45TH KANSAI CONVENTION: JAPAN SOCIETY OF INTERNATIONAL ECONOMICS

7 JUNE, 2003
KOBE INTERNATIONAL UNIVERSITY

NEW INTERGOVERNMENTAL TRANSFERS IN DECENTRALIZED INDONESIA: KEY CHALLENGES [*]

NORIO USUI [**]
KANSAI UNIVERSITY

I. INTRODUCTION

After the long continued authoritarian regime, Indonesia has initiated a drastic decentralization program since fiscal year (FY) 2001. Although various efforts were made to empower regional governments even before the decentralization, political difficulties to maintain national integrity after the economic crisis created a strong and urgent need to decentralize the country. The hierarchical relationship between provincial and local governments called *Kota* (municipality or city) and *Kabupaten* (regency or district) was eliminated, and all local government[1] became fully autonomous and responsible for planning, management, financing, and major public service deliveries. While provincial governments also act as autonomous regions, they retain a hierarchical relationship with the central government. At the same time, about two million central civil servants were transferred to regional governments. With the implementation of the decentralization, Indonesia has started moving from one of the most centralized to one of the most decentralized countries in the world.

Although Indonesia's decentralization is deeply rooted in the political purpose, a key objective is to move decisions closer to the people to make public service delivery more responsible to local demands and preferences. To this end, one of key challenges for the Government of Indonesia (the Government) is how to guarantee a reasonable balance between expenditure responsibilities and revenue instruments available to regional governments. A basic principle is: first should come expenditure responsibilities, and then revenue responsibility should be assigned. Economic literatures advocate this principle as *revenues should follow functions*. Without careful assessment of fiscal needs to finance newly devolved expenditure responsibilities, it is not possible to set efficient revenue assignments to regional governments. However, in reality, Indonesia's decentralization has been initiated without clear expenditure assignments: obligatory functions and, much less, minimum service standards (SPMs) have not yet been established.[2]

In comparison with the vague expenditure assignments, Indonesia has prepared relatively clear revenue assignments, which drastically changed Indonesia's intergovernmental fiscal relations after the decentralization. Before FY2001, there existed two central transfers to regions: (i) Subsidy to Regions (SDO), which was mainly used to finance salaries of local civil servants; and (ii) Regional Development Funds (INPRES) for development expenditures. Since FY2001, both transfers were eliminated and instead combined into General Allocation Fund (DAU), a block grant, set at a minimum of 25 percent of total domestic revenues in the national (central) budget. DAU became a mainstay of Indonesia's new intergovernmental transfers. Indonesia also expanded revenue sharing system, which assigns each regional government its share of revenues from taxes on personal income, land and building, transfer of land and buildings, forestry, mining, fisheries, oil, and natural gas. Another newly introduced transfer was Special Allocation Fund (DAK), a matching grant, which aims at penetrating

* This paper describes research in progress by the author to elicit comments and further debates. The findings, interpretations, and conclusions expressed are solely those of the author's.

** *Correspondence*: Norio Usui, Associate Professor, Faculty of Economics, Kansai University, 3-3-35 Yamate-cho, Suita, Osaka 564-8680, Japan. Phone/Fax: +81-6-6368-0584, E-mail: nusui@ipcku.kansai-u.ac.jp

[1] In this paper, the term "local government" refers to municipality or city (Kota) and regency or district (Kabupaten), while "regional government" is applied both to provincial and local levels of government.

[2] Decentralization laws and regulations define roles of regional governments only in general terms: local governments take primary responsibilities for public works, health, education, agriculture, communication, industry and trade, investment, environment, land matters, cooperatives, and human resources, and provincial governments play coordinating roles.

nationally prioritized projects at regional level and/or financing projects which have spill over effects across regions. Further, regional taxes and levies law was revised to strengthen regions' revenue mobilizing capacities.

After the decentralization, total amounts of central transfers to regional governments (DAU, revenue sharing, and DAK) were drastically increased. The amounts in FY2001 and FY2002 were Rp.81.7 trillion and Rp.98.0 trillion, or 5.7 percent and 5.8 percent of GDP, respectively, which were much higher than Rp.33.5 trillion or 3.7 percent of GDP in FY2000. DAU has taken up about 70 percent of total transfers. Within the revenue sharing, sharing revenues from natural resource sectors, especially from oil and natural gas, has been about 50 percent of total sharing amounts. While limited amounts of DAK were allocated in FY2001 and FY2002, the Government has increased budget allocation to DAK since FY2003.[3]

Table 1 *Central Budgets and Transfers to Regions*

(Rp. trillion)	FY2000 # revised	FY2001 revised	FY2002 revised	% GDP	FY2003 proposal	% GDP
		→ After Decentralization				
Revenues	203.9	263.2	301.9	17.9	327.8	16.8
Tax	135.2	179.9	219.6	13.0	260.8	13.3
Non-Tax	68.6	83.3	82.2	4.9	67.0	3.4
Expenditures	262.7	315.8	344.0	20.4	354.1	18.1
Central Govt	218.0	234.1	246.0	14.6	240.9	12.3
Routine	183.1	190.2	193.7	11.5	186.4	9.5
Development	34.9	44.0	52.3	3.1	*54.5*	2.8
Transfers to Regions	44.7	81.7	98.0	5.8	113.2	5.8
Balanced Funds	44.7	81.7	94.5	5.6	103.6	5.3
Rev. Sharing	3.5	20.3	24.6	1.5	25.9	1.3
Personal Income Tax	--	3.1	4.1	0.2	5.3	0.3
Property-related Taxes	n.a.	5.4	7.9	0.5	9.6	0.5
Natural Resources	n.a.	11.7	12.7	0.8	13.0	0.7
DAU ##	41.2	60.5	69.1	4.1	75.4	3.9
DAK	--	0.9	0.8	0.0	2.3	0.1
Special Autonomy and Balancing	0.0	0.0	3.4	0.2	9.6	0.5
Primary Balance	14.0	24.0	46.4	2.8	54.6	2.8
Overall Balance	-58.8	-52.6	-42.1	▲ 2.5	-26.3	▲ 1.3

Notes: # annualized. ## SDO plus INPRES for FY2000.
Source: MOF.

A key purpose of this paper is to clarify major constraints in Indonesia's new intergovernmental fiscal transfer system, which should be resolved to achieve the expected goal of decentralization. This paper is organized as follows: section 2 assesses DAU allocation mechanism; section 3 discusses revenue sharing system; and section 4 analyzes DAK allocation mechanism; and final section summarizes policy recommendations.

II. GENERAL ALLOCATION FUND (DAU)

Total General Allocation Fund (DAU) allocation amount is set at minimum 25 percent of central government's domestic revenues, and the amount is shared between provincial and local governments at 10 percent and 90 percent, respectively. A main objective of DAU is to equalize fiscal

[3] "Special autonomy and balancing" in Table 1 contains budget allocations: 1) to Ache and Papua which acquired a special autonomy status due mainly to political reasons; and 2) contingency fund (FY2001) and additional allocations for adjustments required due to the hold harmless allocations.

capacities across regions to finance their expenditure needs, which include additional financial needs to finance newly devolved functions: Article 15 of Law No. 104/2000 stipulates that “the general allocation fund shall be allocated with the purpose of equalizing the financial capacity among regions for financing their necessary spending in the scheme of decentralization implementation”. DAU is clearly defined as an equalizing grant. However, it’s expected equalizing effect has been undermined due mainly to some political factors. To clarify the issue, devolution process of DAU allocation system since FY2001 needs to be reviewed.

DAU allocation to a regional government *i* is comprised of three factors:

$$DAU_i = BFA_i + FA_i + LSA_i$$

where *BFA* is balancing factor amount, *FA* is formula amount, and *LSA* is lump sum amount. DAU allocations have been conducted based on these three factors, although the law stipulates formula based allocation which incorporates regional governments’ fiscal needs and fiscal capacities.

Balancing Factor: In FY2000, when the Government discussed DAU allocation for FY2001, the first year of the decentralization, the Government realized a possible mismatch between expenditure responsibilities and revenue assignments in regional budgets. In particular, one of the most serous concerns was uncertainty about additional salary costs due to the large scale central staff transfer, which should be financed by regional budgets after the decentralization. About two million civil servants were scheduled to be transferred to regional governments. However, at that stage, the Government did not have any reliable data regarding the staff transfer to each regional government. To address the issue, the Government decided to allocate 30 percent of SDO and 10 percent of INPRES in addition to the annualized total amount of SDO and INPRES allocated in FY2000 to each local government (Kabupaten/Kota). Total amount of the balancing factor allocation made up about 80 percent of the total DAU available to local governments (DAU_{TK}). FY2001 balancing factor amount for a local government *i* can be written as:

$$BFA_I = 1.3 \bullet SDO_i + 1.1 \bullet INPRES_I$$

As for provincial governments, this measure was not adopted since the total amounts of SDO and INPRES in FY2000 was bigger than the total DAU amount available to provinces (10 percent of total DAU) in FY2001. The Government utilized the total amounts of SDO and INPRES, without the additional 30 percent of SDO and 10 percent of INPRES, to determine the balancing factor amounts to provinces. Following the share of the balancing factor for local governments, the Government allocated 80 percent of DAU available to provinces (DAU_{TP}) as the balancing factor amount:

$$BFA_i = \left(\frac{SDO_i + INPRES_i}{\sum_i (SDO_i + INPRES_i)} \right) \bullet 0.8 \bullet DAU_{TP}$$

In FY2002, the Government adopted wage bill for civil servants, instead of SDO and INPRES, to incorporate salary costs of regional governments explicitly, and allocated 50 percent (local governments) and 30 percent (provinces) of the total DAU amounts as the balancing factor allocations, respectively. The balancing factor allocations covered about 77 percent and 31 percent of total salary costs of provinces and local governments, respectively.

$$BFA_i = Wage_i$$

$$BFA_i = \frac{Wage_i}{\sum_i Wage_i} \bullet 0.3 \bullet DAU_{TP}$$

$$BFA_i = \frac{Wage_i}{\sum_i Wage_i} \bullet 0.5 \bullet DAU_{TK}$$

In FY2003 budget, the balancing factor allocations both for provinces and local governments were set at 30 percent and 45 percent, respectively. Although the Government has gradually reduced the balancing factor allocation weight, this allocation has undermined the equalizing effect of DAU. It could be understood that, at least for FY2001, the first year of the decentralization, the balancing factor based on the previous SDO and INPRES allocations was useful to avoid possible confusion at regions which could happen due to the large scale staff transfer. However, it is clear that the Government needs to further reduce the balancing factor allocations and shift to more formula based allocations to realize the expected equalizing effect of DAU. In addition, it must be noted that the wage and salary based balancing factor allocations since FY2002 could induce a moral hazard problem: regional governments' restructuring efforts could be discouraged since larger personnel expenses without any restructuring efforts imply higher DAU allocations to regional governments.

Formula Factor: The formula factor aims to allocate DAU based on the fiscal gaps (FG) of regional governments. The fiscal gap is defined as the difference between expenditure needs (EN) and fiscal capacity (FC).

$$FG_i = EN_i - FC_i$$

In this definition, fiscal gaps in some regions, in particular who can enjoy immense sharing revenues from taxes and natural resources, can be negative, which, in theory, implies negative DAU allocations to such regions. However, under the current DAU allocation system, the negative DAU allocation is not allowed, and the fiscal gaps of such regions can be set equal to zero. This is a decisive factor avoiding the equalizing effects of the Indonesia's new intergovernmental fiscal relations. Under the current revenue sharing arrangements, a bulk of sharing revenues is allocating to a few regions due to the geographically biased natural resource endowments and tax bases.[4]

The expenditure needs in FY2001 formula was defined as:

$$EN_i = APBDEXP_T \bullet \left(0.25 \frac{Pop_i}{Pop_T / n} + 0.25 \frac{Area_i}{Area_T / n} + 0.25 \frac{Pov_i}{Pov_T / n} + 0.25 \frac{Cost_i}{100} \right)$$

where $APBDEXP_T$ is total regional government expenditures in the previous fiscal year (actual amount, not incorporated fiscal needs for regional governments to finance their expenditure responsibilities), *Pop* is the population, *Area* is surface area, *Pov* is the number of poor people, *Cost* is a cost index, and *n* is the number of regional governments. The cost index is intended to measure regional differences in public service delivery costs, and these costs are assumed to be positively related with expenditure needs.

It is noted that the Government put the equal weight (0.25) to each variable. However, there was no empirical assessment to check the validity of the equal weight. However, at the same time, it was not possible for the Government to assess its appropriateness, since the fiscal needs are not evaluated based careful cost estimation of regional governments' expenditure responsibilities.

In FY2002, however, the Government slightly revised the definition of the fiscal needs and adopted different weights for each variables. However, it is still difficult to evaluate the impacts of this change on improving measurement of regions' true fiscal needs without knowing true expenditure assignments and their cost implications. There is no convincing explanation by the Government on this change.

[4] See Table 8 and Table 11.

$$EN_i = APBDEXP_T \bullet \left(0.4\frac{Pop_i}{\sum_i Pop_i} + 0.1\frac{Area_i}{\sum_i Area_i} + 0.1\frac{PovGap_i}{\sum_i PovGap_i} + 0.4\frac{Cost_i}{\sum_i Cost_i} \right)$$

Poverty index is another issue to be discussed. As shown in the FY2001 formula, the Government utilized so-called *head account* pov*erty index* as a variable to measure fiscal needs. However, in FY2002, *poverty gap index* was employed without a clear explanation. This may evoke the traditional, but still new, discussion on Indonesia's poverty problem. It is generally believed that poverty in Java is more serious since a majority of poor people stay in Java (head account poverty index). However, if we consider poverty depth, which is measured by the average proportionate distance of the poor from the poverty line, poverty in outer-Java is much more serious than Java. The Government might intend to allocate more DAU to the outer-Java by adopting the poverty gap index, although the weight of the poverty index in the formula was decreased to 0.1 from 0.25.

$$Poverty\ Index = \sum_i^n \frac{(z - y_i)^\alpha}{N}$$

where y_i is income of the poor *i*, *z* is the poverty line, *n* is number of poors (below poverty line), and *N* is total population. In this definition, poverty index is the head account index (if α is equal to zero), and poverty gap (or poverty depth) index (if α is equal to one).

However, if we compare the relative poverty weights based on the both definitions, the results do not necessarily support the expected higher allocations to the outer-Java (Table 2). Although, in the provincial DAU allocation, the relative weight for the outer-Java was slightly increased, that in local government allocation was dropped with the poverty gap index. This issue needs to be carefully reviewed for future revision of the formula.

Table 2 *Allocation Weights on the Poverty Indices*

(%)	Provinces			Local Governments	
	Head Account	Poverty Gap Index		Head Account	Poverty Gap Index
Java	17.6	16.9		27.3	32.1
Outer-Java	82.4	83.1		72.7	67.9
Total	100.0	100.0		100.0	100.0

Another issue to be considered is the treatment of cost index in the fiscal needs calculation. It is highly required to incorporate the cost index since there is a vast cost deferential in public service deliveries among regions. However, in general, cost index should be structured to adjust fiscal needs deferential after considering other factors, i.e., population, area, and poverty.

The fiscal capacity in FY2001 was defined as:

$$FC_i = \left(\frac{PAD_T + PBB_T + BPHTB_T}{n} \right) \bullet \frac{1}{3} \left(\frac{NRO_i / GRDP_i}{NRO_T / GRDP_T} + \frac{NNRO_i / GRDP_i}{NNRO_T / GRDP_T} + \frac{LF_i / Pop_i}{LF_T / Pop_T} \right)$$

where *PAD* is region own revenue, *PBB* is sharing revenues from land and building tax, *BPHTB* is sharing revenue from transfer of land and buildings, *NRO* is natural resource sector GDP, *NNRO* is non-natural resource sector GDP, *GRDP* is regional GDP, *LF* is the working age population, and *Pop* is the population.

There were some conceptual problems in the fiscal capacity definition. Firstly, it was not clear why the Government did not incorporate the sharing revenue from the personal income tax (PPH). Secondly, this definition can provide disincentive to the revenue collecting efforts by the regional governments, since the actual amounts of region own revenue was utilized to measure the fiscal capacity. In other words, higher region's own revenue can reduce DAU allocation by increasing the fiscal capacity. Third, there was no specific reason to employ both natural resource sector GDP and non-natural resource sector GDP in this definition, since the sum of the two variables must be equal to the total regional GDP. Fourth, it was not consistent to use the working age population as a variable to measure the fiscal capacity, since labor force can be regarded as a production factor to produce outputs, i.e., RGDP, which was already incorporated in the definition.

In the DAU allocation for FY2002, however, the fiscal capacity definition was simplified and much improved. Fiscal capacity is the sum of region's own revenues and sharing revenues.

$$FC_i = P\hat{A}D_i + PBB_i + BPHTB_i + PPH_i + 0.75 \bullet SDA_i$$

where $P\hat{A}D$ is *potential* region's own revenues, *PBB* is sharing revenue from land and building tax, *BPHTB* is sharing revenue from transfer of land and buildings, *PPH* is sharing revenue from personal income tax, and *SDA* is sharing revenues from natural resources.

Since the potential region's own revenue is measured as a function of service sector GDP (GRDPS), this revision can provide tax mobilizing incentive to regional governments. This is one of the significant improvements in the FY2002 formula.

$$P\hat{A}D_i = \beta_0 + \beta_1 \bullet GRDPS_i + \varepsilon_i$$

However, it should be noted that, despite the improvements, the FY2002 fiscal capacity definition had to bear another serious problem. The definition says that only 75 percent of sharing revenues from natural resources can be treated as fiscal capacity. Considering the significant counter equalizing impacts of the natural resource revenue sharing, 100 percent of the natural resource sharing revenue should have been regarded as region's fiscal capacity. However, the weight of 75 percent was introduced due to the strong lobbying activities by some regional governments, in particular by resource rich regions.

FY2001 formula amount allocations to local governments and provinces can be written as:

$$FA_i = \left(DAU_{TK} - \sum_i BFA_i \right) \bullet \frac{FG_i}{\sum_i FG_i}$$

$$FA_i = 0.2 \bullet DAU_{TP} \bullet \frac{FG_i}{\sum_i FG_i}$$

In FY2002, the formula amounts both to local governments and provinces were calculated as:

$$FA_i = \left(DAU_{TK(P)} - \sum_i BFA_i - \sum_i LSA_i \right) \bullet \frac{FG_i}{\sum_i FG_i}$$

Lump Sum Factor: In FY2001, this factor was derived only to allocate a residual arose due to the revision of the state budget in the parliament (DPR). The residual was equally allocated to all local governments. For provinces, no lump sum allocation existed.

$$LSA_i = \frac{DAU_{TK} - \left(\sum_i BFA_i + \sum_i FA_i\right)}{n}$$

However, even in FY2002, the Government maintained the lump sum allocations both to provinces and local governments: 10 percent of DAU_{TK} (local governments) and 20 percent of DAU_{TP} (provinces) were allocated as lump sum allocations:.

$$LSA_i = \frac{1}{n} \bullet 0.1 \bullet DAU_{TK}$$

$$LSA_i = \frac{1}{n} \bullet 0.2 \bullet DAU_{TP}$$

It was not clear why the Government kept this component for FY2002. Some observers pointed out that the lump sum factor could serve as an incentive to create new regional governments. To respond to this criticism, the FY2003 DAU allocation proposal recommends the abolishment of the lump sum allocations. In reality, many new regional governments, in particular local governments, were established in FY2001 and FY2002. This trend still continues in FY2003.

Table 3 *Weights for Factors in DAU Allocations*

	FY2001		FY2002		FY2003 (Proposal)	
	Prov.	Local Gov.	Prov	Local Gov.	Prov	Local Gov.
Balancing Factor (BFA)	80.0	80.9	30.0	50.0	40.0	40.0
Formula Factor (FA)	20.0	18.5	50.0	40.0	60.0	60.0
Lump Sum Factor (LSF)	0.0	0.6	20.0	10.0	0.0	0.0
Total (%)	100.0	100.0	100.0	100.0	100.0	100.0
DAU (Rp. trillion)	6.1	54.5	6.9	62.2	7.5	67.9
Source: MOF.						

Hold Harmless Component: In FY2001, when the Government submitted FY2002 DAU allocation proposal, the parliament (DPR) strongly requested a revision of DAU allocation to guarantee that no regional government could receive less DAU than in FY2001. The Government revised the allocation by reallocating a part of DAU from surplus regions (proposed amounts for FY2002 were bigger than those allocated in FY2001) to deficit regions, and by allocating additional Rp. 2 trillion to accommodate the DPR request.

It should be noted that this, so called "hold harmless" component, had a very different from the balancing factor allocation described in the earlier part of this paper. This also reflects strong lobbying activities by the resource rich regions, which could lose in the original proposal. Some believed that the hold harmless component can be justified by the Government Regulation No.104/2000, which says that "the proposal of the Regional Autonomy Advisory Council (DPOD) shall take the balancing factor into account". However, in principle, this part was prepared to remain a possibility to allocate a part of DAU based on non-formula basis to avoid possible mismatch between expenditure responsibilities and revenue assignments at regions. Upon this principle, a part of DAUs were actually allocated based on the past SDO and INPRES allocations (in FY2001) and civil servant salaries (since FY2002).

In the DAU allocation proposal for FY2003, the hold harmless component is still maintained. The Government fully recognizes that the expected equalizing impacts of DAU can be undermined due to this component. However, given the DRP intervention (or political interventions by resource rich regions), one of feasible and practical solutions is to allocate the increasing pie of DAU (note that total DAU amount is defined as a minimum 25 percent of central government's domestic revenues) only to the regions which have fiscal gaps, and, on the other side, to allocate the exact same amounts of DAU allocated in FY2002 to the regions which enjoy topping up DAU allocation due to the component.

Although this can provide only a medium term solution, there seems to be no alternative way to stimulate the expected equalizing effects of DAU. The DAU allocation proposal for FY2003 adopts this measure.

Table 4 *Cumulative Per Capita Revenues and their Variations*

Provinces (Rp. million/1000)	Own Revenues	Sharing Revenues		DAU FY2003 (Proposal)		
		+Taxes	+Natural Resources	+Balancing Factor	+Formula Factor	+Hold Harmless
Maximum	110.9	399.9	447.1	490.5	490.5	490.5
Minimum	5.5	8.6	8.6	22.5	31.4	32.1
Max/Min	20.2	46.4	51.8	21.8	15.6	15.3
Average	16.7	34.1	58.8	79.9	135.7	136.9
Standard Deviation	18.8	70.1	107.0	114.7	111.3	113.5
Coef. of Variation	1.125	2.054	1.819	1.436	0.820	0.829

Local Governments (Rp. million/1000)	Own Revenues	Sharing Revenues		DAU FY2003 (Proposal)		
		+Taxes	+Natural Resources	+Balancing Factor	+Formula Factor	+Hold Harmless
Maximum	855.3	924.5	4,874.5	5,130.3	7,271.4	7,271.4
Minimum	0.0	6.2	11.1	82.0	185.2	185.2
Max/Min	28,358.8	148.9	440.3	62.6	39.3	39.3
Average	22.4	50.9	179.5	359.6	710.8	756.0
Standard Deviation	50.3	67.9	462.3	481.5	676.9	758.3
Coef. of Variation	2.245	1.334	2.575	1.339	0.952	1.003

Future Direction of DAU Allocation Mechanism: Two serious challenges in the current DAU allocation mechanism are: the 0.75 weight for the natural resource revenues in the fiscal capacity calculation and the hold harmless component. Even it may not easy to eliminate these constraints under the current political situation, the Government needs to continue its efforts to improve DAU allocation system by further socializing the original purpose of DAU. However, at the same time, the Government may need to recognize that, even these constraints are eliminated, it is not easy to redress the current horizontal fiscal imbalances without introducing the negative DAU allocation system. At least, if the current revenue sharing mechanism, especially those from the natural resource revenues, is maintain, it is not possible to equalize the financial capacities (measured in per capita revenues) across the regions without introducing the negative DAU transfer system.

Table 5 *Simulation Results: Cumulative Per Capita Revenues and their Variations*

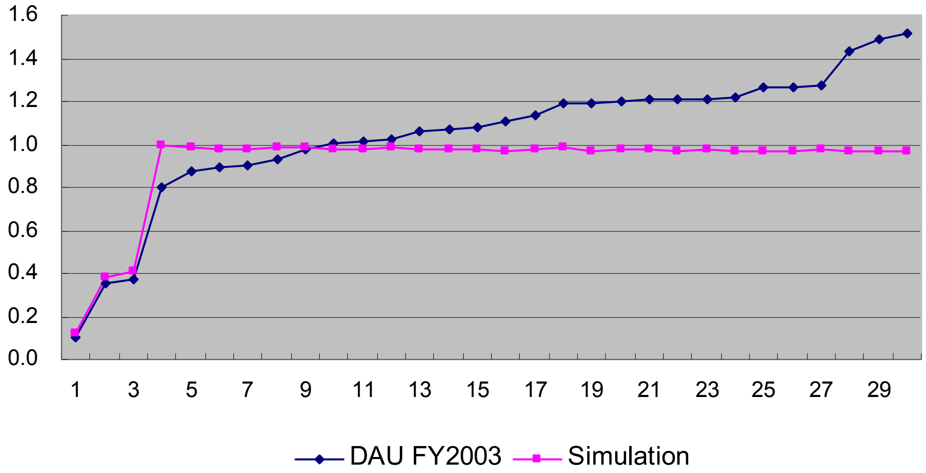
(Rp. million/1000)	Provinces				Local Governments			
	Own Revenues	+Sharing Revenues	+DAU (FY2003) Proposal	+DAU Simulation	Own Revenues	+Sharing Revenues	+DAU (FY2003) Proposal	+DAU Simulation
Maximum	110.9	283.5	490.5	447.1	855.3	4,874.5	7,271.4	6,923.8
Minimum	5.5	6.3	32.1	32.0	0.0	11.1	185.2	151.9
Max/Min	20.2	44.8	15.3	14.0	28,358.8	440.3	39.3	45.6
Average	16.7	25.4	136.9	153.7	22.4	179.5	756.0	783.6
Standard Deviation	18.8	49.5	113.5	114.0	50.3	462.3	758.3	784.9
Coef. of Variation	1.125	1.945	0.829	0.742	2.245	2.575	1.003	1.002

Table 5 shows the results of hypothetical simulations based on FY2003 DAU allocation proposal. This simulation assumes that 1) 100 percent of natural resource revenue sharings are incorporated into regions' fiscal capacities, and 2) 100 percent formula based DAU allocation (without balancing and hold harmless factors). The results imply that the even the formula based allocation can not fully compensate the unequalizing effect of the revenue sharing system.

However, at the same time, we may need to reconsider the original purpose of DAU allocation. As is clearly shown in the DAU allocation formula, its major purpose is to fulfill the fiscal gaps which are measured by the differences between the fiscal needs and fiscal capacities. This does not necessarily imply equal per capita revenues across the regions. The most important issue is how effectively DAU can fulfill each region's fiscal gap. We need to check how effectively DAU allocation can fulfill regions' fiscal gaps by checking the ratio of fiscal need to resource availability, i.e., fiscal capacity plus DAU allocation.

Figure 1 *Fiscal Needs/(Fiscal Capacity + DAU) Ratios*

Provinces



Local Governments

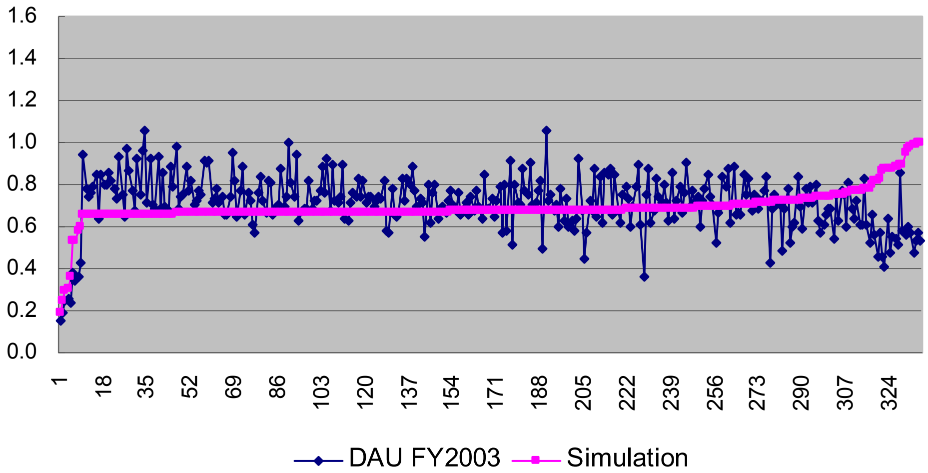


Figure 1 shows the rations both for provinces and local governments. Under the DAU allocation proposal for FY2003 (DAU FY2003 case), there still remain large fiscal gaps in some regions. However, if the Government can eliminate the 75 percent count of natural resource revenue sharing in the fiscal capacity calculation, and adopt the 100 percent formula based allocation, the calculated DAU (Simulation case) can much reduce the fiscal gaps both in provinces and local governments.

Figure 1 also shows an interesting difference between provinces and local governments. On average, the ratios (of fiscal needs to fiscal capacity plus DAU) in provinces are higher than those in local governments. This implies that, at least in the aggregate, local governments can receive relatively enough DAU to finance their fiscal needs than provinces. Table 6 shows that aggregate fiscal needs, fiscal capacities (100 percent of the sharing revenues from the natural resource sectors are incorporated into the calculations), fiscal gaps, and DAU allocations both for provinces and local governments (note: the adjusted fiscal gaps assume that fiscal gaps of negative fiscal gap regions are equal to zero). Total DAU allocation to provinces can just cover their total fiscal gaps, while that to local governments is about 55 percent bigger than the amount required to finance their total fiscal gaps. It must be noted that current sharing arrangement between provinces (10 percent) and local government (90 percent) of DAU can be revised to resolve the unbalanced DAU allocation.

Table 6 *Aggregate Fiscal Gaps and DAU Allocations for FY2003*

(Rp. billion)	Fiscal Needs	Fiscal Capacities	Fiscal Gaps	Adjusted Fiscal Gaps	DAU	DAU/Adj. Fiscal Gaps
Provinces	12,771	9,761	3,011	7,286	7,540	1.035
Local Governments	56,991	16,619	40,372	43,708	67,860	1.553
Total	69,762	26,380	43,383	50,994	75,400	1.479

However, we may need to be careful to assess the above results. As already mentioned, under the current DAU allocation formula, the fiscal needs are measured based on the regional governments' past expenditures with four variables, i.e., population, poverty index, area, and cost index. Only if the method can capture the true fiscal needs of the regions, we can accept the above results. Further, we may need to remember that regional governments' expenditure assignments have not yet been clearly defined. There is no clear definition of minimum service standards (SPMs), much less their cost estimations. The fiscal needs in the DAU formula are not calculated based on the detailed cost estimations of SPMs. More detailed analyses on the expenditure assignments should be required to justify any revision of DAU sharing between provinces and local governments, since their expenditure assignments roles can be much different.

In the long term, it is much desirable that the DAU allocation formula, especially its fiscal needs formulation, incorporates detailed cost estimations of SPMs. On the initiative of Ministry of Home Affairs (MOHA), the Government is currently preparing SPMs in coordination with major donors. However, it seems to require a considerable time, since operational and workable SPMs can firstly be prepared after long continuing try and error processes. Cost estimations of the SPMs, therefore, can only be incorporated into the DAU formula in the medium or long-term.

With relation to this issue, there is a risk to be realized by the Government. Although it is not possible to refer to the expecting costs for SPMs in this stage, we can not deny the possibility that computed costs will require much higher resource transfer to regions. DAU, which is currently fixed at minimum 25 percent of net domestic revenues, can be a first target for the purpose. However, this issue must be carefully considered in the context of the current hard budget constraints of the central government. In the meantime, it is desirable not to rush in incorporating the SPM cost estimations into DAU allocation system. This issue should be positioned as a medium term policy target.

DAU Disbursement Mechanism: DAU allocation flow to regional government treasuries through KPKN (local branch of the central treasury office) on monthly basis. Every month (last week) the Government disbursed the proportional amount (1/12) in FY2001. However, since FY2002, considering higher fiscal needs of regional governments in the beginning of fiscal year, the Government has revised the disbursement system, where the regions can receive two month DAU in January (first and last weeks) and proportional amount in the following months until November (every last week). December allocations can be utilized to adjust allocation amounts based on central budget realization. However, the Government allocated the *budgeted* DAU amounts, not the 25 percent of *actual* central government's domestic, without any adjustments in December. At least in the Law, DAU should be allocated based on the actual domestic revenues (not budgeted amount). This issue needs to be clarified to avoid a possible conflict with regional governments.

III. REVENUE SHARING

Prior to the decentralization, revenue sharing arrangements existed in Indonesia. However, they were applied to the limited revenue sources including land and building tax (PBB), transfer of land and buildings tax (BPHTB), forestry licensing fees (IHPH), mining land rents and royalties. With the implementation of the decentralization, the Government raised the regions' shares for these sources and also expanded the sharing arrangements to other revenue sources. Current revenue sharing consists of three types: property-related taxes, personal income tax, and natural resource revenues. A major purpose of the enlarged revenue sharing arrangements is to improve the vertical fiscal imbalances. Although a part of the purpose is actually achieved by the new sharing scheme, it causes significant fiscal imbalances across regions (horizontal fiscal imbalances). This is one of key challenges in the Indonesia's fiscal decentralization.

Property-related Taxes: Sharing from the property-related taxes comprises of those from two taxes, namely, land and building and transfer of land and buildings. Even before the decentralization, sharing revenues from these taxes have been a major component of revenue sharing between the central and regional governments. Although the Government Regulation No.25/2000 stipulates that 10 percent of PBB and 20 percent of BPHTB are central share, the central shares (a part of central of PBB and 100 percent of BPHTB) are reallocated to regions. Table 11 shows the sharing rates for these taxes.

In many countries, property-related taxes are important revenue sources of regional governments. This is because the property-related taxes are taxes on an immobile factor of production, therefore, most suitable for administration at regional levels. In Indonesia, however, these taxes have been, and still are, administrated by the central government. However, in some regions, the regional governments have been assessed and collected the taxes on behalf on the central government. Current tax rates are only 0.5 percent of market values of the properties. Considering the still limited revenue mobilizing capacities of regional governments, the Government is planning to transfer these taxes to regional governments. This may improve regions' tax mobilizing capacities without any losses in tax administration efficiency.

Table 7 *Sharing Rates for Property-related Taxes*

(%)	Central	Regions			
		Prov.	Local Govt.	Other Local Govt.	Total
Land & Building (PBB)	9.0	16.2	64.8	10.0	91.0
Transfer of Land & Building (BPHTB)	--	16.0	64.0	20.0	100.0
Source: MOF.					

Personal Income Tax: Sharing from the personal income tax (PPH) was introduced by the revised income law (Law No. 17/2000). On a derivation basis, 8 percent and 12 percent of total personal income tax are allocated to provinces and local governments, respectively. A key issue needs to be address is the concentration of the sharing revenue from the personal income tax to some limited regions, more precisely, to Jakarta, which enjoys about 50 percent of total sharing amounts to all provinces and local governments. Table 8 shows the Jakarta's share in FY2001 revenue sharing in the personal income tax (and property-related taxes).

Table 8 *DKI Jakarta's Share in FY2001*

(%)	Personal Income Tax (PPH)	Land & Building (PBB)	Transfer of Land & Building (BPHTB)
Jakarta	73.3	48.1	79.5
Non-Jakarta	26.7	51.9	20.5
All Provinces	100.0	100.0	100.0

Some observers indicate the lack of clarity and certainty in the revenue sharing of the personal income tax. Under the current sharing system, local governments' shares are distributed under provincial government's authority. Many local governments criticize the lack of transparency in the transferred amounts. To redress this issue, one feasible solution may be to introduce the so-called *piggy back* component or surcharge on the personal income tax. This means that the imposition of local tax component on top of the current personal income tax (central tax). This method has greater transparency than the current sharing system.

However, in this case, the Government needs to consider its impacts on the progressive structure of current personal income tax. Current personal income tax rates are 5 percent (0 to Rp. 25 million), 10 percent (Rp. 25 to 50 million), 15 percent (Rp. 50 to 100 million), 25 percent (Rp. 100 to 200 million), and 35 percent (above Rp. 200 million). The newly introduced piggy backed tax should not disturb the progressiveness of the current personal income tax.

One idea is to apply uniform percentage uplifts on the current bonds after reducing the central tax rates. That is, the current five bands of the tax rate could each be reduced to 80 percent of the current levels (4 percent, 8 percent, 12 percent, 20 percent, and 28 percent). Then, regional governments' supplementary tax elements can be set at 1 percent, 2 percent, 3 percent, 5 percent, and 7 percent for each bond without disturbing the current progressive structure. Regional governments can be given authority to set their tax rate for each bond within the above maximum rate. Tax rates (central plus regional tax components) for the tax payers at most the same as the current tax rates.

However, there seems to be a missing issue in this argument. While the piggy backing personal income tax seems to have greater transparency in the sharing revenue allocations, it can not improve the inequitable sharing revenue allocations across regions. If the Government wants to address this issue, it is worth considering introducing a single, flat rate, to all income bonds as the regional income tax surcharge. In this system, relatively poor regions, where a majority of residents belong to lower income bands, can increase their income tax revenues since regional income tax rates for the lower income bands can be higher than those in uniform percentage uplifts. The Government can find the appropriate level of the flat rate (*x percent*) which can guarantee the current 20 percent and 80 percent sharing between regional and central governments. This can achieve more equitable personal income revenue allocations across regions, and, hence, can contribute to improve the horizontal fiscal imbalances. Table 9 shows the tax structures in the both ideas.

Table 9 *Options for Piggy Backed Personal Income Tax*

Uniform Percentage Uplifts					
	Band I	II	III	IV	V
Center	4	8	12	20	28
Regions	1	2	3	5	7
Total	5	10	15	25	35
A Single, Flat Rate					
	Band I	II	III	IV	V
Center	5-X	10-X	15-X	25-X	35-X
Regions	X	X	X	X	X
Total	5	10	15	25	35

In addition, regional governments' tax administration capacity should be improved before introducing the piggy backed personal income tax. Even the Government decides to adopt a new tax system, continuing supports to improve the tax administration at regional levels would be required.

Natural Resource Revenues: In general, revenue sharing from natural resource revenues is considered an inappropriate instrument of fiscal decentralization, since natural resources are usually unevenly distributed, which can induce higher horizontal fiscal imbalance across regions. Of course, natural resource revenue sharing may be justified as a tool to improve vertical fiscal imbalances. However, in general, its negative impact on equitable revenue allocations is much bigger than the positive effect on the vertical fiscal balances. It is in this reason why the revenue sharing of the natural resource is not adopted in many countries.

However, Indonesia expanded revenue sharings from natural resources after the decentralization. A considerable change was the inclusion of oil and natural gas revenue sharing. Under the new sharing system, 15 percent of the oil and 30 percent of natural gas revenues need to be shared with regions.

The decisive reason why the Government introduced the revenue sharing from oil and natural gas revenues was to accommodate strong regional aspiration to acquire a larger share of these revenues. Some regions, especially resource rich regions, had a long dissatisfaction over the traditional central control of these revenues. These regions generally believe that the natural resources are their own heritage. The Government decided to introduce the natural resource revenue sharing to accommodate the long-cherished regions' aspiration in the difficult political situation prior to FY2001 decentralization, even though they recognized its negative impacts on the horizontal fiscal balance.

Table 10 *Sharing Rates for Natural Resource Revenues*

	Central	Regions				
		Prov.	Local Govt.	Local Govt. within the same province	Other Local Govt.	Total
Mining: Land Rent	20.0	16.0	64.0	--	--	80.0
Mining: Royalty	20.0	16.0	32.0	32.0	--	80.0
Forestry: Management Rights	20.0	16.0	64.0		--	80.0
Forestry: Resource Revenues	20.0	16.0	32.0	32.0	--	80.0
Fishery	20.0	--	--	--	80.0	80.0
Oil	85.0	3.0	6.0	6.0	--	15.0
Gas	70.0	6.0	12.0	12.0	--	30.0
Source: MOF.						

Table 11 shows the top three recipients of the sharing revenues from the oil and natural gas in FY2001. It clearly shows that the bulk of the revenues go to the very limited resource rich regions (more than 80 percent of total revenues was allocated only to the three regions both at provincial and local government levels), which implies that revenue sharing from oil and natural gas sectors is a major source of the higher horizontal fiscal imbalance. In principle, the imbalance should be redressed by other central transfers, in the case of Indonesia by DAU. However, as mentioned in the previous section, its equalizing function has been severely suppressed by various factors including: 1) hold harmless component (no regional government could receive less DAU than the previous year); 2) exclusion of a part of natural resource revenue sharing (25 percent) in the fiscal capacity calculation; and 3) non-negative DAU allocation even to some rich regions. It is clear that the Government is trying to achieve more equitable DAU allocation under these constraints.

Table 11 *Top Three Recipients of Oil and Natural Gas Revenue Sharing in FY2001*

	Prov.	Local Govt.
Total (Rp. trillion)	2.19	7.64
Ache	0.21	0.86
Riau	0.78	3.13
Kalimantan Timur	0.80	2.66
Sub Total	1.79	6.65
(% to Total)	81.7	87.0

Disbursement Mechanism: One problem arisen in FY2001 was too delayed disbursements of the sharing revenues to regions, which might have negative impacts on regional financial management. To check this issue, current disbursement mechanism of the sharing revenues needs to be carefully reviewed.

Regional shares of property-related taxes are transferred on monthly basis based on the realization amounts (not budgeted amount) through KPKN. Personal income share is disbursed on the quarterly basis under provincial government authority. However, its disbursement amounts in the first three quarter are based on the budgeted amount, and adjustment is made in the last quarter tranche.

Table 12 *Quarterly Disbursements of Sharing Revenues*

(Rp. billion)	FY2001				
	Q1	*Q2*	*Q3*	*Q4*	Total
Revenue Sharing					
Personal Income Tax (PPH)	20.2	788.9	1,022.0	1,462.2	3,293.3
Property-related Taxes					
Land and Building Tax (PBB)	510.0	353.2	1,948.9	2,137.3	4,949.4
Duties Land and Building Transfer (BPHTB)	246.0	326.9	382.5	501.3	1,456.6
Natural Resources (SDA)					
Oil	0.0	0.0	2,974.6	3,015.3	5,989.9
Gas	0.0	0.0	1,678.5	1,903.8	3,582.3
General Mining	0.0	0.0	0.0	438.0	438.0
Forestry	0.0	0.0	0.0	318.2	318.2
Fishery	--	--	--	--	--
Total	776.2	1,469.0	8,006.5	9,776.1	20,027.8
(%)	3.9	7.3	40.0	48.8	100.0

Source: BAF, MOF. Preliminary Figures.

A biggest problem lies in natural resource revenue sharings. In principle, 25 percent of regional shares should be released in the second (April) and third (July) quarters, and the remaining 50 percent in the last quarter (October and December). However, in FY2001, actual disbursements were conducted at the very last minute of the fiscal year. A major reason of this delay came from difficulties in collecting required production data of natural resources. It took unexpectedly long time to collect these data at the technical ministry level, which inevitably resulted in delayed disbursement by Ministry of Finance (MOF). Table 12 shows quarterly disbursement amounts. This might have significant impacts on FY2001 regional budgets. A majority of regions carried over a major part of the sharing revenues into FY2002 budgets, which is one of factors explaining budget surpluses in some regions (Table 13). The Government needs to take appropriate actions to this issue.

Table 13 *Regional Budgets: Before and After the Decentralization*

(Rp. billion)	FY2000 #			FY2001		
	Regional Govt.	Prov.	Local Govt.	Regional Govt.	Prov.	Local Govt.
Revenues	52,638	12,984	39,654	108,855	29,396	79,459
Previous Year's Surplus	2,930	1,179	1,752	6,218	4,067	2,151
Regional Own Revenues	7,549	3,953	3,596	15,359	10,134	5,225
Balanced Funds	41,119	7,820	33,299	82,975	14,159	68,816
Tax Sharing	4,445	706	3,739	10,008	4,290	5,718
Non-Tax Sharing	1,710	996	714	11,472	3,206	8,266
DAU (SDO+INPRES for FY2000)	34,494	6,114	28,379	60,499	6,507	53,992
DAK (Others for FY2000)	470	3	467	996	156	839
Regional Borrowing	1,040	32	1,008	495	11	484
Others	0	0	0	3,807	1,025	2,783
Expenditures	49,325	11,635	37,689	92,716	23,093	69,623
Routine Expenditure	31,081	5,934	25,147	62,954	14,699	48,255
Personnel Expenditure	20,563	2,042	18,521	41,053	5,763	35,289
Non-Personnel Expenditure	10,517	3,892	6,626	21,902	8,936	12,966
Development Expenditure	18,244	5,701	12,543	29,762	8,394	21,368
Balances	3,313	1,349	1,965	16,139	6,303	9,836

Note: annualized.
Source: MOF.

Like DAU allocation in FY2001, the Government allocated the *budgeted* amounts (not actual amounts) of regional shares to the regions. This issue needs to be clarified by the Government.

With the implementation of the decentralization, the central government can not enjoy unexpected oil and natural gas windfall due to higher oil and gas prices, and Rupiah depreciation, since parts of their revenues should be shared with the regional governments. Further, the central government needs to take the financial risk of the oil and natural gas revenue shortfalls, which can be induced by lower oil and gas prices and stronger currency, if current budget based disbursements of oil and natural gas revenues to the regions. In this context, a clear adjustment system in the last trances should be established. At the same time, conservative oil and gas price setting in the budgeting process needs to be maintained.

Local Tax Sharing: Revised local tax law (Law No. 34/2000) introduced new tax sharing mechanism between province and local governments. Under the new system, four provincial taxes need to be shared with local governments (70 percent of automotive vehicle tax and fee for changes of vehicle ownership, and 30 percent of fuel vehicle and use of underground water taxes, should be transferred to Kabupaten/Kota). Provincial government has a responsibility to develop a sharing system across local governments. However, some provincial governments have not yet legalized the allocation mechanism, and, even within provinces who have established new sharing systems, a lack of transparency of the allocation methods have been criticized by some local governments. In addition, under the new local tax law, local government needs to transfer the 10 percent of its local tax revenues to villages (Desa). Like the provincial tax sharing, there is the same allocation problem between local government and villages.

IV. SPECIFIC PURPOSE GRANT (DAK)

Before the decentralization, Indonesia's regional development activities were mainly financed by INPRES and central development budgets (DIP). There existed two types of INPRES: specific purpose INPRES and general purpose INPRES. The former, which took up a major part of INPRES, was allocated for various purposes including building and maintaining schools and health facilities in regions, while the latter was utilized based on regional governments' preferences. DIP funds were allocated as budgets to the central line ministries/agencies in the central government budgets to finance central government's projects at regional level. In the DIP projects, the central line ministries controlled all aspects of project implementation through their local branches (Kanwil and Kandep), and.project funds were managed outside regional government budgets. In many cases, regional governments did not have any project ownership even though projects were implemented in their territories.

With the implementation of the decentralization, the Government introduced a matching grant called Special Allocation Fund (DAK). However, budget allocations to DAK were limited both in FY2001 and FY2002 and only limited amounts were allocated for reforestation activities. One reason might be that many people felt that DAK could not be an appropriate central transfer since they considered that DAK could still involve central control. Based on bitter experiences in the past, many regional governments feel that even DAK projects are centralistic like former DIP projects. Another possible reason was the hard budget constraint at central level. In the new system, the central government needs to contribute at most 90 percent of total project costs under the DAK scheme.

However, even considering these problems, the Government needs establish a workable DAK allocation mechanism. Even after the decentralization, central government needs to take responsibilities for some projects at regions: 1) projects which have large spill over effects across regions; and 2) projects which promote national priorities. Projects to support regional governments to achieve minimum service standards can be included in this category. How the Government can control regional governments' budget allocations for these areas without unnecessary interferences into regional government affairs? After the decentralization, the Government does not have any effective policy instruments to control regional governments. DAK can be a key instrument for this purpose.

Under the new DAK system, the Government can improve regional governments' project ownership, since regional governments need to finance a part of project costs and also they should take the initiative in proposing the projects to the central government. In this sense, DAK projects can foster stronger project ownership by regional governments.

Further, it must be noted that budgets of central line ministries or agencies still contain funds for decentralized functions. Some observers pointed out that, in the FY2002 budget, central development budgets (DIP) still contains as much as Rp. 10 to 20 trillion to finance devolved functions to regions, although the Law No. 25/1999 stipulates that all decentralized functions must be financed and managed through regional budgets. This fact implies that the Government has available funds for DAK allocation. Of course, it can be understood that this is a temporally measure avoid public service delivery disruption at regional levels, since some regional governments do not have enough capacity to carry out newly devolved functions. However, at the same time, it can not be denied the possibility that central line ministries or agencies tend to keep the DIP funds to maintain their powers even after the decentralization. In principle, the Government should gradually phase out the DIP channels and transfer the funds into DAK allocation.

In the FY2003 budget, the Government allocates Rp. 2.6 trillion for DAK. About Rp. 2.3 trillion are available for non-reforestation projects, especially for education, health, and infrastructures (road and irrigation projects), beyond the forest rehabilitation (Table 14). It means that the Government will start utilizing DAK channel to some non-reforestation projects for the first time after the decentralization. This is a great progress. However, there is a critical problem to be redressed by the Government before allocating DAK to non-reforestation projects. It is an allocation procedure of DAK.

Table 14 *DAK Allocations*

(Rp. billion)	FY2001 revised	FY2002 revised	FY2003 budget	Major Purposes
DAK	701	817	2,617	
Reforestation	701	817	348	
Non-Reforestation	--	--	2,269	
Education			625	Rehabilitation of Primaly School Buildings
Health			375	Rehabilitation of Rural Clinics and Local Hospitals
Infrastructure			1,181	
Road			843	Provincial and Local Roads
Irrigation			339	Operation, Maintenance, and Rehabilitation
Others			88	Local Government Office Building
Source: MOF.				

Allocation Criteria: According to MOF, there are three criteria for DAK allocation for FY2003: 1) General Criterion; and 2) Technical Criterion. There are two steps in the identification process of eligible local governments for DAK. First, the Government ranks all local governments according to their fiscal capacities. The Government calculated financial capability indices of regions (TKKD: Tingkat Kemampuan Keuangan Daerah) based on FY2001 regional budgets. TKKD for a region is defined as a ratio of regional fiscal net to notational average regional fiscal net. Regional fiscal net is the sum of central transfers and regional owned revenue (PAD). When the TKKD of a region is below one, it means that the region's financial capability is below the national average. Regions whose RKKDs are below one are classified eligible for DAK allocation. A cut-off line is set at 238 to classify all local governments into eligible ones and non-eligible ones, which means that poorer 238 local governments are eligible for DAK allocation (General Criterion).

Second, National Development Planning Agency (in coordination with three line ministries reviewed sectoral indicators for the 238 local governments to check their eligibilities for each proposed sector

(Technical Criterion). Utilized technical indicators include: school-damaged index and construction cost index (education sector); human poverty index (HPI), numbers of rural clinic (Puskesmas), mobile health service (Puskesmas Keliling) and supporting health center (Puskesmas Pembantu), and construction cost index (health sector); and quality of road, traffic load, and construction cost index (road sector); average rice production, number of irrigation existing around neighborhood, existing condition of irrigation, and construction cost index (irrigation sector). Based on these technical indicators, eligible regional governments are selected.

However, in reality, sectoral indicators are mainly utilized to determine allocation amounts to each local government, since DAK for education, health, and road sector (except irrigation sector) can be allocated to all governments pass eligibility test by RKKD. In the three sectors, minimum allocation can be distributed to all eligible governments (their RKKDs are below one), then, the remaining funds can be allocated based on formulas established by sectoral indicators. Only for irrigation projects, DAK can be allocated based on a formula (there are some regions which can not receive DAK even they are classified as eligible in their fiscal capacities)

Matching Rates: Once eligible regions are determined by the criteria, another important issue to be resolved is matching rate. There is an agreement within the central government, that only regions with a good ability to provide matching funds for DAK projects can receive DAK. Government Regulation (PP) No.104/2000 stipulates that a minimum 10 percent of project cost should be financed by local government. This arrangement is required to foster project ownership by local governments. However, it may favor financial rich regions in DAK allocation, since some poor regions may not be able to provide needed matching fund from their budgets.

There are at least two factors the Government needs to consider in determining matching rate for DAK projects. Fist, as mentioned above, matching rate should be determined by considering *difference in fiscal capacities across the regions*. This is required not to exclude financially poor regions from DAK projects. Another factor to be considered is *profitability of projects*. In general, we can expect large financial returns in social sector projects such as education and health, even these projects can bring large social returns. On the other hand, some infrastructure projects can earn enough returns on the invested capitals to cover the project costs. The Government needs to prepare different matching rates incorporating the above two factors to achieve the expected role of DAK.

A clear matching rate setting criterion was not prepared by the Government. In FY2003, the matching rate of 10 percent, the minimum requirement, would be applied for all (eligible) local governments and also for all projects irrespective of differences in fiscal capacity and financial profitability of projects

Best Strategic Use of DAK: A chief concern appeared in the FY2003 DAK allocation criteria is its implicit emphasis on equalizing effects of DAK allocation. Judging from the allocation criteria, the Government seems to have no hesitation in utilizing DAK to supplement the equalizing effect of DAU. As we emphasized, DAK was introduced to promote national priorities and to internalize spill over effects. In principle, it must be used to support the attainment of SPMs and compensate the national priority projects which have significant spill-over effects. DAK should be utilized for these purposes. To be fair, the Government does not have enough tools to promote the national priorities after decentralization. Under the current system, the Government can promote national projects by fostering coordination with the regional governments only through discussions at development planning coordination meetings (Rakorbang). DAK should be kept as a policy instrument to promote the national projects. In the sense, it is not appropriate for the Government to utilize DAK to improve the horizontal fiscal balances. Even current intergovernmental transfers, in particular DAU allocation, can not carry out the expected equalizing function, it should be resolved by improving DAU allocation mechanism itself, not by DAK allocation.

Disbursement Mechanism: In principle, DAK funds are allocated in three times (40, 30, 30 percents in each tranche) subject to actual expenditure by regions. However, in FY2001, due to the delayed release of the Ministerial Decree (Kepmen), actual disbursement concentrated in November and December. Even in FY2002, Ministerial Decree for DAK allocation has not yet released (as of August 2002). The delayed announcements of DAK allocation amounts to regions created confusion at the regional level.

Another problem in DAK disbursement system is its fund flow mechanism. DAK funds have not been transferred to treasury offices of regional governments, but allocated directly to projects/activities (Dinas) through KPKN. Local treasury offices received only the notification of transfer but not the transfer itself. Since DAK is part of the regional budget (APBD), the disbursement process should be done through local treasury office.

V. MAJOR CONCLUSIONS: KEY POLICY RECOMMENDATIONS

This paper analyzed Indonesia's new intergovernmental transfer system in the overall context of decentralization. Effective intergovernmental relations can firstly be established after preparing clear authority demarcation between different levels of governments. The most serious challenge for Indonesia's new intergovernmental transfer system lies in the lack of clear expenditure assignments to regional governments. This makes it difficult to assess appropriateness of the new intergovernmental transfer system. Major conclusions (policy recommendations) of this paper can be summarized as:

General Allocation Fund (DAU): A main objective of DAU is to equalize fiscal capacities across the regions to finance their expenditure needs including additional fiscal costs to finance newly devolved functions. To this end, the Government prepared a DAU allocation formula that incorporates fiscal needs and capacity of all regions. However, actual allocations were not perfectly based on the formula due mainly to political factors or lobbying activities by some resource rich regions. As a result, DAU has not yet achieved the expected equalizing effect. Key constraints are: 1) "*hold harmless*" component (no region could receive less DAU than the previous year); and 2) missing 25 percent of natural resource revenue sharing in fiscal capacity calculation in the formula. Our simulation exercise shows that more formula based allocation can improve horizontal fiscal balances. The Government is moving to this direction by increasing the weight for formula allocation, however, further efforts are required to socialize the original purpose of DAU. In the short-term (if the Government can not remove the above two constraints due to political reasons), a feasible solution is to allocate increasing pie of DAU only to regions which really suffer from lack of fiscal resources, by fixing the allocation amounts to regions which enjoy additional revenues due to these constraints.

The Government also needs to incorporate cost estimations to achieve minimum service standards (SPMs) into the DAU allocation formula, especially its fiscal needs calculation. However, this issue needs to be addressed in the medium- and long-term, since operational and workable SPMs can be prepared after long continuing try and error processes. A risk is that computed costs for SPMs will require much higher resource transfers to regions, which will elicit discussion within the Government to increase total pool of DAU (currently fixed at 25 percent of net domestic revenues). Rough and ready incorporation of SPM cost estimation into the DAU formula will require another revision of DAU formula in the near future. Further, this issue must be carefully considered in the overall context of the current hard budget constraints of the central government budget. In the meantime, it is desirable not to rush in incorporating SPM cost estimation into the DAU allocation system.

Revenue Sharing: Highly unequalzing effects of current revenue sharing system and too delayed disbursements to regional governments need to be realized as key challenges for the Government. A bulk of sharing revenues from personal income tax and property related taxes goes to some limited regions, in particular to Jakarta, which enjoys about 50 percent of total sharing amounts to regions. Further, sharing revenues from natural resources concentrated to the limited resource rich regions. Delayed disbursement of sharing revenues created serious difficulties in financial management at regions. In FY2001, a major part of these revenues were disbursed to regions at the very last stage of the fiscal year. This is a key factor explaining the relatively large budget surpluses recorded in FY2001 regional budgets. The Government needs to streamline the complicated calculation process of sharing revenues, in particular those from natural resource sectors, to enable timely disbursement to regional governments.

Specific Purpose Grant (DAK): It must be emphasizes that the lack of policy tools or instruments to promote nationally prioritized projects at regional levels is a key challenge for Indonesia's decentralization. Even after the decentralization, the Government needs to foster nationally prioritized projects at regions without unnecessary interferences in regional government affairs. The Government needs to establish a clear linkage between the central and regional governments in planning and budgeting. DAK, as a matching grant, needs to play a major role to this end. However, to make it possible, the Government needs to clarify some key issues including: 1) identification of eligible regions; 2) technical criteria by sectors: 3) matching rate setting; and 4) disbursement mechanism. A key issue to be realized by the Government is the original purpose of DAK. DAK was introduced to finance nationally prioritized projects and/or spill over projects at regions, not to improve horizontal fiscal imbalances. However, at least, judging from DAK allocation criteria for FY2003, the Government failed to pay enough attention to this issue. DAK should not be utilized as an equalizing tool, which must be achieved by DAU allocation.

In any country, decentralization can achive its expected goals after long try and error process. It is nothing strage even if Indonesia's drastic decentralization has some shortcomings in this stage. However, it is the role of the responsible government to realize the constraints in order to establish a workable decentralization system in the future.

References:

Alm, J., Aten, H.R., and R. Bahl, (2001): *Can Indonesia Decentralize Successfully? Plans, Problems and Prospects*. Bulletin of Indonesian Economic Studies, Vol. 37, No. 1, pp. 83-102.

Asanuma, S., and Bambang Brodjonegoro, (2003): *Indonesia's Decentralization Policies: Origins, Issues, and Prospects*. A Paper presented at the International Symposium on Indonesia's Decentralization Policy: Problems and Policy Directions, sponsored by Ministry of Foreign Affairs of Japan, Japan International Cooperation Agency, and the Government of Indonesia, Hitotsubashi Memorial Hall, Hitotsubashi University.

Bahl, R., (1999): *Implementing Rules for Fiscal Decentralization*. in Proceedings of the International Seminar on Land Policy and Economic Development, International Center for Land Policy Studies and Training, Taiwan.

Bird, M. R., and M. Smart, (2001): *Intergovernmental Fiscal Transfers: Some Lessons from International Experience*. A paper presented at Symposium on Intergovernmental Transfers in Asian Countries: Issues and Practices, Hitotsubashi University, Tokyo, February 2001.

Devas, N., (ed.), (1989): *Financing Local Government in Indonesia*, Monographs in International Studies, Southeast Asia Series, No.84, Ohio University.

Hofman, B., and K. Kaiser, (2002): *The Making of the Big Bang and its Aftermath; A Political Economy Perspective*. A Paper presented at the Conference: Can Decentralization Help Rebuild Indonesia?, sponsored by the International Studies Program, Andrew Young School of Policy Studies, Georgia State University.

Lewis, D. B., (2002): *Revenue-Sharing and Grant-Making in Indonesia; The First Two Years of Fiscal Decentralization*. in Smoke P., (ed.),: *Intergovernmental Transfers in Asia*, Asian Development Bank.

Shah, A., and Z. Qureshi, (eds.), (1994): *Intergovernmental Fiscal Relations in Indonesia; Issues and Reform Options*. World Bank Discussion Paper No.239, World Bank.

Usui, N., and Armida Alisjahbana, (2003): *Local Development Planning and Budgeting in Decentralized Indonesia: Key Issues*. A Paper presented at the International Symposium on Indonesia's Decentralization Policy: Problems and Policy Directions, sponsored by Ministry of Foreign Affairs of Japan, Japan International Cooperation Agency, and the Government of Indonesia, Hitotsubashi Memorial Hall, Hitotsubashi University. This paper is available from GTZ web site (http://www.gtzsfdm.or.id/dec_o_pa_doc.htm).