	2.07	-5.98	35.64	0.19	0.18	0.19	0.21	0.19	ABOVE
45	Kab. Batanghari	Jambi	Western Part	6.35	0.99	60.44	0.09	61.46	-63.63	437.70	0.25	4.00	-5.98	35.64	0.24	0.25	0.24	0.09	0.19	ABOVE
46	Kota Bogor	Jabar	Western Part	13.68	0.99	60.44	0.21	22.17	-63.63	437.70	0.17	1.99	-5.98	35.64	0.19	0.17	0.19	0.21	0.19	ABOVE
47	Kota Sibolga	Sumut	Western Part	6.56	0.99	60.44	0.09	53.37	-63.63	437.70	0.23	4.37	-5.98	35.64	0.25	0.23	0.25	0.09	0.19	ABOVE
48	Kab. Banjar	Kalsel	Eastern Part	5.32	0.99	60.44	0.07	46.45	-63.63	437.70	0.22	5.79	-5.98	35.64	0.28	0.22	0.28	0.07	0.19	ABOVE
49	Kab. Polewali Mamasa	Sulsel	Eastern Part	5.26	0.99	60.44	0.07	47.74	-63.63	437.70	0.22	5.43	-5.98	35.64	0.27	0.22	0.27	0.07	0.19	ABOVE
50	Kota Padang	Sumbar	Western Part	16.88	0.99	60.44	0.27	7.37	-63.63	437.70	0.14	0.64	-5.98	35.64	0.16	0.14	0.16	0.27	0.19	ABOVE
51	Kab. Nabire	Papua	Eastern Part	2.03	0.99	60.44	0.02	71.11	-63.63	437.70	0.27	5.74	-5.98	35.64	0.28	0.27	0.28	0.02	0.19	ABOVE
52	Kota Depok	Jabar	Western Part	12.21	0.99	60.44	0.19	27.91	-63.63	437.70	0.18	2.04	-5.98	35.64	0.19	0.18	0.19	0.19	0.19	ABOVE
53	Kab. Tuban	Jatim	Western Part	14.13	0.99	60.44	0.22	9.32	-63.63	437.70	0.15	2.09	-5.98	35.64	0.19	0.15	0.19	0.22	0.19	ABOVE
54	Kota Dumai	Riau	Western Part	5.09	0.99	60.44	0.07	43.43	-63.63	437.70	0.21	5.38	-5.98	35.64	0.27	0.21	0.27	0.07	0.19	ABOVE
55	Kab. Kotawaringin Timur	Kalteng	Eastern Part	12.45	0.99	60.44	0.19	23.45	-63.63	437.70	0.17	1.71	-5.98	35.64	0.18	0.17	0.18	0.19	0.18	ABOVE
56	Kota Pangkal Pinang	Babel	Western Part	9.28	0.99	60.44	0.14	33.45	-63.63	437.70	0.19	2.96	-5.98	35.64	0.21	0.19	0.21	0.14	0.18	ABOVE
57	Kota Banda Aceh	NAD	Western Part	4.39	0.99	60.44	0.06	48.87	-63.63	437.70	0.22	5.02	-5.98	35.64	0.26	0.22	0.26	0.06	0.18	ABOVE
58	Kota Gorontalo	Gorontalo	Eastern Part	9.13	0.99	60.44	0.14	38.64	-63.63	437.70	0.20	2.50	-5.98	35.64	0.20	0.20	0.20	0.14	0.18	ABOVE
59	Kota Makassar	Sulsel	Eastern Part	15.56	0.99	60.44	0.25	8.12	-63.63	437.70	0.14	0.45	-5.98	35.64	0.15	0.14	0.15	0.25	0.18	ABOVE
60	Kab. Sumba Timur	NTT	Eastern Part	5.84	0.99	60.44	0.08	27.82	-63.63	437.70	0.18	5.58	-5.98	35.64	0.28	0.18	0.28	0.08	0.18	ABOVE
61	Kab. Kotawaringin Barat	Kalteng	Eastern Part	10.82	0.99	60.44	0.17	21.40	-63.63	437.70	0.17	2.39	-5.98	35.64	0.20	0.17	0.20	0.17	0.18	ABOVE
62	Kab. Purworejo	Jateng	Western Part	7.43	0.99	60.44	0.11	20.08	-63.63	437.70	0.17	4.81	-5.98	35.64	0.26	0.17	0.26	0.11	0.18	ABOVE
63	Kab. Takalar	Sulsel	Eastern Part	4.36	0.99	60.44	0.06	50.43	-63.63	437.70	0.23	4.40	-5.98	35.64	0.25	0.23	0.25	0.06	0.18	ABOVE
64	Kab. Padang Pariaman	Sumbar	Western Part	6.54	0.99	60.44	0.09	42.54	-63.63	437.70	0.21	3.52	-5.98	35.64	0.23	0.21	0.23	0.09	0.18	ABOVE
65	Kab. Sumedang	Jabar	Western Part	11.37	0.99	60.44	0.17	20.04	-63.63	437.70	0.17	1.77	-5.98	35.64	0.19	0.17	0.19	0.17	0.18	ABOVE
66	Kab. Magelang	Jateng	Western Part	10.46	0.99	60.44	0.16	22.00	-63.63	437.70	0.17	2.20	-5.98	35.64	0.20	0.17	0.20	0.16	0.18	ABOVE
67	Kota Bukit Tinggi	Sumbar	Western Part	11.46	0.99	60.44	0.18	18.18	-63.63	437.70	0.16	1.52	-5.98	35.64	0.18	0.16	0.18	0.18	0.17	ABOVE
68	Kab. Sleman	Yogya	Western Part	12.52	0.99	60.44	0.19	13.46	-63.63	437.70	0.15	1.08	-5.98	35.64	0.17	0.15	0.17	0.19	0.17	ABOVE
69	Kota Manado	Sulut	Western Part	12.61	0.99	60.44	0.20	13.32	-63.63	437.70	0.15	1.01	-5.98	35.64	0.17	0.15	0.17	0.20	0.17	ABOVE
70	Kota Metro	Lampung	Western Part	6.25	0.99	60.44	0.09	32.53	-63.63	437.70	0.19	3.83	-5.98	35.64	0.24	0.19	0.24	0.09	0.17	ABOVE
71	Kota Ternate	Maluku Utara	Eastern Part	5.65	0.99	60.44	0.08	32.00	-63.63	437.70	0.19	4.15	-5.98	35.64	0.24	0.19	0.24	0.08	0.17	ABOVE
72	Kab. Serang	Banten	Western Part	12.82	0.99	60.44	0.20	9.87	-63.63	437.70	0.15	0.90	-5.98	35.64	0.17	0.15	0.17	0.20	0.17	ABOVE
73	Kab. Tapin	Kalsel	Eastern Part	6.40	0.99	60.44	0.09	31.31	-63.63	437.70	0.19	3.59	-5.98	35.64	0.23	0.19	0.23	0.09	0.17	ABOVE
74	Kota Pontianak	Kalbar	Eastern Part	12.36	0.99	60.44	0.19	11.03	-63.63	437.70	0.15	1.04	-5.98	35.64	0.17	0.15	0.17	0.19	0.17	ABOVE
75	Kab. Semarang	Jateng	Western Part	12.28	0.99	60.44	0.19	10.84	-63.63	437.70	0.15	1.11	-5.98	35.64	0.17	0.15	0.17	0.19	0.17	ABOVE
76	Kab. Lebak	Banten	Western Part	5.67	0.99	60.44	0.08	34.50	-63.63	437.70	0.20	3.76	-5.98	35.64	0.23	0.20	0.23	0.08	0.17	ABOVE
77	Kota Salatiga	Jateng	Western Part	12.80	0.99	60.44	0.20	7.12	-63.63	437.70	0.14	0.93	-5.98	35.64	0.17	0.14	0.17	0.20	0.17	ABOVE
78	Kab. Sinjai	Sulsel	Eastern Part	6.61	0.99	60.44	0.09	37.37	-63.63	437.70	0.20	2.65	-5.98	35.64	0.21	0.20	0.21	0.09	0.17	ABOVE
79	Kab. Lahat	Sumsel	Western Part	4.84	0.99	60.44	0.06	37.71	-63.63	437.70	0.20	3.63	-5.98	35.64	0.23	0.20	0.23	0.06	0.17	ABOVE
80	Kab. Boyolali	Jateng	Western Part	9.34	0.99	60.44	0.14	12.75	-63.63	437.70	0.15	2.48	-5.98	35.64	0.20	0.15	0.20	0.14	0.17	ABOVE
81	Kab. Pangkajene dan Kepulauan	Sulsel	Eastern Part	12.95	0.99	60.44	0.20	5.64	-63.63	437.70	0.14	0.52	-5.98	35.64	0.16	0.14	0.16	0.20	0.17	BELOW
82	Kab. Kudus	Jateng	Western Part	12.40	0.99	60.44	0.19	7.14	-63.63	437.70	0.14	0.76	-5.98	35.64	0.16	0.14	0.16	0.19	0.17	BELOW
83	Kab. Banjarnegara	Jateng	Western Part	8.88	0.99	60.44	0.13	21.02	-63.63	437.70	0.17	2.05	-5.98	35.64	0.19	0.17	0.19	0.13	0.16	BELOW
84	Kab. Ngada	NTT	Eastern Part	4.87	0.99	60.44	0.07	22.34	-63.63	437.70	0.17	4.66	-5.98	35.64	0.26	0.17	0.26	0.07	0.16	BELOW
85	Kab. Pekalongan	Jateng	Western Part	8.74	0.99	60.44	0.13	19.75	-63.63	437.70	0.17	2.14	-5.98	35.64	0.20	0.17	0.20	0.13	0.16	BELOW
86	Kab. Kupang	NTT	Eastern Part	9.64	0.99	60.44	0.15	11.25	-63.63	437.70	0.15	2.14	-5.98	35.64	0.20	0.15	0.20	0.15	0.16	BELOW
87	Kab. Banyumas	Jateng	Western Part	10.49	0.99	60.44	0.16	13.72	-63.63	437.70	0.15	1.18	-5.98	35.64	0.17	0.15	0.17	0.16	0.16	BELOW
88	Kab. Luwu	Sulsel	Eastern Part	4.77	0.99	60.44	0.06	38.71	-63.63	437.70	0.20	3.10	-5.98	35.64	0.22	0.20	0.22	0.06	0.16	BELOW

89	Kota Solok	Sumbar	Western Part	8.86	0.99	60.44	0.13	20.88	-63.63	437.70	0.17	1.64	-5.98	35.64	0.18	0.17	0.18	0.13	0.16	BELOW
90	Kota Balikpapan	Kaltim	Eastern Part	11.58	0.99	60.44	0.18	11.33	-63.63	437.70	0.15	0.49	-5.98	35.64	0.16	0.15	0.16	0.18	0.16	BELOW
91	Kab. Lampung Tengah	Lampung	Western Part	2.48	0.99	60.44	0.03	52.18	-63.63	437.70	0.23	3.37	-5.98	35.64	0.22	0.23	0.22	0.03	0.16	BELOW
92	Kab. Tanah Datar	Sumbar	Western Part	6.50	0.99	60.44	0.09	28.99	-63.63	437.70	0.18	2.41	-5.98	35.64	0.20	0.18	0.20	0.09	0.16	BELOW
93	Kab. Sambas	Kalbar	Eastern Part	3.99	0.99	60.44	0.05	35.14	-63.63	437.70	0.20	3.57	-5.98	35.64	0.23	0.20	0.23	0.05	0.16	BELOW
94	Kota Padang Panjang	Sumbar	Western Part	7.57	0.99	60.44	0.11	24.24	-63.63	437.70	0.18	1.93	-5.98	35.64	0.19	0.18	0.19	0.11	0.16	BELOW
95	Kota Jayapura	Papua	Eastern Part	6.26	0.99	60.44	0.09	33.47	-63.63	437.70	0.19	1.99	-5.98	35.64	0.19	0.19	0.19	0.09	0.16	BELOW
96	Kota Sukabumi	Jabar	Western Part	12.52	0.99	60.44	0.19	2.29	-63.63	437.70	0.13	0.17	-5.98	35.64	0.15	0.13	0.15	0.19	0.16	BELOW
97	Kab. Alor	NTT	Eastern Part	5.56	0.99	60.44	0.08	17.67	-63.63	437.70	0.16	3.56	-5.98	35.64	0.23	0.16	0.23	0.08	0.16	BELOW
98	Kota Sawahlunto	Sumbar	Western Part	8.38	0.99	60.44	0.12	17.03	-63.63	437.70	0.16	1.61	-5.98	35.64	0.18	0.16	0.18	0.12	0.16	BELOW
99	Kota Pekalongan	Jateng	Western Part	8.80	0.99	60.44	0.13	15.97	-63.63	437.70	0.16	1.34	-5.98	35.64	0.18	0.16	0.18	0.13	0.16	BELOW
100	Kota Pare-Pare	Sulsel	Eastern Part	9.78	0.99	60.44	0.15	11.63	-63.63	437.70	0.15	0.84	-5.98	35.64	0.16	0.15	0.16	0.15	0.15	BELOW
101	Kab. Karawang	Jabar	Western Part	11.76	0.99	60.44	0.18	2.68	-63.63	437.70	0.13	0.19	-5.98	35.64	0.15	0.13	0.15	0.18	0.15	BELOW
102	Kota Bandar Lampung	Lampung	Western Part	10.31	0.99	60.44	0.16	7.95	-63.63	437.70	0.14	0.75	-5.98	35.64	0.16	0.14	0.16	0.16	0.15	BELOW
103	Kab. Karanganyar	Jateng	Western Part	8.40	0.99	60.44	0.12	17.02	-63.63	437.70	0.16	1.27	-5.98	35.64	0.17	0.16	0.17	0.12	0.15	BELOW
104	Kab. Kampar	Riau	Western Part	4.95	0.99	60.44	0.07	37.54	-63.63	437.70	0.20	1.93	-5.98	35.64	0.19	0.20	0.19	0.07	0.15	BELOW
105	Kab. Subang	Jabar	Western Part	11.12	0.99	60.44	0.17	5.29	-63.63	437.70	0.14	0.24	-5.98	35.64	0.15	0.14	0.15	0.17	0.15	BELOW
106	Kab. Cianjur	Jabar	Western Part	7.04	0.99	60.44	0.10	22.10	-63.63	437.70	0.17	1.68	-5.98	35.64	0.18	0.17	0.18	0.10	0.15	BELOW
107	Kab. Lampung Barat	Lampung	Western Part	2.46	0.99	60.44	0.02	40.73	-63.63	437.70	0.21	3.32	-5.98	35.64	0.22	0.21	0.22	0.02	0.15	BELOW
108	Kab. Tabalong	Kalsel	Eastern Part	7.99	0.99	60.44	0.12	16.35	-63.63	437.70	0.16	1.38	-5.98	35.64	0.18	0.16	0.18	0.12	0.15	BELOW
109	Kab. Mojokerto	Jatim	Western Part	8.89	0.99	60.44	0.13	6.16	-63.63	437.70	0.14	1.37	-5.98	35.64	0.18	0.14	0.18	0.13	0.15	BELOW
110	Kab. Pelalawan	Riau	Western Part	2.86	0.99	60.44	0.03	45.76	-63.63	437.70	0.22	2.14	-5.98	35.64	0.20	0.22	0.20	0.03	0.15	BELOW
111	Kab. Lamongan	Jatim	Western Part	8.19	0.99	60.44	0.12	5.25	-63.63	437.70	0.14	1.29	-5.98	35.64	0.17	0.14	0.17	0.12	0.14	BELOW
112	Kab. Aceh Selatan	NAD	Western Part	1.73	0.99	60.44	0.01	33.39	-63.63	437.70	0.19	3.36	-5.98	35.64	0.22	0.19	0.22	0.01	0.14	BELOW
113	Kab. Tapanuli Tengah	Sumut	Western Part	3.34	0.99	60.44	0.04	32.99	-63.63	437.70	0.19	2.18	-5.98	35.64	0.20	0.19	0.20	0.04	0.14	BELOW
114	Kab. Hulu Sungai Selatan	Kalsel	Eastern Part	5.73	0.99	60.44	0.08	17.40	-63.63	437.70	0.16	1.72	-5.98	35.64	0.18	0.16	0.18	0.08	0.14	BELOW
115	Kab. Sumba Barat	NTT	Eastern Part	5.37	0.99	60.44	0.07	10.80	-63.63	437.70	0.15	2.48	-5.98	35.64	0.20	0.15	0.20	0.07	0.14	BELOW
116	Kab. Tanah Karo	Sumut	Western Part	3.86	0.99	60.44	0.05	22.96	-63.63	437.70	0.17	2.51	-5.98	35.64	0.20	0.17	0.20	0.05	0.14	BELOW
117	Kab. Madiun	Jatim	Western Part	6.48	0.99	60.44	0.09	6.90	-63.63	437.70	0.14	1.93	-5.98	35.64	0.19	0.14	0.19	0.09	0.14	BELOW
118	Kab. Jember	Jatim	Western Part	6.58	0.99	60.44	0.09	8.83	-63.63	437.70	0.14	1.70	-5.98	35.64	0.18	0.14	0.18	0.09	0.14	BELOW
119	Kab. Blora	Jateng	Western Part	7.82	0.99	60.44	0.11	9.64	-63.63	437.70	0.15	0.74	-5.98	35.64	0.16	0.15	0.16	0.11	0.14	BELOW
120	Kab. Tana Toraja	Sulsel	Eastern Part	6.06	0.99	60.44	0.09	13.97	-63.63	437.70	0.15	1.50	-5.98	35.64	0.18	0.15	0.18	0.09	0.14	BELOW
121	Kab. Lombok Barat	NTB	Eastern Part	7.63	0.99	60.44	0.11	9.32	-63.63	437.70	0.15	0.75	-5.98	35.64	0.16	0.15	0.16	0.11	0.14	BELOW
122	Kab. Ciamis	Jabar	Western Part	5.96	0.99	60.44	0.08	16.19	-63.63	437.70	0.16	1.29	-5.98	35.64	0.17	0.16	0.17	0.08	0.14	BELOW
123	Kab. Maros	Sulsel	Eastern Part	5.74	0.99	60.44	0.08	12.46	-63.63	437.70	0.15	1.74	-5.98	35.64	0.19	0.15	0.19	0.08	0.14	BELOW
124	Kota Palembang	Sumsel	Western Part	10.14	0.99	60.44	0.15	-3.05	-63.63	437.70	0.12	-0.23	-5.98	35.64	0.14	0.12	0.14	0.15	0.14	BELOW
125	Kab. Tegal	Jateng	Western Part	8.88	0.99	60.44	0.13	1.76	-63.63	437.70	0.13	0.16	-5.98	35.64	0.15	0.13	0.15	0.13	0.14	BELOW
126	Kab. Tulang Bawang	Lampung	Western Part	1.82	0.99	60.44	0.01	27.41	-63.63	437.70	0.18	2.93	-5.98	35.64	0.21	0.18	0.21	0.01	0.14	BELOW
127	Kab. Karimun	Riau	Western Part	16.82	0.99	60.44	0.27	-37.65	-63.63	437.70	0.05	-2.25	-5.98	35.64	0.09	0.05	0.09	0.27	0.14	BELOW
128	Kab. Timor Tengah Selatan	NTT	Eastern Part	7.45	0.99	60.44	0.11	4.06	-63.63	437.70	0.14	0.78	-5.98	35.64	0.16	0.14	0.16	0.11	0.14	BELOW
129	Kab. Sukoharjo	Jateng	Western Part	6.61	0.99	60.44	0.09	8.89	-63.63	437.70	0.14	0.90	-5.98	35.64	0.17	0.14	0.17	0.09	0.13	BELOW
130	Kab. Jepara	Jateng	Western Part	12.26	0.99	60.44	0.19	-12.05	-63.63	437.70	0.10	-1.38	-5.98	35.64	0.11	0.10	0.11	0.19	0.13	BELOW
131	Kab. Barru	Sulsel	Eastern Part	5.34	0.99	60.44	0.07	14.59	-63.63	437.70	0.16	1.14	-5.98	35.64	0.17	0.16	0.17	0.07	0.13	BELOW
132	Kab. Kapuas	Kalteng	Eastern Part	4.13	0.99	60.44	0.05	17.99	-63.63	437.70	0.16	1.64	-5.98	35.64	0.18	0.16	0.18	0.05	0.13	BELOW
133	Kab. Tanggamus	Lampung	Western Part	2.58	0.99	60.44	0.03	24.70	-63.63	437.70	0.18	2.15	-5.98	35.64	0.20	0.18	0.20	0.03	0.13	BELOW
134	Kab. Ketapang	Kalbar	Eastern Part	3.84	0.99	60.44	0.05	18.98	-63.63	437.70	0.16	1.70	-5.98	35.64	0.18	0.16	0.18	0.05	0.13	BELOW
135	Kab. Tanjung Jabung Barat	Jambi	Western Part	7.81	0.99	60.44	0.11	3.69	-63.63	437.70	0.13	0.13	-5.98	35.64	0.15	0.13	0.15	0.11	0.13	BELOW

136	Kab. Bandung	Jabar	Western Part	8.71	0.99	60.44	0.13	-1.26	-63.63	437.70	0.12	-0.10	-5.98	35.64	0.14	0.12	0.14	0.13	0.13	BELOW
137	Kab. Bone	Sulsel	Eastern Part	5.10	0.99	60.44	0.07	10.89	-63.63	437.70	0.15	1.35	-5.98	35.64	0.18	0.15	0.18	0.07	0.13	BELOW
138	Kab. Bungo	Jambi	Western Part	9.87	0.99	60.44	0.15	-7.74	-63.63	437.70	0.11	-0.48	-5.98	35.64	0.13	0.11	0.13	0.15	0.13	BELOW
139	Kab. Lampung Utara	Lampung	Western Part	2.99	0.99	60.44	0.03	21.10	-63.63	437.70	0.17	1.93	-5.98	35.64	0.19	0.17	0.19	0.03	0.13	BELOW
140	Kab. Kuantan Singingi	Riau	Part	3.17	0.99	60.44	0.04	29.98	-63.63	437.70	0.19	1.03	-5.98	35.64	0.17	0.19	0.17	0.04	0.13	BELOW
141	Kota Palangka Raya	Kalteng	Eastern Part	5.23	0.99	60.44	0.07	12.53	-63.63	437.70	0.15	1.02	-5.98	35.64	0.17	0.15	0.17	0.07	0.13	BELOW
142	Kab. Sidenreng Rappang	Sulsel	Eastern Part	6.07	0.99	60.44	0.09	7.53	-63.63	437.70	0.14	0.81	-5.98	35.64	0.16	0.14	0.16	0.09	0.13	BELOW
143	Kab. Karangasem	Bali	Western Part	7.77	0.99	60.44	0.11	1.28	-63.63	437.70	0.13	0.12	-5.98	35.64	0.15	0.13	0.15	0.11	0.13	BELOW
144	Kota Samarinda	Kaltim	Eastern Part	8.77	0.99	60.44	0.13	-3.76	-63.63	437.70	0.12	-0.22	-5.98	35.64	0.14	0.12	0.14	0.13	0.13	BELOW
145	Kab. Temanggung	Jateng	Western Part	6.37	0.99	60.44	0.09	5.34	-63.63	437.70	0.14	0.48	-5.98	35.64	0.16	0.14	0.16	0.09	0.13	BELOW
146	Kota Tanjung Balai	Sumut	Western Part	6.32	0.99	60.44	0.09	6.68	-63.63	437.70	0.14	0.39	-5.98	35.64	0.15	0.14	0.15	0.09	0.13	BELOW
147	Kab. Batang	Jateng	Western Part	7.26	0.99	60.44	0.11	1.30	-63.63	437.70	0.13	0.17	-5.98	35.64	0.15	0.13	0.15	0.11	0.13	BELOW
148	Kota Kendari	Sultra	Eastern Part	7.13	0.99	60.44	0.10	1.58	-63.63	437.70	0.13	0.08	-5.98	35.64	0.15	0.13	0.15	0.10	0.13	BELOW
149	Kab. Ende	NTT	Eastern Part	4.12	0.99	60.44	0.05	8.09	-63.63	437.70	0.14	1.61	-5.98	35.64	0.18	0.14	0.18	0.05	0.13	BELOW
150	Kab. Musi Rawas	Sumsel	Western Part	3.38	0.99	60.44	0.04	16.92	-63.63	437.70	0.16	1.28	-5.98	35.64	0.17	0.16	0.17	0.04	0.13	BELOW
151	Kab. Majalengka	Jabar	Western Part	5.90	0.99	60.44	0.08	6.02	-63.63	437.70	0.14	0.41	-5.98	35.64	0.15	0.14	0.15	0.08	0.13	BELOW
152	Kab. Asahan	Sumut	Western Part	5.75	0.99	60.44	0.08	6.41	-63.63	437.70	0.14	0.46	-5.98	35.64	0.15	0.14	0.15	0.08	0.12	BELOW
153	Kab. Rembang	Jateng	Western Part	6.53	0.99	60.44	0.09	2.30	-63.63	437.70	0.13	0.25	-5.98	35.64	0.15	0.13	0.15	0.09	0.12	BELOW
154	Kota Bau-Bau	Sultra	Eastern Part	4.77	0.99	60.44	0.06	11.76	-63.63	437.70	0.15	0.65	-5.98	35.64	0.16	0.15	0.16	0.06	0.12	BELOW
155	Kab. Tasikmalaya	Jabar	Western Part	4.12	0.99	60.44	0.05	10.40	-63.63	437.70	0.15	1.12	-5.98	35.64	0.17	0.15	0.17	0.05	0.12	BELOW
156	Kab. Ngawi	Jatim	Western Part	6.37	0.99	60.44	0.09	1.05	-63.63	437.70	0.13	0.23	-5.98	35.64	0.15	0.13	0.15	0.09	0.12	BELOW
157	Kota Bontang	Kaltim	Eastern Part	4.15	0.99	60.44	0.05	13.01	-63.63	437.70	0.15	0.52	-5.98	35.64	0.16	0.15	0.16	0.05	0.12	BELOW
158	Kab. Jeneponto	Sulsel	Eastern Part	2.87	0.99	60.44	0.03	13.00	-63.63	437.70	0.15	1.42	-5.98	35.64	0.18	0.15	0.18	0.03	0.12	BELOW
159	Kab. Kapuas Hulu	Kalbar	Eastern Part	2.41	0.99	60.44	0.02	8.18	-63.63	437.70	0.14	2.13	-5.98	35.64	0.19	0.14	0.19	0.02	0.12	BELOW
160	Kab. Barito Utara	Kalteng	Eastern Part	4.67	0.99	60.44	0.06	5.57	-63.63	437.70	0.14	0.72	-5.98	35.64	0.16	0.14	0.16	0.06	0.12	BELOW
161	Kab. Muara Enim	Sumsel	Western Part	7.05	0.99	60.44	0.10	-3.02	-63.63	437.70	0.12	-0.25	-5.98	35.64	0.14	0.12	0.14	0.10	0.12	BELOW
162	Kab. Bantul	Yogya	Western Part	7.76	0.99	60.44	0.11	-6.40	-63.63	437.70	0.11	-0.55	-5.98	35.64	0.13	0.11	0.13	0.11	0.12	BELOW
163	Kab. Enrekang	Sulsel	Eastern Part	5.83	0.99	60.44	0.08	0.32	-63.63	437.70	0.13	0.03	-5.98	35.64	0.14	0.13	0.14	0.08	0.12	BELOW
164	Kab. Barito Selatan	Kalteng	Eastern Part	2.93	0.99	60.44	0.03	14.48	-63.63	437.70	0.16	0.87	-5.98	35.64	0.16	0.16	0.16	0.03	0.12	BELOW
165	Kab. Brebes	Jateng	Western Part	5.41	0.99	60.44	0.07	1.77	-63.63	437.70	0.13	0.16	-5.98	35.64	0.15	0.13	0.15	0.07	0.12	BELOW
166	Kota Langsa	NAD	Western Part	1.79	0.99	60.44	0.01	16.17	-63.63	437.70	0.16	1.40	-5.98	35.64	0.18	0.16	0.18	0.01	0.12	BELOW
167	Kab. Agam	Sumbar	Western Part	4.61	0.99	60.44	0.06	4.45	-63.63	437.70	0.14	0.36	-5.98	35.64	0.15	0.14	0.15	0.06	0.12	BELOW
168	Kab. Lampung Selatan	Lampung	Western Part	3.25	0.99	60.44	0.04	9.02	-63.63	437.70	0.14	0.92	-5.98	35.64	0.17	0.14	0.17	0.04	0.12	BELOW
169	Kab. Malang	Jatim	Western Part	6.30	0.99	60.44	0.09	-2.07	-63.63	437.70	0.12	-0.39	-5.98	35.64	0.13	0.12	0.13	0.09	0.12	BELOW
170	Kota Binjai	Sumut	Western Part	4.90	0.99	60.44	0.07	2.36	-63.63	437.70	0.13	0.17	-5.98	35.64	0.15	0.13	0.15	0.07	0.12	BELOW
171	Kab. Wonogiri	Jateng	Western Part	5.99	0.99	60.44	0.08	-2.72	-63.63	437.70	0.12	-0.34	-5.98	35.64	0.14	0.12	0.14	0.08	0.11	BELOW
172	Kab. Klungkung	Bali	Western Part	5.80	0.99	60.44	0.08	-2.82	-63.63	437.70	0.12	-0.22	-5.98	35.64	0.14	0.12	0.14	0.08	0.11	BELOW
173	Kab. Gowa	Sulsel	Eastern Part	7.04	0.99	60.44	0.10	-9.26	-63.63	437.70	0.11	-0.62	-5.98	35.64	0.13	0.11	0.13	0.10	0.11	BELOW
174	Kab. Aceh Utara	NAD	Western Part	5.18	0.99	60.44	0.07	0.67	-63.63	437.70	0.13	-0.21	-5.98	35.64	0.14	0.13	0.14	0.07	0.11	BELOW
175	Kab. Pontianak	Kalbar	Eastern Part	3.06	0.99	60.44	0.03	6.63	-63.63	437.70	0.14	0.75	-5.98	35.64	0.16	0.14	0.16	0.03	0.11	BELOW
176	Kab. Barito Kuala	Kalsel	Eastern Part	4.76	0.99	60.44	0.06	0.01	-63.63	437.70	0.13	0.00	-5.98	35.64	0.14	0.13	0.14	0.06	0.11	BELOW
177	Kab. Bangkalan	Jatim	Western Part	5.40	0.99	60.44	0.07	-1.46	-63.63	437.70	0.12	-0.39	-5.98	35.64	0.13	0.12	0.13	0.07	0.11	BELOW
178	Kab. Wajo	Sulsel	Eastern Part	6.63	0.99	60.44	0.09	-8.37	-63.63	437.70	0.11	-0.94	-5.98	35.64	0.12	0.11	0.12	0.09	0.11	BELOW
179	Kab. Cirebon	Jabar	Western Part	7.22	0.99	60.44	0.10	-9.94	-63.63	437.70	0.11	-1.35	-5.98	35.64	0.11	0.11	0.11	0.10	0.11	BELOW
180	Kab. Bima	NTB	Eastern Part	6.06	0.99	60.44	0.09	-8.38	-63.63	437.70	0.11	-0.67	-5.98	35.64	0.13	0.11	0.13	0.09	0.11	BELOW
181	Kab. Kendal	Jateng	Western Part	7.98	0.99	60.44	0.12	-14.80	-63.63	437.70	0.10	-1.54	-5.98	35.64	0.11	0.10	0.11	0.12	0.11	BELOW
182	Kab. Landak	Kalbar	Eastern Part	1.07	0.99	60.44	0.00	9.71	-63.63	437.70	0.15	1.25	-5.98	35.64	0.17	0.15	0.17	0.00	0.11	BELOW

183	Kab. Kutai Barat	Kaltim	Eastern Part	5.03	0.99	60.44	0.07	-4.97	-63.63	437.70	0.12	-0.32	-5.98	35.64	0.14	0.12	0.14	0.07	0.11	BELOW
184	Kab. Indragiri Hilir	Riau	Western Part	4.66	0.99	60.44	0.06	-4.55	-63.63	437.70	0.12	-0.15	-5.98	35.64	0.14	0.12	0.14	0.06	0.11	BELOW
185	Kab. Sukabumi	Jabar	Western Part	5.19	0.99	60.44	0.07	-7.52	-63.63	437.70	0.11	-0.56	-5.98	35.64	0.13	0.11	0.13	0.07	0.10	BELOW
186	Kab. Belu	NTT	Eastern Part	4.26	0.99	60.44	0.05	-2.48	-63.63	437.70	0.12	-0.41	-5.98	35.64	0.13	0.12	0.13	0.05	0.10	BELOW
187	Kab. Sikka	NTT	Eastern Part	4.47	0.99	60.44	0.06	-4.13	-63.63	437.70	0.12	-0.78	-5.98	35.64	0.12	0.12	0.12	0.06	0.10	BELOW
188	Kab. Kebumen	Jateng	Western Part	6.14	0.99	60.44	0.09	-11.88	-63.63	437.70	0.10	-1.31	-5.98	35.64	0.11	0.10	0.11	0.09	0.10	BELOW
189	Kab. Kulon Progo	Yogya	Western Part	6.37	0.99	60.44	0.09	-17.49	-63.63	437.70	0.09	-1.52	-5.98	35.64	0.11	0.09	0.11	0.09	0.10	BELOW
190	Kab. Hulu Sungai Tengah	Kalsel	Eastern Part	5.76	0.99	60.44	0.08	-12.06	-63.63	437.70	0.10	-1.57	-5.98	35.64	0.11	0.10	0.11	0.08	0.10	BELOW
191	Kab. Bangli	Bali	Western Part	4.03	0.99	60.44	0.05	-7.12	-63.63	437.70	0.11	-0.77	-5.98	35.64	0.13	0.11	0.13	0.05	0.10	BELOW
192	Kab. Sangihe Talaud	Sulut	Eastern Part	4.28	0.99	60.44	0.06	-9.17	-63.63	437.70	0.11	-0.90	-5.98	35.64	0.12	0.11	0.12	0.06	0.10	BELOW
193	Kab. Jembrana	Bali	Western Part	4.59	0.99	60.44	0.06	-12.04	-63.63	437.70	0.10	-1.14	-5.98	35.64	0.12	0.10	0.12	0.06	0.09	BELOW
194	Kab. Banyuwangi	Jatim	Western Part	7.53	0.99	60.44	0.11	-13.56	-63.63	437.70	0.10	-3.18	-5.98	35.64	0.07	0.10	0.07	0.11	0.09	BELOW
195	Kab. Yapen Waropen	Papua	Eastern Part	1.60	0.99	60.44	0.01	-1.79	-63.63	437.70	0.12	-0.21	-5.98	35.64	0.14	0.12	0.14	0.01	0.09	BELOW
196	Kab. Bondowoso	Jatim	Western Part	5.94	0.99	60.44	0.08	-12.21	-63.63	437.70	0.10	-2.46	-5.98	35.64	0.08	0.10	0.08	0.08	0.09	BELOW
197	Kab. Selayar	Sulsel	Eastern Part	2.67	0.99	60.44	0.03	-7.61	-63.63	437.70	0.11	-0.68	-5.98	35.64	0.13	0.11	0.13	0.03	0.09	BELOW
198	Kab. Majene	Sulsel	Eastern Part	1.96	0.99	60.44	0.02	-7.21	-63.63	437.70	0.11	-0.85	-5.98	35.64	0.12	0.11	0.12	0.02	0.08	BELOW
199	Kab. Aceh Tenggara	NAD	Western Part	2.39	0.99	60.44	0.02	-12.96	-63.63	437.70	0.10	-0.78	-5.98	35.64	0.12	0.10	0.12	0.02	0.08	BELOW
200	Kab. Soppeng	Sulsel	Eastern Part	3.44	0.99	60.44	0.04	-16.52	-63.63	437.70	0.09	-1.26	-5.98	35.64	0.11	0.09	0.11	0.04	0.08	BELOW
201	Kab. Indramayu	Jabar	Western Part	4.64	0.99	60.44	0.06	-26.34	-63.63	437.70	0.07	-1.44	-5.98	35.64	0.11	0.07	0.11	0.06	0.08	BELOW
202	Kab. Simalungun	Sumut	Western Part	3.62	0.99	60.44	0.04	-18.71	-63.63	437.70	0.09	-1.93	-5.98	35.64	0.10	0.09	0.10	0.04	0.08	BELOW
203	Kab. Dompu	NTB	Eastern Part	4.03	0.99	60.44	0.05	-19.12	-63.63	437.70	0.09	-2.21	-5.98	35.64	0.09	0.09	0.09	0.05	0.08	BELOW
204	Kab. Tanjung Jabung Timur	Jambi	Western Part	2.77	0.99	60.44	0.03	-19.47	-63.63	437.70	0.09	-1.33	-5.98	35.64	0.11	0.09	0.11	0.03	0.08	BELOW
205	Kab. Tapanuli Selatan	Sumut	Western Part	2.46	0.99	60.44	0.02	-17.00	-63.63	437.70	0.09	-1.67	-5.98	35.64	0.10	0.09	0.10	0.02	0.07	BELOW
206	Kota Lhokseumawe	NAD	Western Part	4.98	0.99	60.44	0.07	-23.57	-63.63	437.70	0.08	-3.01	-5.98	35.64	0.07	0.08	0.07	0.07	0.07	BELOW
207	Kab. Situbondo	Jatim	Western Part	4.58	0.99	60.44	0.06	-16.16	-63.63	437.70	0.09	-3.85	-5.98	35.64	0.05	0.09	0.05	0.06	0.07	BELOW
208	Kab. Pesisir Selatan	Sumbar	Western Part	2.98	0.99	60.44	0.03	-24.11	-63.63	437.70	0.08	-2.41	-5.98	35.64	0.09	0.08	0.09	0.03	0.07	BELOW
209	Kota Lubuk Linggau	Sumsel	Western Part	4.59	0.99	60.44	0.06	-34.29	-63.63	437.70	0.06	-2.86	-5.98	35.64	0.08	0.06	0.08	0.06	0.06	BELOW
210	Kab. Lima Puluh Kota	Sumbar	Western Part	4.32	0.99	60.44	0.06	-41.36	-63.63	437.70	0.04	-3.43	-5.98	35.64	0.06	0.04	0.06	0.06	0.05	BELOW
211	Kab. Muaro Jambi	Jambi	Western Part	3.46	0.99	60.44	0.04	-51.11	-63.63	437.70	0.02	-2.68	-5.98	35.64	0.08	0.02	0.08	0.04	0.05	BELOW
212	Kota Magelang	Jateng	Western Part	6.44	0.99	60.44	0.09	-52.04	-63.63	437.70	0.02	-5.98	-5.98	35.64	0.00	0.02	0.00	0.09	0.04	BELOW
213	Kab. Musi Banyuasin	Sumsel	Western Part	1.79	0.99	60.44	0.01	-60.26	-63.63	437.70	0.01	-2.81	-5.98	35.64	0.08	0.01	0.08	0.01	0.03	BELOW
214	Kab. Halmahera Tengah	Maluku Utara	Eastern Part	2.08	0.99	60.44	0.02	-63.63	-63.63	437.70	0.00	-5.50	-5.98	35.64	0.01	0.00	0.01	0.02	0.01	BELOW
AVERAGE IFA																				0.17