

Autonomy with Equity and Accountability

Toward a More Transparent, Objective, Predictable
and Simpler (TOPS) System of Central Financing
of Provincial-Local Expenditures in Indonesia

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Abstract

During the past decade, Indonesia has transformed itself from centralized governance to decentralized local governance. Local governments were given extensive expenditure responsibilities while keeping the tax system centralized. To finance decentralized provincial-local expenditures, Indonesia implemented a new system of intergovernmental finance. This paper provides a review of the equity and efficiency implications of the current system of central-provincial-local transfers.

It finds that the system of intergovernmental finance represents one of the most complex systems ever implemented by any government in the world. The system is primarily focused on a gap-filling approach to provincial-local finance to ensure revenue adequacy and local autonomy but without accountability to local residents for service delivery performance. This is done through a great degree of academic rigor using highly complex procedures. The complexity leads to a lack of transparency, inequity and uncertainty in

allocation as well as creating incentives for jurisdictional fragmentation and reducing own-tax effort. Simpler alternatives are available that have the potential to address equity objectives while also enhancing efficiency and citizen-based accountability. Such alternatives would represent a move away from complex gap filling and special allocation approaches to simple, output based transfers to finance operating expenditures. These would be complemented by capital grants to deal with infrastructure deficiencies, and fiscal capacity equalization as a residual program with an explicit standard to ensure that all local jurisdictions have adequate means to deliver reasonably comparable levels of public services at reasonably comparable levels of tax burdens across the country. The paper argues that such an alternative system of intergovernmental finance would preserve autonomy, while enhancing equity, simplicity, objectivity, transparency and accountability.

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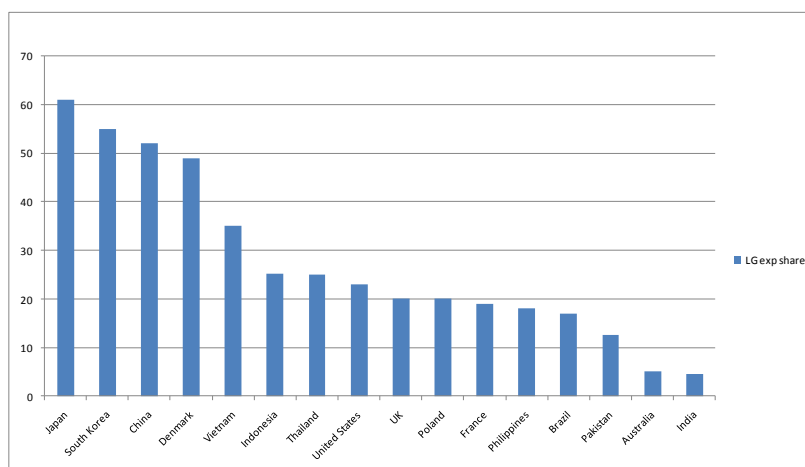
1. Introduction

Provincial and local government reforms continue to dominate the national policy agenda today in Indonesia despite the sweeping legislative and administrative changes affecting the organization, functions and finance of sub-national government undertaken since 1999. During the past decade Indonesia has come a long way from centralized governance to decentralized local governance, and today Indonesia ranks among the most decentralized developing countries (see Ivanyna and Shah, 2011). Indonesia quite remarkably achieved this status without experiencing any service delivery disruptions even during the early stages of this rapid transformation. Today the Government of Indonesia is revisiting all aspects of local governance to make appropriate legal and institutional adjustments based upon lessons learned during the past decade. An important area ripe for this re-examination and possible reform is the central financing of subnational expenditures. The system of intergovernmental finance in vogue today represents one of the most complex system ever implemented by any government in the world. The system is primarily focused on a gap-filling approach to provincial-local finance in an objective manner to ensure revenue adequacy and local autonomy but without accountability to local residents for service delivery performance. This is done through a great degree of academic rigor using highly complex

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procedures with the objective of providing precise justice and more importantly to keep politics at

Figure 1. With the big bang, Indonesia has leap-frogged to the community of decentralized nations. (local government share of total expenditures -2005)



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bay. Do these complex programs serve their explicitly stated objectives? This paper takes a closer look at selected major programs of central transfers to finance provincial-local government expenditures in Indonesia. The paper concludes that super complexity leads to a lack of transparency, inequity and uncertainty in allocation. Simpler alternatives are available that have the potential to address equity objectives while also enhancing efficiency and citizen-based accountability. Such alternatives would represent a move away from complex gap filling and special allocation approaches to simple output based transfers to finance operating expenditures, complemented by capital grants to deal with infrastructure deficiencies and instituting fiscal capacity equalization as a residual program with an explicit standard to ensure that all local jurisdictions have adequate means to deliver reasonably comparable levels of public services at reasonably comparable levels of tax burdens across the country. The paper argues that such an alternative system of intergovernmental finance would preserve autonomy, while enhancing equity, simplicity, objectivity, transparency and accountability.

The rest of the paper is organized as follows. Section 2 presents a brief overview of provincial-local organization and finances. Section 3 provides a bird's eye view of central transfers to sub-national governments. Section 4 presents a brief commentary on the tax sharing system. Section 5 presents a review of equalization transfers (Dana Alokasi Umum -DAU). Special attention is paid to expenditure needs equalization. Section 6 discusses specific purpose transfers (DAK). Section 7 discusses the merits and demerits of a common proposal to set up an independent grants commission. A final section presents concluding remarks and presents a forward looking view about the reform of intergovernmental finances.

2. An Overview of Provincial-Local Finances in Indonesia

The Republic of Indonesia is an archipelago of nearly 14,000 islands with 930 of them inhabited, covering an area of 1.9 million square kilometers and having an ethnically diverse estimated 2011 total population of 246 million. Since 1954, it has organized itself as a multi-tier unitary state. Indonesia's political and administrative system consists of three formal government levels, the central; the provincial level (Daerah Tingkat I or Dati I); the district level (Daerah Tingkat II or Dati II or Kabupatens) and the urban municipalities (cities, towns or Kotamadya). In addition unincorporated areas include the villages (kelurahan in urban areas and desa in rural areas). As of today, there are 33 provinces, 405 districts, 97 cities, 6,543 subdistricts and 75,244 villages (out of which roughly 12,000 are urban villages). Both the subdistrict and villages do not have formal local governments. The average population of a province is about 7 million, ranging from fewer than 1 million in North Maluku to more than 38 million in West Java. The average population under Indonesian local governments (including rural districts and urban municipalities) is about 500,000 people, rather large by international standards. There is fairly wide diversity in size, from fewer than 25,000 in sparsely populated Sabang to almost 4 million in metropolitan Bandung. Some of these jurisdictions might in fact be too large, whereas others might be too small to deliver services efficiently. Local governments also differ vastly in their geographic and socioeconomic characteristics. Per capita incomes in the richest 20 percent of districts are more than three times higher than in the poorest 20 percent of districts. This uneven distribution of economic activity is reflected in large disparities in living conditions. Poverty rates range from about 7 percent in the industrialized district of Bekasi at the fringe of Jakarta to more than 40 percent in the West Sumba district in the eastern part of Indonesia. Illiteracy in the East Javanese district of Sampang is still more than 40 percent, though it has decreased to 12 percent for Indonesia as a whole. And though about 98 percent of people in Tanjung Jabung Barat in the province of Jambi have access to primary health care, only 22 percent do in Sintang in West Kalimantan. This heterogeneity potentially increases the benefits of decentralization, but it also places considerable pressure on the fiscal system to ensure minimum quantity, quality, and access in public service and to enable the convergence of living conditions across Indonesia's local governments (see Eckardt and Shah, 2007).

Indonesia retained a centralized unitary government structure until 1999. In May 1999, President Bacharuddin Jusuf Habibie sponsored enactment of major legislation that stipulated a new division of powers among different orders of the government. Through the enactment of Law 22/1999 on regional governance, responsibility for much government expenditure was decentralized—largely to local (district) governments rather than provincial governments. Such a move had earlier been advocated by Shah (1998a), who argued that decentralization to the local levels will strengthen political and economic union by addressing long felt grievances while decentralization to the provincial level might unleash centrifugal tendencies and precipitate the secession of some especially resource-rich units from the nation.

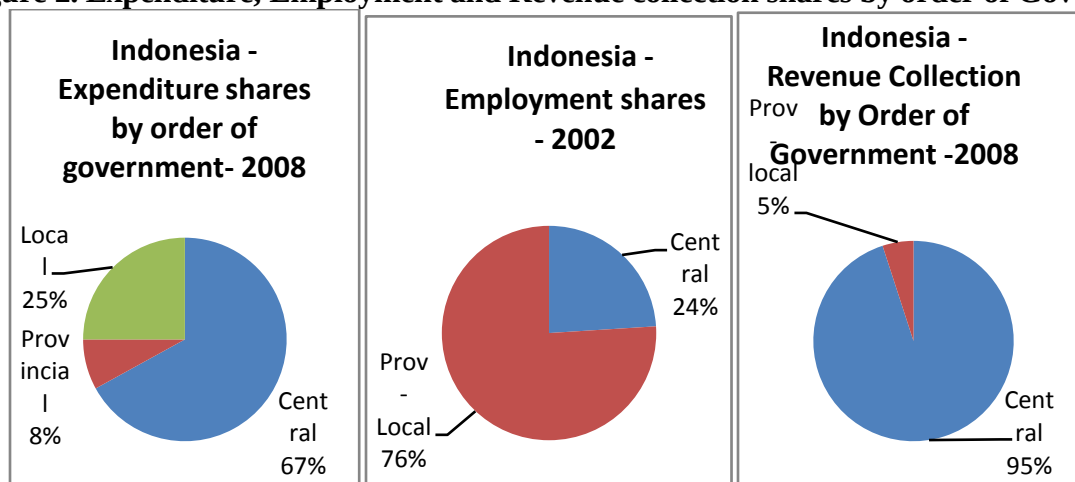
Law 25/1999 on fiscal balance between the central government and the regions channeled budgetary flows to the district level. Subsequently in September 2004, the parliament (Dewan Perwakilan Rakyat) approved Law 32/2004 on sub-national governance and Law 33/2004 on fiscal decentralization, thereby reinforcing Indonesia's effort to create a decentralized system of governance.

Article 18 of the 1945 Constitution Act provides for the creation and maintenance of local governments through the enactment of a local government act. The decentralization laws of 1999 and 2004 and associated regulations are the basis of Indonesia's current local government system. The Second Constitutional Amendment Act, passed in 2000, has embedded parts of the decentralization reforms—for example, the democratic elections of mayors and governors—into the constitution to ensure the long-term stability of the system and to provide political safeguards against arbitrary reversals.

The resources that local governments have at their disposal have been increased through the enactment of article 7 of Law 25/1999, which requires the central government to transfer at least 25 percent of domestic net revenues (total domestic revenue minus revenue sharing) to subnational levels of government. Law 33/2004 has increased the subnational share to a minimum of 26 percent of net domestic revenue beginning in 2008. Ten percent of that amount accrues to the provincial governments, and 90 percent to the local governments, which carry out the bulk of expenditure responsibilities.

Overall, in 2008, the Central Government accounted for 95% of revenue collection and 67% of direct spending. Provinces and local governments account for 5% of revenue collection and 33% of expenditures. Provincial governments are relatively less important than local governments and command only 8% of national expenditures. Local government expenditure share (25%) in Indonesia compares favorably with most developing and industrial countries (see Figure 2).

Figure 2. Expenditure, Employment and Revenue collection shares by order of Government



Source: Ministry of Finance , Indonesia and Eckardt and Shah (2007)

Sub-national Expenditure Responsibilities

Indonesia's decentralization policy shifted responsibility for all but five exclusive national functions to regional governments. According to Laws 22/1999 and 32/2004, the national government retained power over five functions that affect the nation: foreign relations, defense and security policy, judiciary and law enforcement, monetary and macroeconomic policies, and religious affairs. Sub-national governments are responsible for all residual functions. In addition,

Law 22/1999 spells out 11 obligatory functions of local governments (table 1). The revised Law 32/2004 removed the omnibus assignment of the residual functions to regional governments and stipulated 15 obligatory functions and a number of discretionary functions.

Table 1. Obligatory Functions of Sub-national Governments under Laws 22/1999 and 32/2004

Law 22/1999 functions	Law 32/2004 functions
Infrastructure (public works)	Development planning and control
Health	Planning, utilization, and supervision of zoning
Education	Public order and peace
Agriculture	Providing public means and facilities
Communication	Handling of health sector
Industry and trade	Education
Cooperatives	Social affairs
Land administration and zoning	Employment promotion
Capital investments	Facilitating the development of cooperatives and small and medium-size businesses
Environment	Environment
Employment promotion	Agriculture
	Demographics and civil registry
	Administration affairs
	Capital investment
	Other mandatory affairs as instructed by the laws and regulations

Source: Eckardt and Shah (2007)

Decentralization policy mainly emphasized the third tier of government, because provinces were perceived as potential drivers of political disintegration. Compared with local governments, provinces have far more limited responsibilities, a fact that is also reflected in their much smaller share of expenditures. The provincial level has a double role as an autonomous regional government and as the regional representative of the national government. Provinces are mainly responsible for supervisory functions and are supposed to intervene in matters that require cross-jurisdictional cooperation. Law 32/2004 explicitly strengthens the coordinating role of provincial governments as regional representatives of the central government, a step that was based on the perception that closer central supervision and oversight are needed to make decentralization work more effectively.

In practice, the distribution of specific responsibilities is regulated by a number of sectoral laws and numerous government regulations and ministerial decrees. For most sectors, responsibilities are shared among government levels, with the national government involved also in formally decentralized sectors (table 2). A national role in most of the sectors listed may be helpful, provided that it does not reinstitute central bureaucratic controls and is instead focused on providing financial and technical support and service delivery oversight. For example, equity concerns might necessitate a strong national role in financing and regulating standards in basic public services, such as education and health. At present national development (capital) expenditures represent more than 60 percent of total development spending, including significant outlays in decentralized service sectors, such as health, education, and infrastructure. This trend suggests that the implementation of decentralization is still lagging in some sectors.

Table 2. Distribution of Functions Across Levels of Government

Function	Central	Province	Local
Foreign relations, defense, and security policy	Exclusively central		
Judiciary and law enforcement	Exclusively central		
Monetary and macroeconomic policies	Exclusively central		
Religious policy	Exclusively central		
Subsidies	Rice subsidy	Subsidies to provincial state enterprises	Subsidies to local state enterprises
	Fuel subsidy		
	Electricity subsidy		
	Subsidies to national state enterprises		
Regulatory function	National laws and regulations	Provincial bylaws in the framework of national legal system	Local bylaws in the framework of national legal system
	Legal supremacy of national law over subnational bylaws		
Natural resource management and environmental policy	Environmental policies and supervision	Supervisory function and cross-district coordination	Management of local natural resources
	Sustainable management of natural resources and preservation of environment		Issuance of fishing and mining licenses
	Financing reforestation programs through DAK grants		Management of local reforestation programs
Education	Educational policies and supervision	Supervisory function and cross-district coordination	Management and financing of public schools
	Frame curricula for primary and secondary schools		Administration and financing of teachers and school staff
	Final national examination for primary and secondary schools		Financing and management of teacher qualification
	Minimum service standards for primary and secondary schools		Financing and management of education infrastructure
	Financing infrastructure and school rehabilitation (primary and secondary)		
	Exclusive responsibility for tertiary education and universities		
	Exclusive responsibility for religious schools (<i>madradesh</i>)		
	DAK grants		
Health	National health policies	Supervisory function and cross-district coordination	Management and financing of health service providers
	Minimum service standards		Administration and financing of in health sector staff
	Social health programs, including financing of free health services for the poor		Management and financing of health service infrastructure
	DAK grants		

Function	Central	Province	Local
Agriculture and irrigation	National programs, extension services, and trainings Infrastructure investments Price regulation and trade through Badan Urusan Logistik (Bureau of Logistics) DAK grants	Provincial programs, extension services, and training Infrastructure investments	Local Programs, extension services, and training Infrastructure investments
Industry	National industrial policies Foreign investment approval Assignment of special industrial zones Promotion of small and medium-size enterprises Microfinance schemes and finance programs for small and medium-size enterprises Financing of research and development in areas of strategic national interest	Supervisory function and cross-district coordination	Local economic development Business licensing Small and medium-size enterprise and cluster promotion Industrial zoning
Transportation	Financing and management of national infrastructure DAK grants	Financing and management of provincial infrastructure	Financing and management of local infrastructure

Source: Eckardt and Shah (2007) and Shah et al (1994)..

Eckardt and Shah (2007) report that local governments account for roughly half of the total wage bill. With decentralization, wage costs increased significantly, as a consequence of civil servants being transferred to the jurisdiction of sub-national governments. These increased costs shifted a significant burden to local government budgets. Indeed, in the aggregate, the expenditure side of local government budgets is dominated by wage costs, which account for about half of total local government expenditures. There is significant variation across local governments, with wage cost shares ranging from 10 percent to more than 90 percent depending on the district. Local budgets in most districts are heavily skewed toward operating expenditures, leaving few funds for much-needed capital spending. Most local public services are labor intensive, and significant shares of the public payroll are allocated to cover personnel expenses related to service delivery—including the salaries of teachers, doctors, and health care workers. However, the country's largely depreciated infrastructure (for example, elementary school buildings, medical equipment) suggests that higher capital expenditures might be needed to provide high-quality services. In the long run, underinvestment in infrastructure will most certainly lead to quality reductions and efficiency losses in public service delivery.

Sub-national Taxing Powers

Provinces have access to motor vehicles registration and transfer taxes and fuel and water excises. They finance 43.8% of expenditures from these sources. In addition, they also receive specified shares of revenues from personal income taxes, property taxes, oil and gas taxes and mining and forestry royalties. Tax by tax sharing for income and resource taxes accounts for additional 24.5% of revenues, other revenues about 10% and the remaining fiscal gap is filled by general purpose (DAU 21.1%) and specific purpose transfers (DAK 1.8%). In 2008, 50% of provincial expenditures were financed by central transfers.

Districts have access to hotel, restaurant, entertainment, advertisement, street lighting and mining tax for class C minerals and parking charges and user fees. These sources finance only 6.5% of district expenditures. They will soon also have access to property taxes as own source revenues. They receive additional 17% from tax sharing from the same revenue sources as the provinces, 10% as miscellaneous revenues and 61% from general purpose and 8% from specific purpose transfers. In 2008 90% of district and city expenditures were financed by central transfers.

Table 3. Sub-national Taxes and charges

Type of tax	Tax rate determination and tax collection	Tax base	Centrally Imposed Rate Cap (%)
P1. Motor vehicle tax	Provincial	Vehicle value (annual)	5
P2. Motor vehicle transfer tax	Provincial	Vehicle resale price (annual)	10
P3. Fuel excise tax	Provincial	Fuel consumption (retail price, excluding VAT)	5
P4. Cigarette tax	Provincial	Cigarette sales	
P5. Surface Water excise tax	Provincial	Water consumption	20
L1. Hotel tax	Local	Turnover	10
L2. Restaurant tax	Local	Turnover	10
L3. Entertainment tax	Local	Turnover (admission price)	35
L4. Advertisement tax	Local	Advertisement rent	25
L5. Street lighting tax	Local	Electricity consumption (retail price, excluding VAT)	10
L6. Mining tax for class C minerals ^a	Local	Market value of extracted minerals	20
L7. Parking tax	Local	Parking spaces	20
L8. Ground water tax	Local	Ground water consumption	
L9. Land and Building taxes*	Local		
L10. Property transfer tax*	Local		
Provincial and Local charges (30- various services and permits)			

Note: * Property taxes will be devolved to local governments by 2014.

Source: Updated from Eckardt and Shah (2007)

3. Central Transfers to Finance Local Public Services in Indonesia – A Review

Central transfers to provincial-local governments in Indonesia– A brief synopsis

Central transfers are the most important source of revenues for sub-national governments in Indonesia. These financed 90% of sub-national governments, 54% of provincial, 86% of cities and 93% of districts expenditures in 2010. Major transfers (Balance grants or Dana Perimbangan) to finance provincial and local expenditures are as follows.

Table 4. Central-provincial/local transfers in Indonesia -2010

Transfer	Share of total transfers in 2010	Share of sub-national expenditures in 2010
Tax sharing	25%	20%
Gap filling (DAU)	56%	46%
Special Allocation Grant (DAK)	6%	5%
Other Specific purpose	13%	10%
ALL	100	90% (Provinces: 54%; Cities: 86% and Districts:93%)

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Source: Ministry of Finance, Indonesia

Tax by tax sharing (Dana Bagi Hasil - DBH). Central Government collects taxes on personal income, property, and renewable and non-renewable natural resources and returns by origin a pre-defined share of the revenues to the originating jurisdiction. These transfers accounted for 25% of total central transfers in 2010 and financed 20% of sub-national expenditures.

Transfers to deal with vertical and horizontal fiscal gaps: Central government provides a basic allocation for wages and salaries and a fiscal gap transfer (Dana Alokasi Umum or DAU) if a jurisdiction's revenues fall short of calculated expenditure needs using macro indicators. These transfers accounted for 56% of total central transfers and financed 46% of sub-national expenditures.

Specific Purpose Grants. These grants include the Special Allocation Grant (Dana Alokasi Khusus or DAK), Special Autonomy grants for Aceh, Papua and Papua Barat, Adjustment Fund compensation, and Special Incentives Grants (Dana Insentif Daerah or DID) and Hibah. DAK is intended to influence local government spending on areas of national priority. It accounts for 6% of central transfers and finances 5% of sub-national expenditures. Adjustment Fund compensation (Dana Penyesuaian or DP) provides special ad hoc assistance e.g. for school operational assistance (BOS), allowances for certified teachers etc. Special Autonomy grants (Dana Otonomi Khusus or DOK) are intended to provide special and preferential support to Aceh and Papua provinces. DID is a small grant program accounting for less than 1% of total transfers and are granted to better performing provinces and cities on public financial management, tax effort, having higher HDI relative to fiscal capacity, higher economic growth, higher reductions in poverty, unemployment and inflation. Hibah transfers are primarily financed by external assistance and are intended to finance sub-national infrastructure and social development expenditures. Specific purpose transfers in total accounted for 19% of central transfers in 2010 and financed 15% of sub-national expenditures (see Qibthiyah, 2011).

The following paragraphs present a review of the revenue sharing system and the two major central transfers- general purpose transfer (DAU) and the specific purpose grant –DAK.

4. Tax by Tax Sharing Arrangements in Indonesia

Indonesia has instituted an elaborate tax by tax sharing system for major sources of revenues other than custom duties and corporate income taxes. Table 5 shows that for shared taxes, other than personal income taxes, oil and gas revenues, majority of revenues are returned mostly by origin to provinces and districts using pre-defined legislated shares. For forestry and mining revenues, the central government retains only 20% of revenues and the remaining 80% of revenues are distributed to provinces and local governments with originating governments receiving a commanding share. For fishery, the remaining 80% of royalty revenues are distributed to all local governments. 91% of property taxes are shared using a mixed criteria. The central government retains only 9% of property tax revenues as cost of collecting this tax. Only 20% of personal income taxes are shared using place of work as the criterion.

In addition to sharing revenues from central revenues, local governments also receive a fixed share of revenues from four provincially collected taxes – motor vehicle tax, vehicle transfer tax, fuel excise tax and groundwater extraction and use tax (see Table 6).

The tax sharing system adopted by Indonesia is quite transparent and enables the Government of Indonesia to maintain a harmonized tax system with lower costs of tax administration. Nevertheless, the system suffers from a number of limitations. For most of the shared taxes, tax base sharing with provincial and local government opting to levy supplementary rates might be a superior alternative to current arrangements. Tax base sharing has the potential of introducing greater accountability in the system as local governments would have to justify tax rate imposition to local electorate. If tax base sharing is ruled out as an option then it would be better to consider using taxpayer place of residence as the criterion for allocation of personal income tax revenues. Such a criterion will lead to greater jurisdictional equity as it will enable residential

Table 5. Sharing of Central Taxes in Indonesia (percent)

Revenue source	Central government	Originating provincial government	Originating local government	All local governments in originating province	All local governments (equal share)
Personal income tax	80.0	8.0	12.0	n.a.	n.a.
Property tax	9.0	16.2	64.8	n.a.	10.0
Property transfer tax	n.a.	16.0	64.0	n.a.	20.0
Tobacco excise tax	98.0	0.6	0.8	0.6	
Mining land rent	20.0	16.0	64.0	n.a.	n.a.
(Kab/Kota producers)					
Mining land rent (prov. Mines)	20.0	80.0			
Mining royalty – (Kab/Kota producer)	20.0	16.0	32.0	32.0	n.a.
Mining Royalty prov.	20.0	26.0	0.0	54.0	0.0
Forestry license	20.0	16.0	64.0	n.a.	n.a.
Forestry royalty	20.0	16.0	32.0	32.0	n.a.
Reforestation	60.0	0.0	40.0		
Fishery royalty	20.0	n.a.	n.a.	n.a.	80.0
Geothermal mining	20.0	16.0	32.0	32.0	n.a.
Oil					
Base rate – kota/kab.	84.5	3.0	6.0	6.0	n.a.
Conditional rate - kota/kab.(education)	0.0	0.1	0.2	0.2	n.a.
Base rate - province	84.5	5.0	0.0	10.0	
Cond. Rate - province	0.0	0.17	0.0	0.33	
Natural gas					
Base rate	69.5	6.0	12.0	12.0	n.a.
Conditional rate (education)	n.a.	0.1	0.2	0.2	n.a.

n.a. = not applicable. Note: 70% of oil and gas revenues are returned to special autonomy regions i.e. Aceh, Papua and Papua Barat

Source: Eckardt and Shah (2007), Marwanto (2011)

Table 6. Sharing of Provincial Taxes in Indonesia

Revenue Source	Provincial Share	Local Share
Motor Vehicle tax	70%	30%
Vehicle Transfer Tax	70%	30%
Fuel Excise Tax	30%	70%
Groundwater extraction and use tax	30%	70%

Source: Eckardt and Shah (2007)

communities to recoup revenues to provide residential services. The real property tax is currently being devolved to local governments as it is truly a local tax – a tax on immobile base with local governments having better information and also as a benefit tax for local services. However, it may be advisable to devolve this tax fully to urban local governments only and in the interest of tax base harmonization and considering capacity constraints of rural local governments, central determination of tax base and tax collection may be retained while devolving responsibility for tax rate determination to rural local governments.

Box 1. Sharing of Natural Resource Revenues: What is ideal is often not politically feasible.

- Ideal: All net oil and gas revenues are deposited in a heritage trust fund (Norwegian style) owned by all citizens regardless of their place of residence. The assets of this fund are held in perpetuity and could not be drawn down but capital income will be available for current use. All citizens hold equal shares in the trust fund and every citizen receives an annual dividend from this income and a fraction of income is distributed to governments.
- Second best solution: Centralization of resource rent taxes redistributed through a central fiscal equalization program. Or alternately decentralization of resource rent taxes accompanied by inter-provincial net equalization program where rich provinces contribute to the pool and poorer provinces receive payments from the pool.

Source: Boadway and Shah (2009) and Bishop and Shah (2011)

Sharing of resource revenues represents a difficult challenge in any multi-order governance whether unitary or federal. Political cohesion and environmental protection consideration require preferential access of resource revenues to producing regions. Economic and social union require national ownership and sharing of resource wealth. A decentralized resource rent tax regime creates both fiscal inefficiencies and inequities. Fiscal inefficiency is created by mobility of labor and capital to capture resource rents accruing to the resource rich jurisdiction and fiscal inequity arises from citizens of a country being treated differently under the fiscal system depending upon their place of residence. Of course royalties, fees, severance, production, output and property taxes related to resources and conservation charges can be suitably devolved to state and local governments to enable them to provide services for resource exploitation and environmental conservation.

Natural resources in Indonesia according to an interpretation of articles 18 and 33 of the Indonesian Constitution should belong to the nation as a whole. However article 18 A (2) gives some flexibility to the GOI to institute revenue sharing arrangements for natural resource revenues (see Box 2). Recognizing this, sharing of natural resources revenues especially oil and gas revenues in Indonesia responds to long felt grievances of resource rich jurisdictions that they bear only costs of such exploitation and benefits accrue to the central government only. Current tax sharing arrangement try to tread a middle ground in addressing the concerns of the producing provinces and the national equity objectives. However, as will be observed in the next section, DAU - the gap filling transfer mostly (95% in 2011) nullifies the gains of producing provinces and partially (63%) nullifies the same for the producing districts as their entitlements for central gap filling transfer is reduced by inclusion of the stated percentage of revenues as part of the fiscal capacity.

Box 2. Indonesia - Constitutional Provisions Relating Ownership, Management of Natural Resource and Sharing of Revenues

Article 18. Since Indonesia is a unitary state (eenheidstaat), there will be no region under its jurisdiction that constitutes another state (staat). **Article 18A:1.** Relations as to authority between the central government and the administrations of a province, a kabupaten, a kota, as well as between a province and a kabupaten or a kota, are to be regulated by law with special regard for the specificity and diversity of each region. **Article 18 A2:** Relations as to finance, public services, the exploitation of natural and other resources between the central government and the regional administrations are to be regulated by law and implemented in a just and synchronized way.

Article 33. The land and the waters as well as the natural riches therein are to be controlled by the state to be exploited to the greatest benefit of the people.

Source: The Constitution of Indonesia -1945

5. The General Purpose Gap Filling Transfer – Dana Alokasi Umum (DAU)

This transfer according to Law 34 (2004) is intended to balance revenue means with expenditure needs for sub-national governments providing central financing in “proportionate, democratic, fair and transparent manner” by taking into account “local potential (fiscal capacity) and conditions and local needs”. Total pool of this transfer is arbitrarily set at of 26% of central revenues net of tax sharing transfers in 2011. 20% of the total pool is allocated to provinces and the remaining 80% to all cities and districts. DAU provides a basic allocation to cover wages of provinces, cities and districts. The remaining funds are allocated by formula that determines fiscal gap based upon the differences between fiscal needs and fiscal capacity. Formula factors for both provinces and cities are the same but receive differential weights due to the peculiar application to DAU allocation of the weighted coefficient of variation- the so called Williamson’s Index (see Tables 7 and 8).

The following paragraphs present a review of the two major central transfers- general purpose transfer (DAU) and the specific purpose grant –DAK.

5. The General Purpose Gap Filling Transfer – Dana Alokasi Umum (DAU)

The General Purpose Gap Filling Transfer – Dana Alokasi Umum (DAU): An Introductory Overview

The general purpose unconditional transfers – DAU, constitute the dominant sources of revenues for provincial and local governments in Indonesia. As part of the DAU transfers, the Central Government of Indonesia provides a basic allocation for wages and salaries and a fiscal gap transfer if a jurisdiction’s revenues fall short of calculated expenditure needs using macro indicators. These transfers accounted for 56% of total central transfers and financed 46% of sub-national expenditures.

These transfers according to Law 34 (2004) are intended to balance revenue means with expenditure needs for sub-national governments providing central financing in “proportionate, democratic, fair and transparent manner” by taking into account “local potential (fiscal capacity) and conditions and local needs”. Total pool of these transfers is arbitrarily set at of 26% of central

revenues net of tax sharing transfers in 2011. Twenty percent of the total pool is allocated to provinces and the remaining 80% to all cities and districts. The DAU provides a basic allocation to cover wages of provinces cities and districts. The remaining funds are allocated by formula that determines fiscal gap based upon the differences between fiscal needs and fiscal capacity. Formula factors for both provinces and cities are the same but receive differential weights due to the peculiar application to DAU allocation of the weighted coefficient of variation- the so called Williamson's Index.

Fiscal capacity of a province is determined by summing up 50% of own source revenues, 80% of non-resource tax sharing and 95% of resource and mining tax sharing. Fiscal capacity of a city or district government on the other hand is based upon 93% of own source revenues, 100% of non-resource tax revenue sharing and 63% of resources and mining tax revenue sharing. The weights for individual revenue sources to determine fiscal capacity varies from year to year as weights are picked up to achieve a given numerical value for the Williamson's index for each year. Table 7 provides these choices for numerical values of the index for the past few years.

Table 7. Williamson's Index as Equalization Standard in Indonesia: 2005 -2011

	2005	2006	2007	2008	2009	2010	2011
Provinces	0.941	0.769	0.975	0.793	0.802	0.836	0.801
Cities and Districts	0.630	0.678	0.699	0.710	0.690	0.718	0.694

Source: Ministry of Finance, Government of Indonesia

Fiscal needs of provinces and cities/districts are determined separately for each of this group by developing a composite index based upon relative population, relative area, relative construction price index, inverse of human development index (comprising arbitrary weights for life expectancy, literacy rate, mean years of schooling and purchasing power adjusted relative real GDP per capita) and inverse of relative nominal per capita GDP. The weights for the above mentioned factors vary for provinces and districts/cities and over time for each group based upon the specified value to be achieved for the Williamson's index (see Table 8). The resulting indexes are multiplied by the per capita aggregate spending for the past year to arrive at numerical values of the expenditure need component. DAU allocation for each jurisdiction is then determined as follows:

DAU= Basic Allocation + Fiscal Gap (Fiscal needs minus Fiscal Capacity)

The DAU is a gross program and compensates a jurisdiction for excess needs but does not tax regions with excess fiscal capacity. The jurisdictions displaying negative fiscal gap (surplus fiscal capacity) e.g. Jakarta metropolitan region receive only the basic allocation and the negative fiscal gap is ignored.

Table 8. Williamson's Index Determined Weights for Fiscal Capacity and Expenditure Need Factors in DAU allocations

PROVINSI	DAU TAHUN 2006	DAU TAHUN 2007	DAU TAHUN 2008	DAU TAHUN 2009	DAU TAHUN 2010	DAU TAHUN 2011
BOBOT VARIABEL DAU						
VARIABEL KEBUTUHAN FISKAL						
JUMLAH PENDUDUK	30.0%	30.00%	30.00%	30.00%	30.00%	30.0%
LUAS WILAYAH	15.0%	15.00%	15.00%	15.00%	15.00%	15.0%
INDEKS KEMAHALAN KONSTRUKSI	30.0%	30.00%	30.00%	30.00%	30.00%	30.0%
INVERS INDEKS PEMBANGUNAN MANUSIA	10.0%	10.00%	10.00%	10.00%	10.00%	10.0%
PDRB	15.0%	15.00%	15.00%	15.00%	15.00%	15.0%
VARIABEL KAPASITAS FISKAL						
PAD	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%
DBH PAJAK	100.00%	75.00%	75.00%	95.00%	73.00%	80.00%
DBH SDA	100.00%	50.00%	41.25%	70.00%	95.00%	95.00%

KABUPATEN / KOTA	DAU TAHUN 2006	DAU TAHUN 2007	DAU TAHUN 2008	DAU TAHUN 2009	DAU TAHUN 2010	DAU TAHUN 2011
BOBOT VARIABEL DAU						
VARIABEL KEBUTUHAN FISKAL						
INDEKS PENDUDUK	30.00%	30.00%	30.00%	30.00%	30.00%	30.00%
INDEKS WILAYAH	15.00%	15.00%	15.00%	15.00%	13.25%	13.50%
INDEKS IKK	30.00%	30.00%	30.00%	30.00%	30.00%	30.00%
INDEKS INVERS IPM	10.00%	10.00%	10.00%	10.00%	11.00%	10.00%
INDEKS INVERS PDRB	15.00%	15.00%	15.00%	15.00%	15.75%	16.50%
VARIABEL KAPASITAS FISKAL						
PAD	100.00%	75.00%	75.00%	70.00%	93.00%	93.00%
DBH PAJAK	100.00%	75.00%	75.00%	73.25%	100.00%	100.00%
DBH SDA	100.00%	50.00%	50.00%	100.00%	100.00%	63.00%

Notes: Provinsi: Province; Variabel Kebutuhan Fiskal: Fiscal Need Variables; Jumlah Penduduk: population share; Luas Wilayah: area share ; Indeks Kemahalan Konstruksi (IKK): Construction price index; Inverse Indeks Pembangunan Manusia (IPM): Inverse of Human Development Index; PDRB – Regional/local GDP ; Variabel Kapasitas Fiskal: Fiscal capacity variable; PAD – own source revenues ; DBH Pajak: revenue sharing from taxes; DBH SDA: Natural resources revenue sharing.

Source: Ministry of Finance, Government of Indonesia

DAU – An Evaluation

In the interest of tax harmonization, limiting differentials in sub-national fiscal capacities and lowering tax administration costs, Indonesia has adopted a highly centralized tax system with the Central Government raising 95% of total revenues. This creates a large vertical fiscal gap (almost 90%) that is filled by revenue sharing and transfers. Revenue sharing by origin while reducing vertical fiscal gap accentuates horizontal fiscal inequalities. DAU is the foremost program to bridge horizontal inequities. It is an objective formula based transfer program that partially compensates for civil service wages and partially tries to limit the differentials the fiscal capacity across jurisdictions by focusing on reducing the variations in regional allocation of transfers as measured by the weighted coefficient of variation. This results in reducing overall inequality in fiscal capacities and some redistribution of income across provinces and cities and districts as shown by Eckardt and Shah (2007). However, the current program has a number of important limitations.

One size fits all approach leads to fiscal inequity. The foremost concern is that the program equalizes jurisdictions with widely dissimilar responsibilities and characteristics. This is especially true when you group metropolitan areas, cities of varying population sizes and rural municipalities

or districts of varying geographical areas as done under the current program. This violates the most fundamental dictum of transfers that “one size does not fit all”. The Constitutional Court of Indonesia in South Sulawesi case had earlier ruled that “Uniform treatment of different entities causes injustice”. Indeed it would be a travesty of justice to consider that a small town with a tiny population such as Puncu has the similar fiscal needs and capacities as a large city like Bandung or for that matter a small district in terms of area, Tangarora has similar revenue means and expenditure needs as a large district of Tangarora. The existing program ignores the fiscal capacity or fiscal need differentials of various size and class of municipalities and assumes that they all have equal per capita needs and revenue means other than from those factors explicitly considered in the formula. If one examines local finance in other countries, there are wide justifiable variations in per capita revenues and spending across various size and urban/rural class of municipalities in view of the diversity of needs and preferences and responsibilities. Equalizing unequals leads to injustice for all. One cannot possibly have the same standard and access and diversity of services in a small remote district as opposed to a large city.

A complex and opaque standard of equalization. A second important concern has to do with the choice of the Williamson’s index as the equalization standard. Most industrial countries adopt a simple, transparent but an explicit standard to reach a broad political and social consensus on overall amount of equalization payments. This is important because equalization programs can have important efficiency and equity tradeoffs. An excessive standard of equalization can lead to adverse impacts on growth just as too little equalization can create potential for succession. While equalization standards vary in terms of their relative emphasis on fiscal capacity versus fiscal need equalization, all bear some affinity to providing reasonably comparable levels of public services at reasonably comparable levels of tax burdens across all jurisdictions to ensure a common political and economic union. The central focus of an equalization program is to help disadvantaged jurisdictions have comparable public service standards to allow them to integrate with the wider economy. Indonesia is unique in selecting complex statistical criterion – the weighted coefficient of variation or the Williamson’s index – as the equalization standard. This choice is unfortunate as it introduces complexity and lack of transparency in the allocation criteria. Further the Williamson’s index has relatively greater sensitivity to outliers. For example, it is possible to redistribute income among the two top quintiles and have a lower value of the Williamson’s index while there may be no significant redistribution to the poorest quintile. Its use in determining factor weights is particularly worrisome as multiple distributions of component weights can yield the same index. The use of this index in determining factor weight introduces uncertainty and inequity in allocations as without any material changes in need and capacity factors, changes in weights, alters the allocation of transfers across jurisdictions. In a developing country context, complexity is sometimes cited as a way to hold the politics at bay as policy makers may not fully comprehend the limitations of a complex design and may hold fire. The Indonesia program cannot be justified on this basis as Table 7 shows that while policy makers may not understand the working of such an index, they have not refrained from forcing the choice of higher variations in inequality in a subsequent year if the resulting allocations lead to more satisfactory outcomes for their jurisdictions of interest.

An erroneous view of fiscal capacity. A third concern has to do with how fiscal capacity is measured. Various sources of revenues are given arbitrary and differential weights for provinces

and cities/districts and revenues from specific purpose transfers (DAK) are excluded. This gives an erroneous view of fiscal capacities of various jurisdictions.

Discouraging local tax efforts. The use of actual revenues as opposed to potential revenues creates disincentive effects for own tax effort. Any increase in own tax effort at the margin is mostly offset by decrease in DAU entitlements.

Undermining agreements with special autonomy regions. The Government of Indonesia has entered into special arrangements with Aceh, Papua and Papua West and allows them a greater share of resource revenues through the tax sharing system. The DAU offsets a large part of those gains by including 95% of those gains as increases in fiscal capacity for the provinces and 63% for cities and districts.

Incentives for local governments to serve as employment creation agencies to the neglect of their role as service providers. The basic allocation provides financing for public sector wages. This creates incentives for padding up local rolls. Such perverse behavior in Indonesia is circumvented by central controls over local recruitment and staffing. But this takes away local autonomy for hiring and firing and setting terms of employment of local employees. It also ties local governments to the personnel policies of the central government taking away any incentives they might have to experiment with new public management paradigms to improve accountability for service delivery performance e.g. through contracting out or partnership arrangements within and beyond government agencies. In short, wages compensation creates an incentives and accountability regime that works against good local governance.

Inappropriate indicators of fiscal need. Beyond basic allocation, formula based expenditure needs determination as done in Indonesia has important limitations. Regional per capita income is used twice as a need factor – real per capita GDP adjusted for purchasing power parity in the formation of the Human Development Index and nominal per capita GDP more directly. Regional per capita income is an imperfect measure of fiscal capacity but not a very useful measure of fiscal need. The inclusion of resources and mining based GDP in both concepts of income inflates the fiscal capacity of resource rich local jurisdictions although significant portions of these incomes may accrue to foreigners and non-residents. It also undermines special autonomy agreements with resource rich provinces. Further local jurisdictions may have limited and partial access to taxing these bases as is the case in Indonesia. Expenditure need determination uses both fiscal capacity and fiscal need factors that work at cross purposes. Further other than population and area, indicators used have little or only remote relationship to service needs. There is also multiple hierarchy of arbitrariness in determining relative factor weights. First the HDI index uses arbitrary weights for life expectancy, literacy rate, and mean years of schooling and per capita GDP. A second degree of arbitrariness arises from the application of the Williamson's index as multiple distributions of relative weights can lead to the same value of the index. The use of the Williamson's index in determining formula factor weights also causes complexity, non-transparency, uncertainty and inequity in individual allocations. Individual jurisdictions entitlements can change from year to year and relative to others for no apparent justification.

Non-neutrality to amalgamation and incorporation decisions The expenditure need determination component formula is also non-neutral as to the amalgamation and incorporation decisions.

Amalgamation of existing jurisdictions leads to lower central transfers for amalgamating jurisdictions and break up of existing jurisdictions benefits all in terms of higher per capita central transfers (see Table 9 from Marwanto Harjowiryo, 2011). No wonder, three new provinces have been created and the number of cities /districts mushroomed from 336 in 2001 to 502 in 2010.

Table 9. Existing DAU Allocation Rewards Jurisdictional Fragmentation

Province	Number of Kab/Kotas -2001	Number of Kab/Kota -2011	Total Kab/kota DAU-2001 (billion Rp)	Total kab/kot DAU – 2011 (billion Rp.)	% change in DAU : 2001-2011
Kalteng	6	14	0.9	5.5	528%
Yogyakarta	5	5	0.9	2.7	216%

Source: Marwanto Harjowiryo (2011)

Inequity for large urban and rural jurisdictions. Finally and most importantly expenditure need determination uses a one size fits all approach and assumes per capita fiscal needs of large cities are similar to those of a small town or a rural district when it uses aggregate per capita spending for all local governments as a reference point. This creates tremendous injustice for large urban and large rural areas.

Complex, non-transparent and inequitable allocations. In sum, the gap filling approach is unnecessarily complex, non-transparent and uses a macro approach that is not well grounded in the local realities to ensure inter-jurisdictional equity. These manna from heaven transfers also create an incentive and accountability structure that is not conducive to responsible, responsive, fair and accountable local governance. Simpler alternatives as outlined in the following paragraphs have the potential to enhance efficiency and equity of such transfers mechanisms.

DAU Simplification Alternatives

In the following three alternative options for the reform of DAU are presented. Common elements of these three alternatives are :

- One size does not fit all. Requires grouping (clustering) of local governments by population size, area and class of local governments.
- The adopted formula must have a sunset clause of five years but interim changes in the formula should not be allowed.
- The formula must have ceilings and floors to keep yearly entitlements stable and predictable.
- National average (by size and class) gap filling or equalization standard to replace Williamson's index. Pool can be adjusted by affordability and allocation determined by standard.
- Gap filling or equalization by size and class of local governments and possibly equal per capita grants to villages.
- Fiscal capacity measurement based upon potential revenues plus tax shares and other transfers and 50% of resource revenues.
- Fiscal needs measurement to discontinue wages compensation (basic allocation), discontinue use of HDI and the Williamson's index and other indexes. Instead consider need measurement based upon service/client population for each service category.

Alternative 1: A Simpler Yet More Objective Gap Filling Approach

To simplify DAU and to ground it in local comparative context, one requires meaningful grouping of local governments. One alternative in this regard is to have the following classes or clusters:

Provinces – one group: P1: Provinces excluding Jakarta

Cities (kotas) – 5 groups: C1 with population over 1 million; C2 with population 500K to 1 million; C3: Population 100-500 K; C4: Population 50-100K; C5: Population under 50K.

Districts (Kabupaten) – 4 Groups: D1: Vast area -top quartile in area; D2: large area - 2nd quartile in area; D3: medium area- 3rd quartile in area; D4: small area – fourth quartile in area.

Please note that urban kabupatens that are part of large metropolitan areas may be treated just like cities (kotas) and grouped with cities.

The fiscal capacity and fiscal needs would be calculated as follows:

Fiscal capacity will be defined to include potential revenues from own sources (PAD) if the jurisdiction applied group average tax effort to own bases plus tax shares and transfers (DBH Pajak) plus potential natural resource revenues (DBH SD) plus other grants. A simple way to calculate potential own source revenues would be to apply national average effective tax rate to local non-resource GDP. Potential resource revenues will be similarly calculated by applying national average effective resource tax rate to local resource based GDP only. Due to instability of resource revenues, higher public expenditure needs with resource exploitation and exhaustible nature of some resources only 50% of resource revenues will be counted towards revenue capacity of resource rich regions. Revenues from specific purpose grants will be fully included. Capital grants and loans earmarked to finance specific projects to finance centrally determined infrastructure deficiencies will be excluded from such calculations.

Fiscal need will be calculated for a representative expenditure system of about 10 or less functions comprising most of local operating expenditures. This expenditure system will be differentiated by size class of local governments and will have service population indicators as determinants with weights based upon aggregate local government expenditure for the specified function based a 3 or 5 years group moving average. Tables 10-12 provide illustrative expenditure functions, service

indicators and weights based upon 2008 expenditures only.

Table 10. DAU Fiscal Need Compensation: Alternatives - Provinces

Expenditure Function	Need Indicator	Weight (share in aggregate provincial spending in prev. 5 years)
General Administration	Population (66.6%) and area (33.3%)	52.3
Law and order	Population	0.7
Education	School age population	7.4
Health	Weighted population with higher weights for age groups 0-5 and 65+	6.1
Social Protection and Welfare	No. of unemployed	1.1
Housing	No. of people in public housing or no of units of public housing	7.6
Roads and Transportation	Km of Roads	10.0
Agriculture and forestry	Area	6.2
Other services	population	9.7
ALL		100.0

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Table 11. DAU Fiscal Need Compensation: Alternatives – Cities (c1..5)

Expenditure Function	Need Indicator	Weight (share in aggregate city group. spending in prev. 5 years)
General Administration	Population	29.3
Law , order and fire protec	Population and prop.values	1.0
Education	School age population	30.4
Health	Weighted population with higher weights for age groups 0-5 and 65+	9.0
Social welfare and protection	population below poverty line or unemployed	1.3
Housing	No. of people in public housing or no of units of public housing	7.6
Roads and Transportation	Km of Roads	10.0
Water and Sewer	No. Residential and comm/ind units	9.2
Other services	population	1.0

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Table 12. DAU Fiscal Need Compensation Alternatives – Districts (D1...D4)

Expenditure Function	Need Indicator	Weight (share in a Group govt. spending years
General Administration	Population (66.6%) and Area (33.3%)	35.0
Law and order, fire	Population and prop.values	1.0
Education	School age population	20.0
Health	Weighted population with higher weights for age groups 0-5 and 65+	15.0
Social welfare and protection	population below poverty line or unemployed	1.0
Housing	No. of people in public housing or no of units of public housing	2.0
Roads and Transportation	Km of Roads	10.0
Rural services	Area	15.0
Other services	Population	1.0

The suggested refinements of the existing DAU offer significant improvements of the program. These include simpler and more meaningful and easily understood indicators. The determination of allocation by group leads to equal treatment of equals. Factor weights are objective and would be stable as these are determined by taking moving average of aggregate spending by the group as a whole. There is more clear and transparent need equalization. Both pool and allocation are determined by formula. Total pool, however, can be constrained by affordability. Nevertheless, there is one major drawback of the proposed design – unconditional fiscal gap compensation strengthens autonomy but without accountability to local residents. A second alternative retains this drawback but moves the current program from gap filling to an equalization program.

Alternative 2: Moving from a Gap Filling To a Comprehensive Fiscal Equalization Approach

Calculation of fiscal capacity and expenditure needs would follow the same approach as under the gap filling approach described above. However surplus or deficiency of per capita fiscal capacity and per capita expenditure needs with reference to average or other explicit standard of equalization will be calculated. The jurisdictions in net deficiency positions will receive equalization payments from the center equivalent to the net deficiencies calculated after taking into account net positions with respect to capacity and needs. This alternative has the clear advantage of having an explicit standard of equalization determine the total pool as well as distributions. It has the disadvantage of having complex and controversial determination of expenditure need equalization as has been the experience in Australia (see Shah 2004).

Alternative 3 – An Almost Ideal Approach: Fiscal Capacity Equalization supplemented by Output-based Operating Grants for Merit Services and Capital Grants or Access to Capital Market Finance to Overcome Infrastructure Deficiencies

Under this option, fiscal capacity equalization follows the same approach as under alternative #2. However expenditure need compensation is done through output-based operating transfers for merit public services where allocation is based upon the share of service population and there is no conditionality on spending but instead customized conditions on service delivery performance in terms of service access and quality for individual jurisdictions and providers for continuation of the grant program. The design of such transfers were spelled out in an earlier section. In addition to these operating transfers, there would also be a need to have a capital grant and capital market access program to deal with infrastructure deficiencies as discussed in the

following section. This alternative further simplifies the determination of grant pool and allocations. But the most important advantage of this alternative is that it preserves local autonomy while enhancing accountability to local government residents.

A forthcoming paper (Shah, Qibthiyyah and Astrid, 2012) provides simulations of above alternatives and compares the results with existing DAU allocations.

6. The Special Allocation Grant -Dana Alokasi Khusus (DAK)

According to the Law 33/2004, the primary objective of this grant is to finance, in selected regions, the infrastructure needs of basic public services that are of high national priority but are regional government responsibilities. Other stated objectives include providing special assistance to certain regions and to accelerate regional development and the achievement of national priorities. Local governments with lower than average fiscal capacity are expected to receive higher priority in financing their infrastructure deficiencies. DAK funds are earmarked to finance capital expenditures only and operating costs are ineligible to receive grant financing. DAK is a closed-ended matching grant program requiring that a minimum of 10% of total costs of the project must be met from recipient's own resources. Matching is considered necessary to ensure local ownership of the project. For 2011, the central government established 19 national priority areas for DAK assistance. These include: education, health, road infrastructure, drinking water infrastructure, Sanitation infrastructure, government infrastructure, maritime affairs and fisheries, agriculture, environment, family planning, forestry, infrastructure in less developed regions, trade facilities, rural electrification, housing and settlement, land transport safety, rural transport, and border area infrastructure.

The allocation of DAK assistance is based on three sets of criteria: general criteria, special criteria and technical criteria. The general criteria established by the Ministry of Finance determines the relative to the national average net (net of public sector wages and benefits) fiscal position of a given district. All districts with below average net fiscal positions are eligible to receive DAK assistance. The special criteria is intended to provide preferential access to local governments in Papua and West Papua provinces, coastal areas and islands, border areas with other countries, regions of interest for food security or tourism reasons, disaster prone areas and less developed areas. Relevant line ministries provide designation for special criteria. The regulation does not provide any specific guidance what proportion of DAK funds are to be made available to meet special criteria. The technical criteria are set by line agencies in consultation with the Ministry of Finance and the Ministry of Home Affairs and the Ministry of Planning. These criteria contain a host of macro, service related administrative, and needs indicators. For example for education, the indicators include: primary schools: total number and those with number of classrooms with medium or heavy damage, junior high schools: number, rated on a scale of low, moderate and serious physical rehabilitation needs, needs for library, equipment needs for lab, science, social sciences, mathematics, sports and arts; language tools and books. For health services indicators are included to cover: basic services, generic drug needs, pharmacy facilities, and referral services related indicators. Basic services indicators are: community health development index (10%), index area (10%), index population (5%), index ratio health center/sub-district (10%), index ratio poskedes/desa (20%), index health center (35%) and index improving health center (15%). For

roads, indicators include: length of road, road condition, area, population, share of capital spending of total budget, spending on roads and reporting timeliness.

To determine the eligibility for DAK allocation, first step is have a fiscal index less than one. In step 2, composite fiscal and special criteria index using equal weights must be greater than one. In the third step, composite fiscal, special and technical criteria index must be greater than one where the first two indexes receive half and the technical criteria receives half of the total weight. It turns out that almost all districts qualify for DAK access using this process. In the second stage a new composite index is developed that places 20% weight on composite fiscal and special criteria index and 80% on the technical criteria index. Thus while total pool of DAK and allocations to various sectors are arbitrary, allocations among districts and provinces are formula driven.

Special Allocation Grant (DAK) – A Review and Pathways to Reform

In the following, DAK is first placed in the broader conceptual and worldwide practice perspective and then specific commentary is provided on the existing DAK program.

DAK capital grants are intended to provide support for two broad areas namely: (a) deal with infrastructure including administrative structure deficiencies in relation to some unspecified minimum service standards for priority public services and disaster management and (b) also provide capital assistance to designated areas. Both the objectives are laudable and closed-ended matching capital grants are appropriate tools for this purpose provided funds for future upkeep of facilities are available. By overcoming infrastructure deficiencies in poorer jurisdictions, these grants strengthen the economic union by creating a level field for poor regions to compete for labor and capital and in the process integrate with the wider economy. These grants enable jurisdictions with limited or no access to capital market finance to create long lived assets and thereby build their economic capacity to be less dependent on future grants. Related to the infrastructure argument, such grants may be important for developing the capacity of local governments to provide public services. The delivery of an acceptable level of public services requires both physical and human assets. The latter includes both the acquisition of particular skills as well as the development of management and administrative expertise. Some of this comes with training, and some simply with experience. In either case, extraordinary once-over expenditures will be needed to develop the decision-making capacity of local governments where limited capacity existed before. Once these backlogs of human and physical capital are made up, the capacity of local governments to deliver important public services will be put on a sustainable footing.

For capital grants to be effective, they must embody a planning view and the central planning and line agencies must map the entire country as to identified regional deficiencies in relation to national minimum standards in basic infrastructure for merit services. In the absence of such a view, capital grants determined on an ad hoc project by project basis become a source of pork barrel politics. Indonesia in the past (pre 2000) under INPRES transfers took precisely such a planning view of these grants in setting a national minimum standard of access to primary school (within walking distance of the community served) for the nation as a whole. The central government provided for school construction, while local governments provided land for the schools. This program was highly effective in dealing with infrastructure deficiencies.

South Africa has experimented with a formula-based capital grant to deal with infrastructure deficiencies while taking a planning view with limited success. The Municipal Infrastructure Grant formula includes a vertical and horizontal division. The vertical division allocates resources to sectors or other priority areas; the horizontal division is determined based on a formula that takes account of poverty, backlogs, and municipal powers and functions. The formula includes five components:

- Basic residential infrastructure, including new infrastructure and rehabilitation of existing infrastructure (75 percent weight). Proportional allocations are made for water supply and sanitation, electricity, roads, and “other” (street lighting and solid waste removal).
- Public municipal service infrastructure, including construction of new infrastructure and rehabilitation of existing infrastructure (15 percent weight).
- Social institutions and microenterprises infrastructure (5 percent weight).
- Nodal municipalities (5 percent weight).
- Final adjustment: A downward adjustment or top-up is made based on past performance of each municipality relative to grant conditions.

In most countries including India, USA and the present DAK program in Indonesia, a planning view is absent to the detriment of the achievement of their objectives.

Experience with ad hoc or formula driven capital grants shows that they often create facilities that are not maintained by sub-national governments, which either remain unconvinced of their utility or lack the means to provide regular upkeep. Such capital grants are pervasive in developing countries and transition economies. Most countries have complex processes for initiating and approving submissions for financing capital projects. These processes are highly susceptible to lobbying, political pressure, and grantsmanship, and they favor projects that give the central government greater visibility. Projects typically lack citizen and stakeholder participation, and they often fail due to lack of local ownership, interest, and oversight. In view of these difficulties, it may be best to limit the use of capital grants by requiring matching funds from recipients (varying inversely with the fiscal capacity of the recipient unit) and by encouraging private sector participation in infrastructure by providing political and policy risk guarantees where appropriate. To facilitate private sector participation, public managers, however, must exercise due diligence to ensure that the private sector does not take the public sector for a free ride or walk away from the project midstream.

DAK has kept the politics at bay by developing objective and rigorous processes for eligibility and allocation of DAK funds but in the process has compromised on the objectives of the grant program as discussed below:

DAK objectives and eligibility conditions: DAK objectives require a detailed central planning view to determine eligibility based on deviations from national minimum standards. Therefore current use of fiscal capacity indicator may be inappropriate. In any case the fiscal capacity indicator being used is highly imprecise as it simply is a ratio of jurisdictions’ revenues to national average revenues without normalization for population and size class of local governments. Thus all smaller jurisdictions become eligible and larger than average jurisdictions become ineligible regardless of their ability to finance projects from own sources or having access to capital finance. Special criteria on the other hand is appropriate given the legal imperatives. However, such areas

would be best treated under a separate grant program. DAK technical criteria is mixed bag of useful and less useful indicators determined in an ad hoc manner. Technical criteria should be guided by services of national priority for which the central government wishes to establish national minimum standards.

Local ownership: DAK has rightly established a matching requirement to build local ownership of the facilities that are built with grant funds. It has however, not established any clarity on the application of the matching rate. It would be useful to establish a clear criteria on local matching rate that varies from 10% to 90% depending upon the relative fiscal capacity (potential revenues) of jurisdiction within its size class. As part of this strategy, large richer jurisdictions must be provided technical assistance to access capital markets rather than grant finance.

Public services of national priority requiring national minimum standards: The DAK program has blossomed into a christmas tree approach to providing pitiful annual financing to all jurisdictions for 19 services. Instead the objectives of the program requires a long term planning view and availability of financing over the medium term rather than on an annual basis. The long term view for priority attention must be realistic and affordable within the existing budget constraints of the central government.

Project application versus automatic financing. DAK approach to using automatic rather than application based financing is appropriate as it keeps the politics at bay as well as overcomes grantmanship. But this automatic financing should be based upon a central planning view rather than a complex yet arbitrary criteria as currently practiced.

Tournament or competition based financing: Both these approaches provide financing based upon the results achieved to a selected set of winners. Given the lack of access to capital finance or having revenue reserves in poorer jurisdictions such approached are not likely to achieve desired objectives.

DAK Reform Options

As discussed above a simpler and more focused DAK approach would keep politics out of grant determination and allocation as is done with a complex criteria now while at the same time help secure a common economic union through establishing national minimum standards for national merit services. This requires taking a planning view of infrastructure deficiencies. Priority service areas, standards of services and identified deficiencies and financing requirements across the nation should be spelled out in the national five year plan. Hopefully this plan view will also bring a substantial part of DEKONs (deconcentrated development expenditures) to this pool thereby enlarging the financing available to set national minimum standards. To implement this planning view, the Ministry of Finance, BAPPENAS, and MOHA in partnership with line ministries develop a list of projects and medium term financing available for the completion of these projects and matching requirements (matching rate to vary inversely with potential per capita revenue capacity) for eligible (a small subset of all) jurisdictions. The line ministries will then work with eligible local governments to work out project details and completion schedule and monitoring and evaluation requirements. Of course, as discussed under DAU, it is important to supplement DAK capital grants with simple formula based (equal per capita based upon service population as the main criterion) output based grants to sustain national minimum standards for merit services.

DAK to special areas identified by legislation would be best carried out under a separate program for the specified areas and be not part of the DAK for minimum service standards for services of national priority.

7. Does Indonesia Need a Grants Commission?

For determining the system of grants, one finds four types of models used in practice (see Shah, 2005 for a formal framework for evaluating such institutional arrangements).

The first and the most commonly used practice is for the federal/central government alone to decide on it. This has the distinct disadvantage of biasing the system towards a centralized outcome whereas the grants are intended to facilitate decentralized decision making. In India, the federal government is solely responsible for the Planning Commission transfers and the centrally sponsored schemes. These transfers have strong input conditionality with potential to undermine state and local autonomy. The 1988 Brazilian constitution provided strong safeguard against federal intrusion by enshrining the transfers' formulae factors in the constitution. These safeguards represent an extreme step as they undermine flexibility of fiscal arrangements to respond to changing economic circumstances.

The second approach used in practice is to set up a quasi-independent body, such as a grants commission, whose purpose is to design and reform the system. These commissions can have a permanent presence as in South Africa and Australia or they can be brought into existence periodically to make recommendations for the next five years as done in India. These commissions have proven to be ineffective in some countries largely because many of the recommendations have been ignored by the government and not implemented as in South Africa. In other cases, while the government may have accepted and implemented all they recommend, they have been ineffective in reforming the system due to the constraints they have imposed on themselves as is considered to be the case in India. In some cases, these Commissions become too academic in their approaches and thereby contributing to the creation of an overly complex system of intergovernmental transfers as has been the case with the Commonwealth Grants Commission in Australia (Shah, 2004, 2007).

The third approach found in practice is to use executive federalism or central-provincial-local committees or forums to negotiate the terms of the system. Such a system is used in Canada and Germany. In Germany, this system is enhanced by having state governments represented in Bundesrat, the upper house of the parliament. This system allows for explicit political input from the jurisdictions involved and attempts to develop a common consensus.

The fourth approach is a variation on the third approach and uses an intergovernmental-cum-legislative-cum-civil society committee with equal representation from all constituent units but chaired by the federal/central government to negotiate changes in the existing arrangements. The so-called Finance Commission in Pakistan and the Indonesian DPOD represent this model. This approach has the advantage that all stakeholders –donor, recipients, civil society and experts are represented on the commission. Such an approach keeps the system simple and transparent. It is important that in such forums only the donors and recipients be the voting members with civil

society members and experts to serve as observers and provide feedback and technical assistance to the principals of these forums. An important disadvantage of this approach is that if unanimity rule is adopted, such bodies may be deadlocked for ever as was witnessed in Pakistan in the 1990s.

The Indonesian DPOD is an important forum for decisions on grant determination. The DPOD's role in grant determination can be strengthened by requiring that only the cabinet ministers, governors and mayors can be voting members and that decisions on matters relating to fiscal transfers must require three-fourth majority of the DPOD.

In conclusion, there appears to be no clear advantage in creating an independent grant commission in Indonesia. Grant determination role is better served by the intergovernmental forum such as DPOD supported by a technical secretariat at the Ministry of Finance.

8. Concluding Remarks on Long-Term Reform Options for Central-Provincial-Local Fiscal Relations in Indonesia

During the past decade Indonesia has made a remarkable transformation from centralized rule to decentralized and democratic local governance. This transformation can be sustained if the intergovernmental finance create the right incentives and accountability regimes for responsive and accountable local governance. Prior to the 2000 reforms, Indonesia had an intergovernment finance system the so called INPRES (presidential instruction) grants system, that was simple, transparent and focused on results based accountability. This paper has called for Indonesia to return to its roots and implement reform options that represent a “back to the future” approach – an approach that draws upon rich and successful Indonesian experiences that have often been cited in the public finance literature as examples of better practices in central transfers (see Shah, 1994, 1998 and Boadway and Shah, 2009).

Recapitulating to strengthen accountable local governance Indonesia need to consider the following reform options.

- *Tax decentralization and tax base sharing.* Tax base sharing is feasible for personal income taxes on residence principle. Tax decentralization may be feasible for royalties, fees, severance, production, output and property taxes, sin taxes (gambling, liquor and massage parlors) and local environmental taxes and charges.
- *Output based per capita operating (non-matching) grants for setting national minimum standards for merit services such as education, health and infrastructure.* These grants should embody simple allocation criteria to local governments based on service population e.g. school operating grant based upon school age population. Local governments would disburse these grants to all providers – government and non government as done in Canada, Brazil, Chile, Finland and Thailand. Continuity of finance can be assured by maintaining or improving upon existing standards of access and service quality. Such transfers will preserve local autonomy while enhancing simplicity, transparency and citizens' based accountability for service delivery performance. Indonesia in the past had a measure of success with a grant program (INPRES grants) that embodied some of these features.
- *Fiscal capacity equalization to national (group) average standard grants* to enable all jurisdictions to provide reasonably comparable levels of public services at reasonably comparable levels of tax burdens.

- *Capital (matching) grants to fiscally disadvantaged jurisdictions* to overcome infrastructure deficiencies in setting national minimum standards for merit services. These grants should be based upon a planning view of identified infrastructure deficiencies and should contain matching requirements that vary inversely with fiscal capacity. These grants combined with output based operating grants will create a level playing field and enable poorer jurisdictions to integrate with the broader national economy and help reduce regional income and fiscal disparities.
- *Assistance for responsible capital market access* to richer local jurisdictions.

The above mentioned reforms will result in an intergovernmental finance system that is more transparent, objective, predictable and simpler with a sharper focus on objectives. These reforms may be considered as integral elements of any effort at fine tuning the existing fiscal system of multi-order governance in Indonesia. In closing, reform is eternal, we never fully succeed at first but we must keep trying.

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