

INCORPORATING SUBNATIONAL PERFORMANCE INCENTIVES IN THE INDONESIAN INTERGOVERNMENTAL FISCAL FRAMEWORK

Blane D. Lewis, National University of Singapore
Paul Smoke, New York University

INTRODUCTION

THERE HAS BEEN GROWING INTERNATIONAL interest in using incentives to promote local government reform and fiscal performance. In Indonesia, the use of performance incentives is increasingly seen by the government and donor agencies as being a potentially valuable way of supporting an unevenly and erratically evolving decentralization process that is nearly a decade old.

The need for national performance incentives in a decentralized system may not seem obvious. The dominant view of decentralization essentially portrays local autonomy as a right enshrined in a constitution, laws, or regulations.¹ In this view, the role of the center is largely to develop an intergovernmental framework. If structured properly (e.g., it devolves appropriate functions, establishes a hard budget constraint, provides for redressing inter-jurisdictional fiscal disparities, etc.), local government behavior is supposed to be primarily driven at the local level by subnational elections.

A more expansive view sees decentralization as a complex, evolving process that involves crafting a delicate balance between national goals and local autonomy.² Most central governments regulate local fiscal behavior to support key national priorities, and key decentralization benefits depend on adequate local capacity/incentives to behave responsibly and accountably. Capacity and accountability are not built rapidly or easily, and elections are a blunt accountability mechanism, particularly if local civil society is weak and inclusive collective decision making is not well understood and established.

In this broader, more dynamic view, decentralization requires a capable center that can develop and enforce appropriate intergovernmental systems, enhance local capacity, and promote local governance. Reform is seen as a lengthy process that requires substantial systemic changes and shifts in behavior by all major actors—central officials, local governments, and citizens. Under such conditions, central incentives for local performance can play a role in furthering national priorities,

promoting adoption of decentralization reforms and stimulating behavioral changes intended to further the major goals of decentralization. The caveat, of course, is that the national political dynamics must be such that the center will in fact create and enforce incentives for desirable behavior.

THE GENERAL CASE FOR IMPROVING LOCAL GOVERNMENT BEHAVIOR IN INDONESIA

There is widespread discontent among central government and international agency officials with how Indonesian subnational governments use fiscal resources. First, subnational governments do not spend available resources and have accumulated large financial reserves. Prior to decentralization, subnational governments held about Rp. 7 trillion in reserve funds.³ Between 2001 and 2006, reserves expanded at an annual rate of 45 percent, standing in October 2007 at about Rp 112 trillion, or about 3 percent of estimated 2006 GDP. Reserves of this magnitude could be considered excessive and a forgone opportunity to increase needed spending, but a word of caution is in order. Reserves are distributed unevenly and are greatest in natural resource rich regions. In addition, the optimal amount of reserves is a function of potential revenue volatility that might affect a local government's ability to maintain expenditures.⁴ Even small and temporary reductions in the oil price, for example, could result in revenue losses that exceed existing subnational reserves. (Lewis and Oosterman, 2009)

Second, although there has not been much thorough analysis, subnational spending has been arguably inefficient. Expenditure on administration, for example, is very high at 32 percent of provincial and local budgets (World Bank, 2007). Data from more developed countries suggest that a figure of around 5 percent may be sufficient to cover administrative needs, although this has not been systematically studied in developing countries.⁵ Subnational governments spent considerably less on major service sectors—29 percent of their budgets on education, 17 percent on infrastructure, and

7 percent on health. Evidence on efficiency problems within sectors is limited, but some exists. A recent examination of primary school costs (Lewis and Pattinasarany, 2008), for example, finds that spending exceeds optimal levels by 23 percent on average, and that teacher absenteeism, as well as the oversupply and undersupply of teachers, contribute to technical and allocative inefficiencies. More research, however, is clearly needed.

Third, the quality of key subnational social and infrastructure services appears generally weak. Despite progress in school enrollments,⁶ for example, Indonesian students ranked just 34th out of 45 in the Third International Mathematics Science Study (TIMSS), carried out in 2003. In the Program for International Student Assessment (PISA), also in 2003, Indonesia ranked last out of 40 countries in both mathematics and language, and performance in the 2006 PISA was not much improved. Although most countries participating in PISA are from the developed world, outcomes in Indonesia are low even after accounting for household socioeconomic status (World Bank, 2007). There are also documented concerns with other services, such as water. Household access to and quality of water services are among the lowest in East Asia. The percentage of urban residents with piped water access declined from 40 in 1997 to 33 in 2002, and water enterprises have persistent high levels of unaccounted water.

These concerns with unexpended resources, inefficient spending, and inadequate quality, while in need of further exploration, provide a tentative rationale for the growing discontent with local government performance in Indonesia. The current zeal for adopting incentives is based at least in part on the belief that under-performance results from a lack of robust incentives in the fiscal system.

CURRENT LOCAL GOVERNMENT PERFORMANCE INCENTIVES IN INDONESIA

Various incentives—some intended and others unintended, some productive and others perverse—operate in the Indonesian intergovernmental fiscal system. A number are related to shared revenues, while others are related to the DAU (general purpose grant) and the DAK (conditional grant) or specific aspects of local fiscal behavior.

Shared tax incentives are minor. The property tax is a central tax, although local governments assist with collections and share receipts. The center by

law respectively returns 64.8 and 16.2 percent of receipts to local and provincial governments by derivation. The center retains 10 percent and charges 9 percent for administration, but the former amount is shared with local governments—6.5 percent in lump sums to all places and 3.5 percent to those meeting the previous year's property tax revenue target. This latter incentive is of limited impact given that 3.5 percent of property tax revenues in 2006 amounted to only about 0.33 percent of total subnational revenues (or about 0.02 percent of GDP). State oil and gas revenues are also shared, and subnational governments will be awarded an additional 0.5 percent share beginning in 2009. Recent legislation requires these resources to be spent on education. Since neither the law nor regulations mention monitoring or enforcement, this incentive may not have any real impact.

Incentives have played some role in the allocation of the general purpose grant (DAU). The DAU is the most important source of subnational funds, constituting about one-half of provincial and nearly two-thirds of local revenue. The resource pool for DAU is 26 percent of (planned) net domestic revenues. In 2008 the DAU reached nearly Rp 179 trillion (4.8 percent of GDP). From the total pool, a portion sufficient to cover the subnational wage bill (recently about 50 percent) is allocated to individual local governments as a function of salary needs. The remainder is distributed by a fiscal equalization formula.

The stated rationale (in Law 32/2004) for covering subnational salary payments from the DAU is to ease the local fiscal burden of staff transferred to subnational governments. Most analysts argue that this in fact undermines incentives for rationalizing local staffing, although the impact is diluted by limited local government control over the hiring and firing of staff. The effect is further complicated by the fact that a local government that cuts staff would receive more funds for non-staff spending. (As the subnational wage bill declines, the portion of funds reserved for staff decreases and that for non-staff spending increases; thus any local government with a positive fiscal gap would receive more equalization funds.) From this perspective the DAU offers an incentive for reformist governments less interested in increasing staff and more interested in service delivery. Of course the loss of funds for a local government reducing civil servants would far exceed the compensating increase in non-wage funds, and all local governments

would receive more equalization funds whether they cut staff or not. These realities surely weaken incentives for potential reformers. Overall, DAU probably provides some disincentive to reduce staff, but this is impossible to rigorously test given the dearth of data.

Another incentive embedded in the DAU allocation system concerns treatment of own-source revenues in the equalization formula, which was initially based on the difference between estimated expenditure needs and fiscal capacity. Expenditure needs were derived from a set of proxies (population, area, a cost index, etc.) and fiscal capacity is based on a local government's other revenues (i.e., besides those from the DAU and the DAK). Potential rather than actual own-source revenues were used in estimating fiscal capacity through a simple regression model. The intent of the formulation was to encourage local governments to increase own revenues "above the potential revenue line" so that they would be able to "keep" some portion of their own revenues alongside dominant DAU allocations.

Empirical evidence shows that increasing transfers have been associated with rising own-source revenues, but this probably has little to do with the DAU formula. The more likely explanation is that increased transfers lead to increased reserve funds, which in turn generate increased interest earnings. Recent analysis (Lewis and Suharnoko, 2009) suggests that interest earnings on unspent balances may explain up to half of the growth in own-source revenues in the post-decentralization period.⁷ In any case, this revenue incentive feature was recently eliminated from the DAU allocation formula.

There is some additional evidence on the impact of DAU on local fiscal outcomes. Lewis (2005) shows that increasing transfers lead to higher local spending and savings, but rich local governments (with substantial natural resources) spend less and save more of transfer increases at the margin than others. Another study (Lewis, 2006) demonstrates that transfer increases are associated with reduced cost efficiency in local tax administration. Further empirical analysis, however, is clearly needed.

The DAK is a conditional matching grant designed to encourage priority capital spending in poor or special regions. The matching component is set at 10 percent (minimum) of the center's contribution. The DAK accounted for less than

Rp 1 trillion in 2001. By 2008 it had grown to Rp 21.2 trillion, around 3 percent of total local revenue. While still relatively small, DAK is likely to become more important, especially if the government succeeds in rechanneling deconcentrated spending on devolved tasks through DAK as required by Law 33/2004. To date, there is no unified agenda for the growing DAK (e.g., to promote priority expenditures, to address poverty, to correct for spillovers, and/or to support minimum standard goals), and there is no mechanism for monitoring the use and impact of the grant. In this policy environment, the DAK is at risk of fragmentation across sectors and uses, which is already beginning to happen. Sectoral coverage during initial years of operation was limited to education, health, roads, irrigation, and office buildings (for newly created local governments). By 2008 coverage had expanded to 11 sectors, and all local governments (451) received some DAK.

Beyond these revenue-related incentives, a number of other restrictions and mandates in the Indonesian system are subject, at least in principle, to incentives and enforcement. For example, there are upper limits on rates applied for local own-source revenues, although these appear not to be regularly monitored or enforced. (There is also no reason to believe that local governments would want or need to violate them given the magnitude of transfers.) There are also legal debt limits. Sub-national borrowing is not presently excessive, but not because of strict enforcement of limits; instead, local governments have limited credit access, in part because loan repayment is poor, with a 2004 arrears rate of 48 percent. The Ministry of Finance (MoF) has legal access to a strong repayment incentive in the form of the right to intercept revenue sharing funds, but this mechanism has not yet been used to enforce compliance.

In summary, the Indonesian experience with attempts to structure performance incentives into the intergovernmental fiscal system has been ad-hoc and uneven. This lack of a systematic approach is not unexpected in Indonesia given the multiple central agencies involved in decentralization, the degree of policy fragmentation within some agencies, and overall weak coordination. Even where incentives do exist, lax or partial implementation seems to be the rule rather than the exception. Finally, the effects of incentives have been poorly monitored and studied. Where data are available, impacts seem to have been limited, and in some

cases unintended or perverse. Given serious concerns about subnational government performance in Indonesia raised above, and the limited/uneven use of incentives to date, there may be opportunities for enhancing incentives and applying them more broadly, creatively, and effectively.

AN OVERVIEW OF THE OBJECTIVES AND DESIGN OF LOCAL GOVERNMENT INCENTIVES

If new incentives are to be developed in Indonesia, it is necessary to consider the possible roles they might serve as well as how they might be designed and implemented.⁸ Subnational government incentives could serve multiple broad purposes. First, they could target simple reform adoption to develop the basic intergovernmental fiscal/administrative/legal system and operating procedures. Second, incentives can target improved fiscal behavior/aggregate budget performance, more or better local government service delivery, enhanced own-source revenue generation, or even to behavior intended to support other priorities, such as poverty reduction or environmental friendly behavior. Third, performance incentives could encourage local governments to try new ways of doing business, such as adopting efficiency enhancing technology, using public-private partnerships, etc.

Within these broader target purposes, specific focal objectives of an incentive system can vary. In the most straightforward case, the incentive could simply certify that a local government has started to use systems and procedures required under reforms. A step beyond this is to reward the extent or technical quality of reforms (e.g., whether budgets are prepared in a timely manner, how well actual budgets correspond to estimates, whether development plan priorities are funded, the frequency/influence of citizen consultation exercises, etc.). Incentives can be used to encourage altered aggregate fiscal behavior (e.g., reduce budget deficits, use idle resources, or reduce debt) or the level/and or composition of their expenditures and revenue (e.g., reduce administration or debt service, increase social services to respond to a national poverty strategy, or increase capital investment). Finally, there may be particular legal spending mandates (e.g., sectoral expenditure targets) or revenue requirements (e.g., minimum collection rates) for which the center wants to create incentives for compliance.

Another major factor for service delivery is whether to target inputs, outputs, or outcomes. Subnational governments may be excessively or inadequately using inputs or under- or overspending relative to cost standards. For example, teacher-student ratios or class sizes may be very high or low, or expenditures per kilometer of road may be below or above average. In such cases, incentives may encourage local governments to adjust inputs or costs. There may, of course, be good reasons for atypical behavior, such as locally specific needs or cost variations, and these would need to be taken into account.

Rather than motivate local governments to alter expenditures or inputs, incentives can target output levels defined by the relevant sectoral ministry, a national development plan or a poverty reduction strategy. Examples would include increases in enrollment ratios, the number of liters of water produced per resident, the number of kilometers of road, etc. It may also be desirable to specify some measure of quality, such as water or roads meeting a certain standard. It would even be possible to target incentives to improvements in outcomes beyond direct production of a public service, such as improvements in literacy, reductions in morbidity and mortality, etc., although this is not feasible in the short term.

Beyond basic decisions about focal objectives of an incentives program, design decisions need to be made. One involves the flexibility of targets. At one extreme, an incentive program can define fixed broad expectations. A less restrictive design would allow subnational governments to choose from a menu of reforms within or across reform areas. The most flexible design would be more open-ended. Obviously, this spectrum of options involves different levels of central direction and local discretion. Another key design feature is how absolute or relative standards should be. Given the common diversity of subnational governments, absolute standards may not be desirable, except for simple compliance-style reforms or for certain categories of local governments. On the other extreme, local governments might be given a say in defining a specific set of targets that they believe they can meet. Such initial individualization of targets can be useful, even if eventual requirements are standardized.

Other important design decisions include: whether incentives should be positive (reward compliance) and/or negative (punish lack of compliance); whether incentives should be tangible/

financial (e.g., technical assistance or funding) or nonfinancial (e.g., good or bad publicity); whether financial resources should be allocated through existing mechanisms or new funds/programs; the appropriate performance period (taking into consideration how frequently performance measurement is needed to stimulate better performance and the source/effort involved in securing data); whether and how to provide capacity building and technical assistance (often a consideration in developing countries); and how to ensure transparency in terms of clarity rules/processes and public availability of results.

A number of decisions need to be made with respect to measuring compliance or performance. First, measures can be objective or subjective. Generally speaking, objective measures are preferable because they are easier to measure, verify, and to interpret, as well as more easily repeated. The data required to construct objective indicators, however, may be unavailable or unreliable, and some aspects of performance may be difficult to measure objectively.⁹ No rating, however, should be fully subjective—there must be clear guidelines for what the different ratings mean and a process for preparing ratings that minimizes overt biases/opportunities for manipulation by those conducting the ratings or being evaluated.

Second, there are challenges involved in measuring even objective indicators that accurately represent a desired result. Increases in revenue yields, for example, may represent improved local performance (although the source of the increase and whether deliberate local government behavior was responsible for it may not be known). Increases in local expenditures on a particular service, in contrast, need not mean that services have actually improved; in fact, spending increases may prove to be wasteful.

Third, sources of data are extremely important. If existing data sources are considered appropriate and reliable, it is obviously preferable to use them rather than mount a new data collection effort, but this is not always feasible. And sometimes existing data sources may not be accessible to the agency that needs to use them, may not be collected and updated on a regular basis, may be subject to changes in the way the data items are defined or collected over time, and may cover different units of analysis. These discrepancies must be understood and dealt with in the construction of performance indicators.

CONSIDERING NEW LOCAL GOVERNMENT PERFORMANCE INCENTIVES IN INDONESIA

Although potentially productive, there are nontrivial challenges to developing performance incentives in Indonesia. To begin with, it might be considered late in the decentralization process to begin using incentives for adoption and effective use of new systems and procedures, which are normally used to initiate reforms.¹⁰ In Indonesia, adoption incentives do not directly address dominant concerns--persistent service deficiencies several years into a reform effort that generated high expectations. Also at issue is central fragmentation among agencies that play a role in decentralization. If different agencies develop ad hoc incentives that work at cross purposes or depend on adoption of other reforms, they may collectively confuse subnational governments about priorities and overwhelm their ability to respond.

Another daunting challenge is potentially limited value of financial incentives given the size and growth rate of local surpluses. This does not, however, undermine the potential value of creating incentives for different behavior. Indeed, it is likely that many (if not most) subnational governments with accumulated surpluses are not providing adequate services. It is in principle possible to penalize repeated large surpluses in local governments that do not meet performance standards. At present, however, data on surpluses (based on Bank Indonesia records) are available only as provincial aggregates, and basing incentives on changes in bank balances would in any case likely induce local governments to find other places to keep surplus resources. Ultimately, only a budgeting system that reliably reports surpluses and where they are kept would meet the data requirement for this type of incentive mechanism.

Finally, a particularly vexing issue concerns the potential moral hazard of transferring more funds to inefficiently operating governments. It is known that, in general, Indonesian subnational governments use the funds they spend on service delivery (as opposed to those they save) inefficiently (Lewis and Pattinasarany, 2008). Providing additional funds to any subnational government as an incentive for having achieved some desired outcome (i.e., that they could have realized with more proficient use of resources in the first instance) risks rewarding inefficient behavior, at least implicitly. In theory some local governments may be operating “efficiently enough” and therefore arguably more

deserving of incentive funds. But identifying sufficiently efficient performers is not easily done in any rigorous way. This makes it difficult to avoid sending mixed signals in attempting to operationalize incentives.

Despite challenges and concerns, there are ways to make progress in creating local performance incentives for Indonesia. A number of aspects of aggregate subnational government fiscal behavior—budget surplus/deficit, borrowing behavior, balance between recurrent and capital expenditures, significance of own-source revenues, etc.—may merit attention. If, for example, data on local government surpluses could be reliably secured, the allocation of these resources for future capital spending could be made a condition for the disbursement of some portion of DAU allocations. Although some observers would undoubtedly object to placing restrictions on a general (unconditional) transfer in a decentralized system, an argument can be made that the central government has an obligation in a newly decentralized system to help ensure the responsible and accountable use of subnational government resources, especially where downward accountability is still only weakly developed. In addition, incentives can work, as demonstrated by the recent MoF withholding of DAU disbursements to local governments that had not submitted required budget reports. Offending local governments almost immediately complied.

More broadly, the discussion of the DAU above highlighted some weak or problematic incentives created by the formula and how its constituent variables are defined. Although again politically sensitive, it would be worthwhile to conduct a more systematic study of the effects of the DAU and to consider options for reforming it in a way that would create incentives for improved subnational performance. Perhaps with a more grounded and more public debate about the effects of the present system, it may become more politically feasible to introduce changes over time in the incentives it creates. There may also be other incentives focused on specific problematic aspects of overall local fiscal behavior. For example, the central government could create incentives for local governments with poor revenue collection performance to improve yields, or to penalize those with substantial or growing debt arrears (especially if they are not making an effort to cooperate with ongoing debt restructuring efforts).

Given potential obstacles to immediately focusing on some of the most critical aspects of overall subnational government fiscal behavior and the structure of the DAU, another option would be to pursue incentives for changes in particular types of behavior. As argued above, focusing on simple reform adoption does not seem likely to gain much traction, although a more strategic step-by-step incentive process that starts with basic reform adoption may still be considered appropriate to develop local governance in a number of carefully identified weaker local governments in Indonesia. This approach is being adopted by an AusAid financed incentives project that targets certain disadvantaged areas.¹¹ For most other local governments, however, efforts to enhance performance should probably focus on creating direct incentives for specific aspects of improved fiscal performance and priority services.

One logical way to target performance in particular service sectors is through the use of conditional transfers. These are commonly used to create incentives for the performance of local functions that are central to major national policy objectives.¹² After a fairly slow start, Indonesia's nascent conditional transfer mechanism, the DAK, has been rapidly growing in recent years, and it seems poised to continue on an upward trajectory. Unfortunately the DAK, which is by law supposed to be designed and managed by the MoF and relevant sectoral ministries, has been substantially captured by the DPR (National Assembly), and it seems unlikely that it could be meaningfully used at the present time to create robust local government performance incentives. This suggests that the so-called "hibah" mechanism outlined in local government legislation, a highly flexible way to get grants from any source (government or donor) to local governments that does not suffer from the concerns noted about the DAK, might be the best resource channel for incentives. Alternatively, there may be other dedicated sources of funding (domestic or external) that could be used to finance subnational government sectoral incentives.

If the initial target of performance incentives is service delivery, then a choice of sector (s) must be made. Many services under some local control in Indonesia would benefit from better performance. Local governments, for example, are subject to substantial mandates in the education sector, including an unenforced and unevenly met constitutional requirement that 20 percent of local

spending be allocated to education, and there are concerns about education quality. Another high profile sector and a major focus of an in-process World Bank Infrastructure Policy Development Loan (IDPL) is the water sector.

Many ways of creating an incentive for education performance could be considered, but as a start, it would seem prudent to target some aspect(s) of outputs or outcomes, such as enrollment rates, attendance rates, or test scores. Focusing on inputs is riskier, as there is inadequate information about the relationship between inputs and desired outputs, and it is clear that increasing input levels need not lead to improved results. In a sector like education for which some relevant data are available, there is a strong case for using objective rather than subjective indicators.

Water is more complicated institutionally than education because it is largely provided through local water enterprises (PDAMs), which have various and evolving relationships with local governments. At present they are generally subject to a nontrivial degree of local government influence over service levels, service coverage, tariff increases, etc., and they are largely dependent on local governments for access to loans and grants provided by the center. Some better performing water enterprises are likely to enjoy a greater independence from local governments after in-process legislation is completed and passed, but many PDAMs will, at least for some time, maintain a somewhat dependent relationship with local governments, in which case incentives targeted at local governments could potentially be effective.¹³

As with education, it would be necessary to consider key design issues. Input targets seem even less appropriate in water than in education since targets would have to vary widely by water source, dispersal of population, and other factors that would affect technology needs. One possible target is cost recovery, among the most recognized water sector issues with great implications for service sustainability. It may be more effective, however, to focus on other, more easily attainable aspects of performance that could improve cost recovery over time, such as reductions in water loss/leakage or increases in connections. As with education, available data could be used to create objective indicators.

Since local governments in Indonesia differ in terms of performance and capacity, absolute

standards may not be sensible; instead, performance could be measured over a period of time relative to a base. A local government that attains a level of improvement could be awarded additional resources, or there could be a series of progressively more generous incentives offered for the attainment of specified levels of a range of indicators or for the achievement of increasingly improved performance vis-à-vis those same indicators. A key design concern is how to ensure simplicity and transparency—it should be clear (from rules and processes) to local governments and their constituents what is being rewarded and how. It would be possible to provide technical assistance and capacity building to local governments identified as deserving of it, or the target performance could simply be adjusted to reflect legitimately defined different expectations.

The education and water performance initiatives briefly considered here are simply meant to provide illustrations of how to think about developing new incentives. These ideas need to be considered after a fuller review of options and in the context of a broader set of key sectors.

CONCLUDING COMMENTS

Interest in adopting incentives to improve subnational government performance seems to be on the rise in many parts of the developing world, including Indonesia. We have outlined the present use of fiscal incentives in Indonesia and suggested the prospective benefits of improving on the status quo and expanding the use of incentives. We have not talked much about the political and institutional dynamics of expanding the use of incentives. It would be naïve not to recognize that these can be a daunting obstacle to initiating, fairly defining, and implementing an incentive scheme. Various parties will object to incentives that threaten their control over resources or are seen to infringe unduly on local autonomy, a cornerstone of decentralization. Some will argue that the local political process should be the main driver of local government behavior, but this view ignores the need to balance upward and downward accountability in intergovernmental systems and to find ways to support better performance where the accountability of local governments to their constituents is weak and only gradually developing.

Even if performance incentives are agreed to and put into place, there will inevitably be a range of problems encountered with design, data collection

and processing as well as the consistent application of the system. Despite the likely challenges involved, the potential benefits suggest the value of at least some degree of experimentation and further policy research.

Notes

- ¹ Fiscal federalism is the mainstream conceptual framework for decentralization. It was introduced and revisited by Oates (1972, 1999), and explored with respect to developing countries in a large literature, including: Bahl and Linn (1992), Shah (1994), Ter-Minassian (1997), Litvack, Ahmad, and Bird (1998), Bird and Vaillancourt (1998), McClure and Martinez-Vazquez (2000), Smoke (2001), Tanzi (2001), Ahmad and Tanzi (2002), Bardhan and Mookherjee (2006), and Smoke (2006). “Second generation” fiscal federalism is outlined in Oates (2005) and Weingast (2006).
 - ² Relevant literature includes Falleti (2005), Shah and Thompson (2004), Smoke, Gomez, and Peterson (2006), and Smoke (2007)
 - ³ The Indonesian rupiah (Rp)/US dollar exchange rate on November 1 2008 was 10,800:1.
 - ⁴ Subnational governments may also hold reserves in anticipation of future capital expenditures.
 - ⁵ For example, in 2001, U.S. state and local governments spent 3.1 percent and 4.6 percent on administration, respectively (U.S. Census Bureau, 2004, 2005).
 - ⁶ The net enrollment rate—number of students divided by the total number of potential students in an age group—in primary school rose from 72 to 93 percent between 1975 to 2005. Net enrollment rates also increased for junior (17 to 65 percent) and senior secondary school (17 to 42 percent) during the same period (World Bank, 2007).
 - ⁷ Between 1999 (the last full fiscal year before decentralization) and 2004, 46 percent of the increase in own-source revenues is accounted for by interest earnings on bank deposits; about 20 percent by the electricity sales tax (administered by the National Electricity Enterprise-PLN); 20 percent from “other” user charges (mostly newly created charges); and about 10 percent from health fees (Lewis and Suharnoko, 2009).
 - ⁸ A good review of the conceptual literature on incentives and of the application of related mechanisms in developing countries, including in the local government sphere, is provided in Zinnes (2008).
 - ⁹ For example, participation is often superficially measured in terms of the number of people or percentage of population that participates. In such cases, subjective measures may be more useful. For example, subnational governments can be rated comparatively on a scale by a panel of people with appropriate knowledge.
 - ¹⁰ Most documented experiences to date (Steffensen and Larsen, 2005), have been in countries in the early stages of decentralization or undertaking the complete restructuring of the intergovernmental system.
- ¹¹ The Delivery Improvement and Local Governance (DIALOG) project began on pilot basis in 2008.
 - ¹² Broad reviews of various forms of intergovernmental transfers, including conditional, are provided, for example, by Bahl (2000), Bird and Smart (2002), Schroeder and Smoke (2003), and Shah (2006).
 - ¹³ Taking this approach assumes that local governments can influence PDAM behavior and that financial incentives for improved performance would actually be passed by the local governments to the PDAMs.

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