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Capital Financing by Indonesian Local Governments: Will Subnational Bonds (Finally) Play a Part?

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Abstract

This paper provides an overview of an idea that has been percolating in Indonesia for several years, the creation of a long-term bond market for the subnational governments. The revised law PP 30 sets out the parameters for long-term borrowing by regional governments in which long-term loans made to the Public are more restricted. Although a set of legal requirements have been instituted, there are still several challenges in developing subnational bonds in Indonesia. The main question is whether subnational governments have interest and capacity in issuing municipal bonds. Lack of budget transparency, accountability and experience in managing debt are a concern in addition to a number of issues related to financial mechanics of subnational budget. This paper is to make a case for financial intermediation and oversight for the smaller subnational borrowers by establishing a bond bank.

JEL Classification Numbers: H63, H72, H74
Keywords: Public finance, subnational borrowing, bond bank, Indonesia

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Introduction

The advent of subnational bonds in Indonesia can be viewed from three directions. The first is that of mobilizing capital to meet the country's well-documented needs for increased infrastructure investment. The second is that exposing regional governments to the private capital markets will help develop their planning and managerial capacities. The third is that the introduction of subnational government's credits will help stimulate the development of a credit markets in Indonesia.[1] The extension of credit to subnational governments through the domestic (private) capital markets via the sale of regional bonds brings a host of consideration. Credit by its very nature runs through time and thus elements of financial stability and fiscal predictability loom large in judging creditworthiness and, hence, marketability of securities. For the last decade, these attributes seemed in short supply in Indonesia, as both the governmental and financial sectors were in turmoil. As of late, Indonesia's economic and fiscal performance has greatly improved and its stature in the global capital markets has risen markedly.

In this paper, we first review the rapid fiscal decentralization of government, which started in 2001, which came in the wake of the "Asian Flu" financial crisis that struck in the late 1990s. In the process of decentralization, Indonesia's intergovernmental structure changed rapidly, as responsibilities (and much of the workforce) was transferred to the subnational governments. But, subsequently, Indonesia was largely unaffected by the 2007-08 financial crisis, and by the end of the decade was moving steadily forward with sustained growth in its GDP and benefitting by political stability.

Next, we will update the current discussions as to creating a regional bond market in Indonesia. This discussion will be based on a survey and critique of the latest Indonesian laws and regulations as they pertain to the issuance of subnational bonds and related issues regarding the mechanics of the issuance process. Particularly helpful are the recent views expressed by the credit rating agencies in their recent reviews of the candidate regional government credits.

Finally, we will make some international comparisons between Indonesia's approach to enhanced subnational borrowing and that of other emerging economies. In particular, we will examine the problems of scale and sophistication of the borrowers. We will make the case for the usefulness of financial intermediation and oversight for the smaller subnational borrowers provided by a bond bank. That would allow those borrowers to enjoy the benefits of broader markets for their credit, but lessen their exposure to the risks of "going it alone' in the capital markets.

[1] By subnational government we mean all those below the sovereign (state). This terms" local," regional, and "subnational" are all used here interchangeably and includes provinces, cities and districts. Distinctions among government types (provinces, regencies (Kabupaten), and cities (Kota) will be made in context. The abbreviated expression 'kabupaten/kota" will be used to distinguish the regencies and municipalities as a group.

Overview of Governmental Structure and Fiscal Capacity

Indonesia is a unitary state that in the past decade has moved swiftly toward decentralization.[2] Overall, the government sector is not very large by international standards, with its expenditures representing about 19 percent of GDP. Ratio of Central Government Debt to GDP is slightly below 30%. Looking at the composition of Indonesian debt that has declined since 2002 due to the robust growth of GDP, domestic debt continues to be larger than external debt. Fiscal sustainability has also been improved from the peak of the 1997 crisis as the budget deficit decreased significantly.

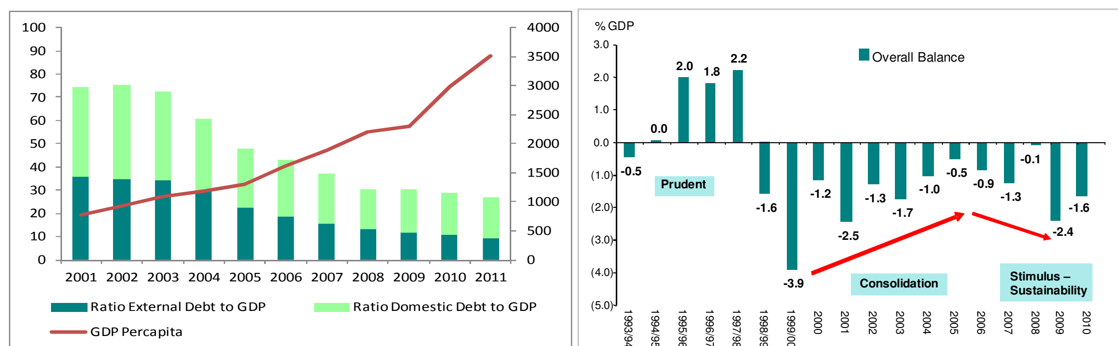

Fig. 1. Indonesian National Debt, 2001-2011

Fig. 2. Government Budget Deficit, 1994-2010

The intergovernmental system has undergone a dramatic transformation. Decentralization meant sending many functions (and employees) down to the local level, not infrequently with considerable confusion as to who is responsible for their performance. It has also led to dramatically restructuring the intergovernmental transfer system to provide the local units with more revenues.[3]

Nationwide, as a result of the decentralization there is a high-degree of dependency by the regional governments on central government transfers in the form of shared taxes and grants, which make up around 83% of total revenues. But, these intergovernmental transfers vary greatly among the subnational units, some of which do have significant own-source revenues. Localities have great differences in appetites for taxes and the ability to levy many different types of taxes. A source of friction has been the practice by some localities of levying a variety of “nuisance’ taxes that inhibited domestic trade and that had prejudicial impacts. Among the many reforms instituted was one to rein in the power of local governments to levy such taxes.

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[2] It is divided into 33 provinces, including the special region of Greater Jakarta. There are about 497 municipalities: 93 cities (kota) and 404 regencies (rural districts or kabupaten). Some local services are provided by locally owned enterprises, BUMD, of which the PDAMS, the local water districts, are the most important.

[3] Over 2.1 million national level civil servants (over half of them are teachers) were transferred to the provincial and local governments in January 2001. It is important to note that transfers from the center for salaries are a priority-spending item under the PAU. As discussed below, these costs must be netted out in tests of revenues available for debt service.

Overall, subnational own–source revenues as a percentage of total governmental revenues in Indonesia are only about 16.8%. But, subnational expenditures have recently been about 37% of total national governmental expenditures or 5.5% of GDP.[4] With the extensive reassignment of functions to the subnational level, the expenditure share of local governments is likely to rise to 40 percent over time. About one-third of local unit expenditures were traditionally for developmental purposes, which has only very loosely corresponded to capital spending. Improved reporting standards for governments, however, are improving on our ability to identify capital spending by local governments.

Table 1. Indonesian Subnational Budget, 2007-2009 (Rp million)

	2007		2008		2009	
REVENUE		**(%)**		**(%)**		**(%)**
Own-Source Revenue	52,180,254	17.97	64,745,871	17.20	62,354,927	16.80
General Allocation Funds (DAU)	147,556,504	50.83	176,637,688	46.92	181,475,697	48.89
Shared Revenue (DBH)*	47,919,319	16.51	78,136,870	20.76	69,091,994	18.62
Specific Allocation Transfer (DAK)	17,251,289	5.94	21,326,692	5.67	24,884,962	6.70
Other Resources**	25,455,356	8.77	33,081,001	8.79	48,754,269	13.14
EXPENDITURE						
Total Expenditure	306,618,958		356,779,485		417,184,043	
Capital Expenditure	89,552,625	29.21	97,300,708	27.27	110,102,489	26.39

** Shared Taxes and Natural Resources Revenues*

** Including Grants, Special Autonomy Funds and Shared Revenues with other regions*

Direct capital grants from the central government for capital purposes were sharply curtailed in 2001, but the program requirements stayed in place, so that the general transfers were in fact used for much the same purposes. Capital spending by governments on infrastructure appears to be about 3.5% of GDP annually (World Bank 2007), with the bulk of that, while occurring at the local level, remaining to some extent under central government control. Thus, in principle, local units have gained much greater autonomy, but the implementation of the new discretion power has continued to be an issue and there continues to be control from the top.

The tax-sharing system is extensive, with most tax rates of the subnational rates controlled at the center. But, even with the uncertainties about required local services and meeting national norms, certain individual localities and affiliated enterprises are relatively well positioned, and some have taken advantage of their circumstances to raise significant revenues. It is also important to bear in mind that the political decentralization has been rapid and that there are severe questions regarding the competency, professionalism and integrity of operations at the subnational level.

[4] Missing from this figure is data on BUMDs (Regionally Owned Enterprises). Since these represented 60 percent of all borrowing from the central government loan funds over the past 25 years, they are no doubt major infrastructure providers. However, 60 percent of loans are in arrears (primarily those to PDAM the water utilities), so many are now precluded from borrowing.

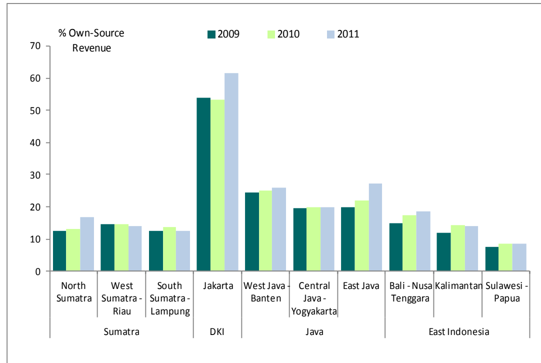

Fig. 3. Subnational Own-Source Revenue, 2009-2011

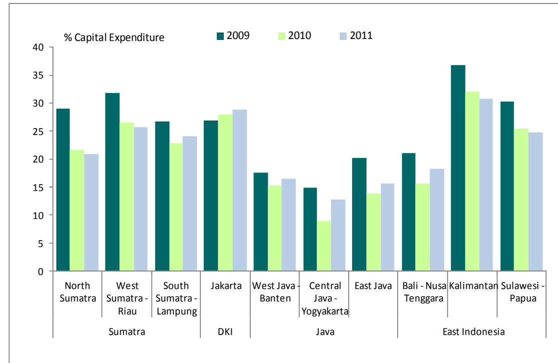

Fig. 4. Subnational Capital Expenditure, 2009-2011

Subnational Borrowing Powers

Under existing law, subnational governments nominally were given the power to borrow from several sources. But, effectuation of that law was repeatedly held up by the central government. There have been prescribed parameters that limit the types and use of debt.[5] In practice, what borrowing that has been done by subnational units has been almost exclusively through government on-lending programs and, only on occasion, through regional banks owned by local governments or other private sources.[6] Moreover, subnational governments (but not their enterprises) have been (temporarily) prohibited from borrowing from non-governmental sources.[7] Thus, while a subnational government borrowing superstructure was put in place nearly a decade ago, the whole borrowing process was effectively put "on hold" and rudderless without the implementing regulations being adopted. There are numerous gaps in the regulations governing borrowing, but until a new set of regulations are promulgated and allowed to go forward, these will not appear and need to be ironed out in the process of doing a borrowing, such as a bond issue.

Almost all regional borrowing the past few years has been from central governmental sources and it has been very limited. There has been no tradition for governments borrowing in the bond markets or from the commercial banking system. Overall, given the uncertainty of the rapid change, local general units of government have been viewed as not financially responsible. Borrowing was restricted to central government

[5] The substance of the restrictions (which are discussed later) are that long-term loans are for self-supporting infrastructure projects, not for expenditure or general O&M, net annual borrowing is not to exceed 75% of General revenue in the previous year's budget (with a minimum DSCR of 2.5). Short-term loans are not to exceed 1/6th of general revenue of the current year. Local units cannot guarantee loans of other parties and public assets cannot be used as security to obtain Local government loans (Law 25/99 as amended and PP 107).

[6] It may have been the case that some local units enter into installment sale contracts as a way to circumvent restrictions on borrowing. In any event there appears to be little borrowing from the private sector or, as of late, from the central government. On the contrary, regional governments have seen their reserves build up and have been lenders to the rest of the Indonesian economy.

[7] Implementation regulations for local borrowing power were held up repeatedly during the decade that followed decentralization.

administered loan funds that were sourced by donor funds. Earlier efforts were made before the crises of 1997 to commence a “revenue bond” municipal market based on selected water utilities, as a separate sector in the country’s small bond market. But these efforts came to naught at the time of the 1997 crisis. Local-government-owned banks (BPD) issued bonds with the aggregate amount of Rp 1.2 billion during 1990s and appeared to have served as financial conduits for some sub-sovereign borrowings. As noted, subnational governments were barred from borrowing (as part of the IMF loan agreements). While municipal enterprises evidently can continue to borrow from private sources, but such borrowing appears to have been minimal. It appears that loans have been made to and equity investments made in local enterprises.[8]

A legacy (and a persistent political problem) of the central government administered lending programs has been the large amount in loan arrearages, which has tainted both the resumption of on-lending and the creation of private lending avenues.[9]

Budgeting and Management Capacity

The decentralization and devolution of power created great changes and turmoil in local finances over the past decade. It brought a host of new employees (central employees transferred to the local units) to the local level and an array of service responsibilities that are not well defined. Local governments (and their elected leaders) are having now to acquire management and financial skills *ex post facto.* A wide variety of international programs have been introduced to support the effort but those programs themselves are in the formative stages and the needed framework of laws and regulation is only slowly, and imperfectly, being erected.

Over the years, reports from the filed have been skeptical as to the technical competency and integrity of local financial administration in many places. At a minimum, there is a need for extensive professional training and technical assistance and there a number of multinational programs in place to attempt that. But the other reality is that new credit programs that depend on local administration will require strong monitoring. The Asian Development Bank, the World Bank and USAID have been involved in projects to support decentralization, including capacity building and investment financing for selected local governments. For reasons discussed below, the local enterprises (BUMDs and especially the water utilities – PDAMs) have been and continue to be of much concern. While they are logical targets for such assistance, the extensive defaults experienced under the central on-lending program served as a large impediment to their renewed borrowing.

[8] See Lewis and Oosterman (2010).

[9] Re-instituting donor-backed loan funds (RDA and SLA) proved to be contentious. The central government did not want to provide a sovereign guaranty and has been unable to resolve the massive defaults by local units. While Law 25/99 and PP107 did allow local units to access donor loans directly, most of the donor community rejected the structure of such direct lending and advocated on-lending through the central government due to poor record of loan repayment and lack of local fiscal capacity. At the end of 2004 over 50% of total amounts due for RDA and SLA loans were in arrears.

Financial Reporting and Accountability

As a unitary state, all expenditures and revenues are theoretically centrally reported. There has been a system of local reporting that was essentially top down using the old prefecture system (central government employees at the local level kept the accounts). There has been a major effort to design and effectuate a new reporting system, including new accounting standards and the mapping of fiscal capacity of regional governments.[10] But, the decentralization process has caused problem of co-ordination and authority.

An issue that needs to be emphasized is that such reporting practices be designed to meet emerging credit market needs. Earlier versions of local government reporting standards (which were based on the Old Dutch colonial system) were strictly on a cash basis and did not report the balance sheet. In the mid-2000s, regulations moved toward a modified accrual basis, although many local units were still reporting on the old format. To further confuse matters, new governmental accounting standards have been adopted that require a move to full accrual system by 2008, a development that will likely sow future confusion. The independence and quality of local audits are unknown and it appears that the central government auditing of local governments may not be operative.

Financial Emergency and Defaults

In the absence of data and without much local government commercial (e.g. private market) debt outstanding, there is at present no framework for identifying or process for curing local unit financial emergencies. Under the old on-lending framework, the national government assumed ultimate responsibility of the debt, most of which is owed to donor institutions. The on-lending programs were not legally secured and the national government, albeit having the power to intercept payments to regional governments, was unwilling to effectuate it to recover owed monies. The abilities of creditors to enforce covenants (or that of localities to have legal firewalls for the provision of basic services) are unfamiliar and untested concepts. Clarification is needed of the ability to pledge future revenues to nongovernmental creditors to recover it of paramount concern. Although there exists the capacity to intercept central payments for debt service, that power is restricted to central government debt and the government, in the face of large scale default, was been unwilling to exercise it. The judicial system is seen as one of the weakest points in Indonesia.

Governments that run into insolvency are evidently eligible for emergency assistance from the center. However, the basis for such assistance (grants) is uncertain and not subject to any uniform standards. This plasticity in assistance is a holdover of the old unitary state concept of paternalism and can represent a source of moral hazard.

[10] Early on in decentralization, financial reporting oversight of subnational governments was divided. The Ministry of Finance (MoF) and the Ministry of Home Affairs (MOHA) had double systems and are engaged in developing the regulations concerning reporting. As of 2005, all units are required to use accrual form accounting and to report within 8 months of the close of the fiscal year. See Lewis and Oosterman (2010).

Banking and Financial Markets

Indonesia has a bank-dominated financial system, which was severely mauled by the 1997 crisis. Most of the formerly private banking system was bailed out under IMF supervision by the central government, which faced with the problem of working out non-performing loans. Meanwhile, bank balance sheets at the time of crisis were loaded with government bonds and thus new lending (or capital market activity) was minimal through the mid-2000s.[11] The country has a limited array of institutional investors (pension systems and retirement funds) that traditionally had invested primarily in bank savings certificates and government bonds. There was however, a capital market superstructure in place (banks, dealers, rating agency, etc.), two active stock exchanges, and a market regulatory mechanism. Overall, bank loans are equal to only 25 percent of GDP and outstanding (traded) bond issues are 1 per cent of GDP.

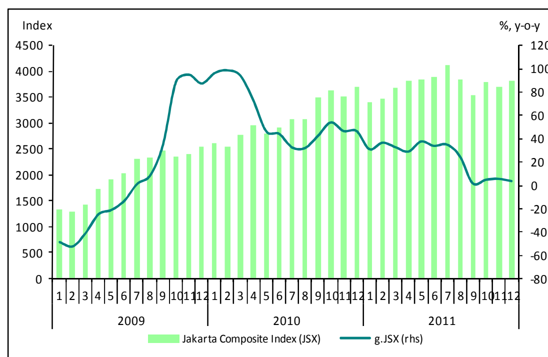

Fig. 5. Stock Exchange Performance, 2009-2011

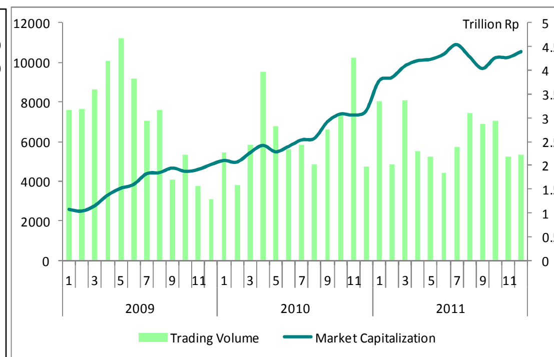

Fig. 6. Market Activities, 2009-2011

Financial Market, Institutions Regulation and Taxation

Regulation of the financial markets is concentrated in BAPEPAM. Bond issues that are to be listed on the exchanges must undergo a lengthy registration process and must receive a credit rating. This process probably renders the existing listed bond market as infeasible for all except major issuers. In the past, there was discussion of an over-the-counter market (trading among dealers) as such a market plays the major part in the secondary bond transactions in many developed countries. But, as we will discuss below, a financial intermediary such as a domestic "bond bank," might tap the listed market. A few years ago, BAPEPAM was chary of municipal bonds and, especially, concerned about the secondary market apparatus and transparency.

The financial sector and capital markets in Indonesia have changed rapidly and there is limited, but increasing, information on the players. The regulation of the financial institutions other than banks involves regulating the insurance companies (banks are

[11] Moody's in 2005 rated the Indonesian banking system at 3 out of possible 100 in terms of bank financial strength (Argentina is 0). Recently, Indonesian largest bank ratings have been rising rapidly and are now considered investment grade. "Nine Indonesian Banks Upgraded by Moody's. *Bisnis* (January11, 2012). http://en.bisnis.com/articles/nine-indonesian-banks-have-ratings-upgraded-by-moodys.

evidently prohibited from holding non-state bonds), which represent a major potential source of funds. Pension funds and insurance companies have been largely limited to holding bank savings certificates and government bonds, but their portfolios have been expanding. Bank capital adequacy requirements could be an issue as it relates to their treatment of subnational securities; that is, are they to be treated as "governmental debt" or "private debt" according to the prudential guidelines. Regulation of non-bank institutions is being centralized in BAPEPAM.

Credit Analysis and Ratings

The largest and best known credit rating agency in Indonesia is Pefindo, which was established in 1994. Pefindo has worked with the major international rating agencies. Although it was approached in the past for purposes of providing local government enterprise ratings (PDAM), it has never done so. In view of the disaster in financial markets and the large number of defaults at the end of the 1990s, the agency was criticized for its lack of care in examining balance sheets and, in particular, exposures to exchange risk. The lack of experience (both of the potential borrowers and the raters), early efforts at credit analysis will be frankly experimental. The ability to do comparative analysis will be hindered if a general and useful reporting system for subnational governments is not in place. Fitch Investors Service opened a local office in 2008. To date, both agencies have focused on corporate credits. Meanwhile, Standard and Poor's has been cultivating a local market with its analysis of regional government financial management.

An Updated Assessment

The rapid devolution of government power and fiscal resources and the turmoil amid sorting out roles and responsibilities has created fiscal (and political) uncertainties but seems destined to move more decision-making and resources to the regions and localities. Undecided is the basic policy design of how local governments are to meet their infrastructure financing responsibilities. Despite the early difficulties, Indonesia is a country of considerable wealth, evidences a high saving rate and appears large enough to support a domestic credit market. The banking system and the financial markets have recovered from the crisis of the late 1990's. As of late, the Indonesian economy has been showing consistent growth and appears to have a solid macro-economic framework.
Conditions seem favorable for the meeting of public capital needs (particularly for infrastructure), which should move to center stage.

Given the heritage of central control and the inexperienced and untested skills at the local government level, there will need to be a substantial institutional commitment to accomplish that transition. The legal requirements and adequate resources of a local bond market would help, not only as a means of mobilizing capital, but as way to better allocated that capital to competing needs. It would create a continuing need for information and extra governmental demands for disclosure and managerial competency.

These demands would stem from the investors self-interest and they will insist on the timely and complete provision of information as a means of enforcing market discipline.

It has often been recommended that the Ministry of Finance sponsor a special financing vehicle that would act as a "bond bank" and generally act on "market-based" principles. Sponsorship and operation can take on number of forms, but the critical matter is that it be a market-oriented entity and not be sabotaged by another generation of concessional on-lending programs. There are a variety of models internationally, as will be discussed briefly below. The actual operation might be undertaken by a commercial bank. Indonesia appears at a policy crossroad in terms of trying to move local units to a system that would instill commercial principles into lending decisions and have sufficient "teeth" to assure borrower compliance with the conditions of commercial-based contracts.

Associated with the reform effort is the need to reform various PDAM water utilities, many of which are in arrears on outstanding on-lent debt. The self-supporting nature of these entities and the prospect of providing them with greater insulation from "day-to-day" politics (plus their need to resolve arrearages) might make them candidates for loans under a reformed program. This appears to be public finance issue, and not specifically on sub-sovereign along these lines, but thought needs to be given early on procurement and contract-enforcement issues, in particular the use of independent engineers and trustees.

Among the infrastructure sectors, transportation is the greatest importance. Capital spending for transportation to have been running about Rps 60 trillion a year in spending and government plans call for those amounts to be about doubled. In each case, the government has hopes of significant reliance on increased user charges and the use of borrowings secured on the self-supporting projects. However, in the water sector, resistance to rate increases has been a huge political problem, and water rates are held at low levels. In the 1990s, Indonesia had extensive investments in private concession and BOT toll roads and evidently would like to reinstate a large program mobilizing private capital. As noted, Indonesian municipal bonds would evidently be limited to funding revenue-generating uses.

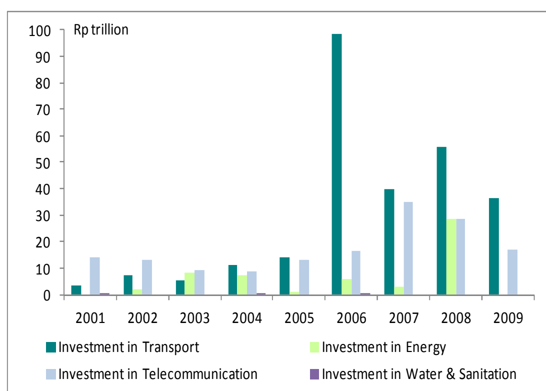

Fig. 7. Infrastructure Investments, 2001-2009

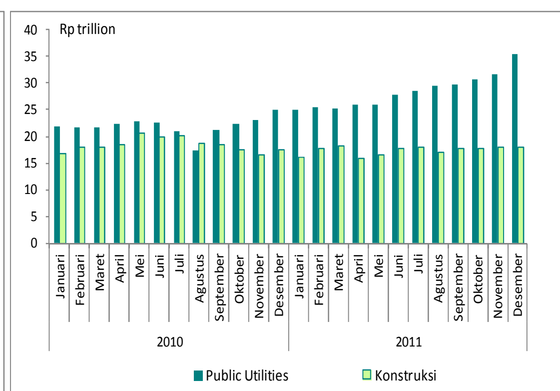

Fig. 8. Investments on Public Utilities & Construction, 2009-2011

Power to Borrow and Borrowing Process

The power to borrow by local governments is subject to the provisions of the law - PP 30 in Indonesia. In the following we examine the provisions if this law and the accompanying regulations. Article 14 of PP 30 sets out the parameters for long-term borrowing by regional governments. Such borrowing is defined as those loans with an original maturity of more than one-year. These loans may originate from (that is, be made by) by the Central Government, other Regional Governments, banks and financial institution, and the public. A distinction is made between loans originating from the public and the institutional lenders. The Long-term loans originating from the Government, other Regional Governments, banks and financial institution may be used to finance infrastructure and/or public facilities investment activities that do the following:

a. generate *direct* income in the form of revenues for APBD in relation to the development of such infrastructure and facilities;
b. generate *indirect* income in the form of savings in APBD expenditures which should be spent if those activities are not engaged; and/or
c. provide economic and social benefits.[12]

However, long-term loans made to the Public are more restricted. These *shall* be utilized to finance infrastructure and/or facilities investment in public service activities that generate income earned from the levies over the usage of those infrastructure and facilities.[13] In other words, publicly offered bonds must be revenue-generating, at least for nominally self-liquidating projects. But there appears no requirement that the revenues be specifically pledged to the repayment of the debt. PP 30 goes on to set out conditions for regional lending, including limitations on debt that may be incurred.

In undertaking borrowing, the Regional Governments are limited to the amount of debt then outstanding debt plus the amount of loan to be undertaken, which in total shall not exceed 75% (seventy-five percent) of the amount of general revenues in their APBD of the preceding year.[14] Moreover, the regional governments shall meet the conditions for the ratio of regional financial capacities to repay the loan stipulated by the Government (Minister of Finance) and other conditions as are stipulated by prospective lenders.[15] Last, "in the event of Regional Loans submitted to the Government, the Regional Governments shall also be required to pay off any loan repayment arrears [for loans] originating from the Government"[16].

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[12] PP 30 (draft) Art. 14 (4).
[13] PP 30 (draft) Art. 14 (5).
[14] PP 30 Art. 15 (1).
[15] In Article 16, the Minister of Finance shall determine the value of regional financial capacity ratio to repay the loan as specified in Article 15 "The determination of the value of regional financial capacity ratio to repay the loan as intended in paragraph (1) shall be a minimum of 2.5 (two point five) by taking into account of the national economic development and regional fiscal capacity."
[16] PP 30 draft Art 15 (3). It is not clear if submission means just for approval on in the case of a loan to be made by the government.

Chapter VI of PP 30 sets out a separate chapter dedicated to regional bonds. Regional Governments may issue bonds insofar as that they meet the conditions for loans as stipulated in Article 15 (discussed above), government regulations and the provisions of laws and regulations in the field of capital market. The issuance of Regional Bonds shall only be done the domestic capital market and shall be denominated in Rupiah. Moreover, regional bonds shall be securities issued by the Regional Governments and shall not be *secured* by the Government.[17]

Regional bonds shall be used only to finance infrastructure and/or public service facilities investment activities that generate income for APBD that is "acquired from a levy on the use of the infrastructure and facilities."[18] Thus, bonds are only to be of a "revenue bond" nature, evidently of the self-liquidating variety. An interesting proviso has to do with the contemplated use of a trustee in the case of bonds. Article 43 indicates that the bond loan agreement shall be set out in a trustee agreement and [the agreement] shall be executed by the governor, regent, or mayor and Trustee as the proxy of the bondholders/lenders.[19]

The Chapter goes on to specify that the bond loan agreement shall at least include following:

a. nominal value;
b. maturity date;
c. interest payment date;
d. interest rate (coupon);
e. frequency of interest payment;
f. method of calculation on interest payment;
g. provisions concerning the right to repurchase the Regional Bonds prior to the maturity date; and
h. provisions concerning transfer of ownership.

The procedures for the issuance process of regional bonds are next laid out. The Regional Bond Issuance Plan shall be submitted to the Minister of Finance after obtaining an approval of the Regional People's Legislative Assembly. This approval shall include principal and interest payment incurred as a result of the issuance of the Regional Bonds, the maximum net value of the bond to be issued when determining a regional government's APBD, and the cost of issuance. The Minister shall evaluate the Regional Bond issuance plan based on the conditions for loans as intended in Article 15. Last, the procedure for the issuance, performance, administration of, and monitoring for the bonds shall be subject to the provisions of laws and regulations in the field of capital market.

Article 46 sets out the regional government's obligations to pay principal and interest of any bond when due.[20] These debt service payments are to be budgeted annually in APBD

[17] PP 30 Art. 40. The meaning of "secured" is not clear. Do the bonds qualify for the use (pledge) of an intercept of payments from the central governmental?
[18] PP 30 Art 42.
[19] This raises the question of the trustee law in Indonesia. Do corporate borrowers use a trustee in issuing bonds?
[20] Art. 46. In addition to interest and principal, there is an obligation to pay penalties for a late payment of principal and interest.

until the end of the liabilities term. Moreover, these payments shall come from Regional revenues originating from income from the activity financed by such regional bonds.

The bonds are evidently "double barrel" obligations, in that regional government APRD general revenues can be used to pay the debt service deficiency: "In event that the activity does not generated a sufficient fund to pay principal, interest and Regional Bond penalty, the payment liabilities shall be paid from other regional revenues."[21] In the event that the due payment liabilities of interest on Regional Bonds exceeds the budgeted fund, the governor, regent, or mayor must make a payment in the amount of the due liabilities. These payments on Regional Bonds shall be budgeted as an amendment to APBD and/or shall be set out in the budget realization report. This provision effectively limits the bonds from being "pure" or "straight" revenue bonds where the lenders (bondholders) could look only at the project's assets and the earnings to repay the debt.[22]

In Article 47 and 48, the management of the bonds is assigned ("shall be conducted by") the governor, regent, or mayor. The management plan consists of planning for and conducting the bond sale and the payment of debt service and any repurchase of bonds (or, evidently, bond call). There is also a provision for the sale of the Regional bonds through auction. Such management is also subject to further provisions governing issuance and for accountability as set forth in Ministerial Regulation.

Financial Capacity to Repay Loans

According to the regulations ("Elucidation") of PP 30[23], the financial capacity of a regional government for loan repayment is determined by a Debt Service Coverage Ratio (DSCR) shall be calculated with the following formula:

$$DSCR = \frac{\{PAD + DAU + (DBH - DBHDR)\} - BW}{\text{Principal loan} + \text{Interest} + CE} \geq X$$

Where:
DSCR = Debt Service Coverage Ratio of the related Regional Loan;
PAD = *Pendapatan Asli Daerah* (Own-Source Revenue);
DAU= *Dana Alokasi Umum* (General Allocation Fund);
DBH= *Dana Bagi Hasil* (Profit-Sharing Fund);
DBHDR= *Dana Bagi Hasil Dana Reboisasi* (Profit-Sharing Fund of Reforestation Fund);
BW = *Belanja Wajib* (Compulsory Expenditures)[24]

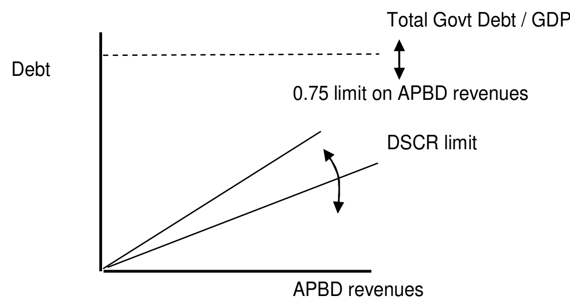
[21] Art 24 (4).
[22] Such bonds are based on the "special fund" doctrine where the governments are legally empowered to create "separate funds" that outside of the general government framework. There debt is not therefore counted against the debt of the general government.
[23] Elucidation of PP 30 (June 2011).
[24] "Compulsory expenditure" are personnel expenditures and expenditures of the members of Regional People's Legislative Assembly (*Dewan Perwakilan Rakyat Daerah/DPRD*). Other loan-related costs include administrative, commitment, provision, insurance costs, and penalty related to Regional Loan.

Principal loan = Installment of Principal loan;
Interest = Loan Interest Expense;
BL =*Biaya Lain* (Other loan-related costs).

DSCR of Regional Governments ≥ X, where X is the Debt Service Coverage Ratio (DSCR) determined by the Government.

The draft regulation puts the X at a minimum of 2.5 in Article 16. The amount of PAD, DAU, DBH, DBHDR, and BW shall be calculated from the annual average actual amounts ("realization") of these items for the last 3 (three) years. Principal loan, Interest, and Other Costs shall be Loan Liabilities ("debt service"). The amount of Loan Liabilities shall be calculated from the annual average of outstanding (un-repaid) previous loan liabilities plus the annual average of proposed loan liabilities.

Fig. 9. Regional Indebtedness



Layers of Limits on Regional Indebtedness
National limit of all government debt to 60% of GDP
Debt outstanding not to exceeed 75% of APBD general revenues
DS = maximum of 0.4 of "Available Funds"
Debt = (.4 x Available funds) / (Repayment structure & interest factor)

Table 2. Simulation of Borrowing Capacity for Four-regions with Highest Guaranteed Revenue

Province	Own-Source Revenue	General Allocation Fund (DAU)	Profit-Sharing Fund (DBH)	Compulsary Expenditure	Guaranteed Income (Revenue)*	Borrowing Capacity (Principal+8% Interest-2% CI)*
DKI Jakarta	16,022,581	209,900	8,700,000	8,521,389	16,411,092.2	5,967,669.89
West Java	10,362,156	19,901,331	3,889,705	19,650,509	14,502,683.1	5,273,702.95
East Java	12,613,675	22,004,152	3,632,391	22,294,308	15,955,910.1	5,802,149.14
East Kalimantan	3,886,920	3,531,847	16,099,392	6,472,442	17,045,716.1	6,198,442.23

** Estimate*

There are several definitional issues that would need to be worked out, although the basic idea is clear. What the regulations attempt to do is estimate the "fiscal margin" of revenues available for the payment of annual debt service on the debt (after issuance of the proposed debt) to new level of debt service.

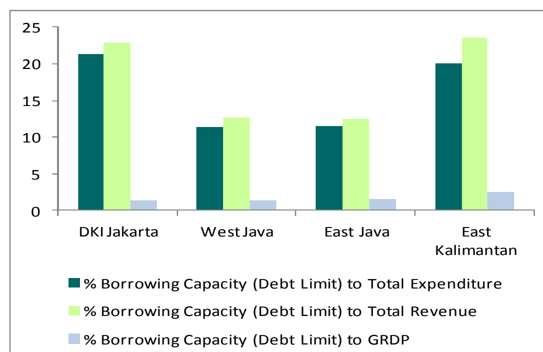


Fig. 10. Ratio of Debt Limit

Capital Spending by Regional Governments

Only recently have the governmental accounting systems in Indonesia been changed so as to provide information on capital spending by subnational governments. That has made it difficult to track spending on "hard" capital improvements, as opposed to developmental expenditures, which have covered a range of activities and served as only a rough proxy for capital spending.

Lewis and Oosterman in a 2010 paper reviewing capital spending for a large sample of Indonesian Subnational make three points. First, operating balances during the mid-2000s exceeded the amount capital spending by subnational governments across all years (except for provinces in 2006), which implied that subnational governments finance capital spending from operating balances. Second, subnational governments, with budgetary surpluses, are net lenders to the rest of the economy. Subnational governments accumulated significant cash deposits after decentralization was launched in 2001 and this is at least in part a manifestation of that fact. Third, capital spending for subnational governments during the interval of 2004 to 2007 steadily increased as a proportion of total spending, reaching 22.6 for 22.6 per cent for provinces and 26.7 per cent for kabupaten/kota.[25] Applying the relevant capital spending shares to the aggregate subnational expenditure data indicates that subnational governments spent 1.3 to 1.7 percent of GDP on capital assets. When central government capital spending is included, the total government capital spending was 2.7 to 3.4 percent of GDP.

Recent analysis suggests that government-wide spending on infrastructure should be at least 5 per cent of GDP in order to secure economic growth of 6 per cent per year. It appears that central and subnational governments are not yet meeting that target. "Local government spending on buildings and other structures is striking in its relative importance. The conventional wisdom in Indonesia is that most of such spending goes to

[25] Subnational governments spent approximately 1.7 per cent of GDP on the acquisition of capital assets in 2006. Central government capital expenditure also amounted to 1.7 per cent of GDP for those 3 years. In total, consolidated government capital spending was 3.4 percent of GDP in 2006.

the construction of government office buildings. Thus, considerable portion of kabupaten/kota infrastructure investment is likely, therefore, to be relatively unproductive."[26]

Generally speaking, therefore, subnational governments in Indonesia have been financing capital spending out of cash, either from operating budget balances or by drawing down on their reserves. As a result, subnational governments have relied on relatively inefficient and inequitable methods of financing investment in infrastructure, particularly in the case of a growing economy.

Indonesian subnational governments have accumulated substantial cash reserves in recent years. According to Lewis and Oosterman, at the end of 2000, provinces and kabupaten/kota held just over Rp 7.4 trillion in reserves. By the end of fiscal year 2008, these reserves had grown to approximately Rp 71.2 trillion (about 1.5 per cent of GDP). The build-up of subnational reserves appears to have been largely by happenstance: "That is, subnationals have not accumulated cash balances with the intent of using them to finance capital projects, although they may do so on an as-needed basis."[27] More importantly, most subnational governments acquire financial assets in enterprises not aimed at public service delivery. BPDs invest most of their funds in treasury notes and government bonds, whereas many of the 435 'other' enterprises—the second largest groups of recipients of subnational government investment in financial assets—seek to provide a commercial service in competition with the private sector counterparts. Examples of such enterprises are: airlines, hotels, football teams, insurance companies and graphic design bureaus.

In contrast, in 2007 only two provinces and fewer than 10 districts invested funds in water utilities, of which there are currently more than 300 (Oosterman, 2009). Indonesian subnational government borrowing has been infrequent and for small amounts and nearly all has been from the central government and that has a troubled history. From 1975 through 2004, total subnational borrowing equaled only 0.2 per cent of (2004) GDP in nominal terms. Borrowing thus became insignificant following decentralization. Since decentralization began in 2001, through the end of 2008 only 10 local governments (and no provinces) had taken out long-term loans (from the Ministry of Finance on-lending channel) to finance infrastructure.[28] Thus, subnational debt to date has played no significant part in the decentralization program.

A number of factors have hindered the growth in subnational capital spending in Indonesia. According to Lewis and Oosterman, the subnational government capital planning and budgeting process is myopic and "focuses on relatively small investments that can be carried out during the course of 1 year."[29] The contracting process is short-term, tedious, and can be fractious. Human resources at the subnational government level

[26] See Lewis and Oosterman (2010).
[27] Ibid.
[28] Ibid.
[29] Ibid.

are severely constrained. The education accomplishments and technical skills are at low levels, there is a lack of project planning and management capacity and computerization is at low levels.

These results underscore that central government should increase its efforts in assisting subnational governments to better plan and manage capital projects, particularly those major ones that involve public infrastructure.

Indonesia Local Government Ratings

In November, there was a presentation by Standard and Poor's and Pefindo that talked about the methodology and early results on their ratings of Indonesian subnational borrowers. The results provide insights as to how the credits are perceived and their strengths and weaknesses, as well as with the subnational sector in general. The overarching finding was that there was a great disparity in administrative capacity at different government levels. In particular, there is a lack of qualified staff and poor financial management skills and low computerization, with reliance on manual procedures. The civil service lacks an effective recruitment and compensation system.

Fiscal framework of the county is still evolving. Expenditure is now decentralized but revenue collection still centralized. The ongoing reforms will continue to affect the division of revenues and expenditures. In the process of reform and decentralization, the fiscal guidelines have become better defined over time. Budget deficits are limited to 6% and the outstanding debt stock to 75% of revenue.

But, central transfers (DAU) remain the dominant source of revenue especially for lower level governments and the current DAU formula has not improved revenue equalization. Previously, large reserves were accumulated, but now the reserves declining while a large backlog of infrastructure needs remains. According to the Standard and Poor's analysis, the procurement rules covering projects are onerous and capital expenditure execution rates are low. Regulations now require performance-focus budgeting with medium-term projections framework, but so far actual implementation has been low.[30]
The analytical framework used by Standard and Poor's to rate local and regional governments consists of combined quantitative and qualitative analysis that involves eight major factors. As is the case with most credit rating agencies, the sovereign rating (country rating) usually forms a cap on how high a credit rating for an individual subnational unit can obtain. This is comprehensive national factor is referred to as an institutional framework, which can also take into consideration the framework of the local governments taken as a sector.

- **Institutional Framework** – this is the only rating factor that S&P assess on a country basis for each level of government.

[30] "Credit Ratings and FMA Findings: DKI Jakarta & Surabaya" Presentation by Yee Farn Phua, Standard and Poor's (Jakarta, November 21, 2011). p.30.

The following seven factors are based on the individual characteristics of a local government:

- Economy
- Financial management
- Budgetary flexibility
- Budgetary performance
- Liquidity
- Debt burden
- Contingent liabilities

In addressing the overall institutional framework, Standard and Poor's indicated that the government accounting standards are evolving. The BPK conducts comprehensive audits on local governments; but qualifications of opinions are frequent. Reporting quality and frequency vary, with delays in filing results. Public disclosure is limited and, of great interest to international investors, publishing these in English is uncommon. With a lack of computerization, manual procedures can lead to both inefficiencies and corruption

The legacy has been one of a weak credit culture. Local government borrowing thus far has been almost all from the central government. Arrears of this subnational debt remain high, mostly from PDAMs. There has been reluctance to repay arrears and to address the solvency problems of local SOEs. But overall local government debt levels are very low (less than 1% of GDP) and are very manageable, especially in view of the strong reserve positions. Bond issuance is now allowed, but no local government has issued bond yet and earlier attempts were discouraged by the central government. In case of problems, formal bailout procedures and any precedent are lacking. Standard and Poor's views the likelihood of "extraordinary support" from the central government as "low."[31]

In assessing the results, S&P noted that the GDP per capita in Indonesia is significantly below that of peer cities in developing countries within the same rating category, but noted that the Indonesian cities have higher rates of growth.[32] On the negative side, the unemployment rate is high due large rural-to-urban migration. Investments are a relatively lower share of expenditures despite large infrastructure gap. Operating margins are lower, coupled with high personnel expenditure. Last, there is high reliance on transfers (Surabaya) and a low revenue flexibility given its high reliance on transfers from the central government.[33] On the positive side, these two governments have adequate reserves and low debt levels, which put both cities in a favorable position to raise funds for infrastructure investment.[34]

[31] Phua (2011), p.31

[32] The rating agencies, as customary, allow themselves to mark "up" or "down" a quantitative score based on judgment.

[33] In the area of financial management, both cities were rated by S&P as 4+ on a scale of 5- (weak) to 1 (very strong). This was considered to be sound to intermediate.

[34] Phua (2011), p.36

Table 3. Credit Weaknesses: Jakarta and Surabaya

DKI Jakarta	Surabaya
ICR: Confidential	ICR: BB/stable
✓ Liquidity profile is adequate and debt levels are low	
✓ Commercial center of the country, diversified local economy with steady growth trend.	✓ Economic center of the East Java region with diversified local economy
✓ Strong operating performance, although balance after capital expenditures may be volatile going forward	✓ Budgetary performance is adequate ✓ Low contingent liabilities

Source: Standard and Poor's Presentation Phua (2011).

As of November 2011, S&P was rating Surabaya as BB and it was not releasing its rating on Jakarta. In January of 2012, Moody's and Fitch both upgraded the sovereign credit of Indonesia to Baa and BBB-3, respectively. For the time being S&P continues to carry the national credit at BB+.

Looking Ahead: A Financial Intermediary for the Subnational Bond Market

As was just discussed, Indonesia appears on the verge of regional bonds being issued. A legal and regulatory framework, still untested, is in place and market conditions seem most favorable, with the nation's credit rating and that of its large banks being lifted into the creditworthy, investment-grades. As is pointed out in Appendix B, work done a few years but likely still relevant (although in need of update) indicated that several provinces and kabupaten/kota were likely good candidates for bond issues and improving economic and fiscal conditions since then have no doubt extended the list.

On the other hand, as the recent rating agency reports and other research attest, there are still several barriers to bonds being sold in the private markets being a feasible alternative for most subnational governments. To reiterate the shortcomings, Indonesia has institutional problems stemming from the fact it has no track record for regional borrowing in the financial markets, the intergovernmental system still is evolving, local governments are still highly dependent on intergovernmental transfers, and human and managerial capacities to formulate and effectuate investment programs are wanting. While these problems are not all related to the size of a government, many are. These conditions are not unique to emerging economies and have been addressed in a variety of ways. International models are available to providing access to the markets, but recognizing that both oversight and technical assistance are very much needed, especially the smaller, less sophisticated units.

Governments have many policy choices as to how to address these handicaps that restrict capital market access, but in the case of Indonesia the idea of creating a financial

intermediary to assist smaller government seems particularly appropriate. While there is much detail that could be added, the basic idea is to provide an entry point to the capital markets, while avoiding the costs and risks of governments wandering into the bond market ignorant of and ill prepared to deal with the demands of the financial markets.

Why an Intermediary ("Bond Bank")?

A common characteristic in an emerging country's subnational borrowing is that the individual loans are small, too small in many cases, to be of interest to the private capital markets, which are oriented to larger (and few) commercial borrowers. This market situation often commends a pooling of small unit credits into a larger, more efficient grouping in order to achieve various economies of scale that are possible with larger issuer of bonds.

In addition, pooling brings a reduction in risk through portfolio diversification, resulting in reductions in the cost of borrowing to the participating local government borrowers. The technique of bond banking, where an intermediating financial entity groups together smaller underlying loans, and itself borrows in the financial markets has seen extensive use in the developed markets but thus far only limited use in developing country financial markets.[35] Major difficulties in adoption appear to be reluctance of central government on-lending agencies (including government-owned banks) to relinquish control over the borrowing by subnational governments and the limited capacity of local markets themselves to handle longer-term debt transactions.

The essential relationships in the bond bank approach are depicted in Figure X. The bond bank in effect can bundle the underlying subnational debt and then sells its own bonds to investors in the capital markets.[36] The basic idea behind the pooling concept is to develop a portfolio of underlying loans that can then be remarketed in bulk to the securities markets as bond bank obligations. Bond bank obligations almost always carry with them a variety of enhancements, such as added reserves, various intercept provisions and, perhaps, commercial bond insurance. All of these functions benefit from economies of scale and the provision of technical expertise.

The pooling concept also provides a number of inherent enhancements in terms of the size and diversity of the pool's portfolio, which serve to protect it against individual "event" risks. This means that with appropriate design, a debt service problem with an individual borrower can be successfully handled through means of reserve funds, various other credit supports, and by the overall pool's diversity. Hence, its financial stability and mitigation of credit risk add to the protection of the investors. In addition, there are

[35] See John Petersen (2002). Given their small size and lack of market experience, local government issuers face high transaction costs on their individual bond sales. Aside from the economies of scale, the bond bank intermediary provides on-going oversight and helps enforce accounting and reporting norms at the local government level. The entity can serve as a clearing house for current reporting to the market.

[36] There are legal distinctions between "pools" or "funds" that represent the resale of interests in the underlying portfolio and in a "bond banks" that sell their own obligations that represent undivided shares in their "business." These distinctions can be important in matters of securities regulation and taxation.

typically economies of scale that flow to the pooling intermediary, which are especially important in the financial markets. These economies include the advantages of scale in the original bond offering transaction (which includes such items as legal, advisory, investment and trustee fees), and also the credit monitoring and data collection that the bond bank does on behalf of the final investors. The TNUDF in India pioneered a credit pooling approach in India and is a leading example in emerging markets.

The bond bank concept has seen extensive use in the developed financial markets of North America and Europe. It is important to note that the bond bank need not be operated as government agency *per se,* but can be managed under contract by a private bank or financial services firm. However, it is important that its legal structure be such as that it can enter into agreements with the underlying borrowers to enforce its contracts and to allow for an interception of revenues in the case of debt serve payments deficiencies by borrowers.

It is clear that bond banks to be effective must work on a commercial basis and as institutions must view themselves as part of the financial marketplace rather than as a government agency. In that sense they need independence in decision-making and clear economic objectives in their operation, and act with transparency. The bond banks are almost always small in size in terms of personnel and frequently contract out for specialized services.[37] They are often administered by individuals that have a private-sector background in banking and finance.

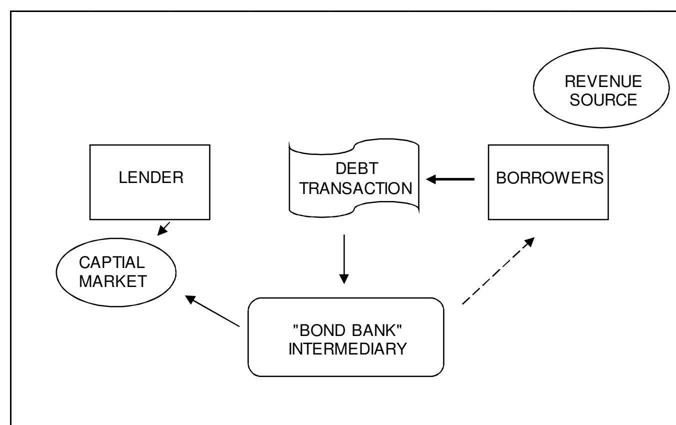


Fig. 11. Bond Bank (Pooling)

[37] Bond banks in the United States typically have a small staff of 3 to 10 persons. They often rely on government departments for technical (engineering, scientific, specific program) support. The banks typically hire outside and legal and accounting services to maintain their independence.

Other Countries' Experience

There are numerous examples in the developed countries of specialized intermediaries that are specifically geared toward financing local and regional governments. As noted, bond banks are found in the Canadian provinces. Similar financial intermediaries dedicated to subnational governments are found in Sweden, Finland and the Netherlands, where state-sponsored local government co-operatives are used to meet local government financing needs by borrowing in the markets and then on-lending to individual units. Now privatized, but formerly state-owned, specialized banking companies have provided for the financing local governments in France, Belgium, Spain and other Western European countries. In Europe, there has been a traditional preference for financing local government credits (except for the very largest borrowers) through the banking system, first with state-owned banks, but later with those banks with special "windows" to meet subnational needs.[38]

Recent European activity is relevant. The European Bank for Reconstruction and Development (EBRD) has operated a Municipal Finance Facility for the EU accession countries that on-lends, enhances, and subsidizes maturity extensions for local government "municipal" utilities in conjunction with local commercial banks. Loans and enhancements are available in either the Euro or local currencies to local banks making loans to local governments. The EBRD has acted as a direct borrower either through direct placements or local-currency denominated bond issues in several emerging local credit markets, including the Russian Ruble, Polish Zloty, Czech Krona, Hungarian Forint, and Estonian Kroon. The policy was pursued to take advantage of market opportunities and to help develop local capital markets. The domestic currency bond and loan proceeds also provide funds for EBRD loans made in the country.[39] The Asian Development Bank, as well, has issued its own local-currency denominated bonds (in India) that provide funds for lending in the local currency and has arranged long-term currency swaps (in the Philippine Peso) for purposes of lending to banks that on-lend funds for infrastructure borrowers.[40]

Designing "market-friendly" credit access for subnational governments is not an easy task in the context of small, shot-term oriented and very volatile financial markets. Even though the markets themselves are primitive, the means of working through them to raise long-term capital may need to be sophisticated.

As should also be obvious, so long as donor loans are the cheapest source of capital (and the only source of long-term capital) and where no long-term market exists, there is a powerful motivation for the sovereign government itself to dominate in the borrowing market and leave little capital on the table for the subnational sector.

The majority of bond investors, even in the developed countries, in general are risk averse and passive in that they rely heavily on outside credit appraisal (such as credit

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[38] See Petersen and Freire (2008), *Subnational Credit Markets in Developing Countries* pp. 34-35
[39] See "Local Currency Financing" at "www.ebrd.com/markets/investor/local."
[40] Remarks of Alfredo Pascual (2004).

ratings). In these cases, a trustee administers the payments and enforcement of the loan contracts. The standard practice in the bond guarantee is to provide for the immediate payment of full debt service. The LGUGC, the Philippine bond guarantor that is unique in the developing markets, provides for such full credit risk guarantees. This is an efficient mechanism to separate a credit risk taker (i.e. the guarantor) and the fund provider (guaranteed-bond investors). Alternatively, pooling of sub-sovereign credits and provision of a reserve for over-collateralization would enable the pool to obtain high credit rating and thus improved access to the bond markets. When banks are dominant player in sub-sovereign finance, they can appraise and take the credit risk but cannot extend loans with adequate maturity due to deposit-based short-term funding, a second-tier institution, like FINDETER, can effectively separate a credit risk taker (i.e., commercial banks) from the fund source.

Infrastructure finance presents special difficulties in emerging markets because of the unavailability of funds for long-term investment. The resulting loans are of much shorter duration than the expected life of the improvement. This places great pressure on taxes and charges that attempt to service debt and rapidly recover the capital component. Also, commercial banks, the capital base of which is typically based on deposits, are ill suited to make long-term loans unless they are provided special (non-market) funds for that purpose. On pragmatic grounds, short maturities severely impact the creditworthiness of individual transactions since the rapid payback of principal sharply elevates debt service.

For the most part, the long-term maturity needs of infrastructure investment have been met by the on-lending of donor funds, often at concessional interest rates and with long grace periods. However, credit enhancements can be used to lengthen effective maturities in developed markets, by employing late-maturity partial credit guarantees and their variants such as put options that are backed up by liquidity support funds[41] Although not providing technically a liquidity facility, to some degree, INCA has acted in a similar capacity acting as a buyer of outstanding municipal bonds and providing re-financings. INCA's "bad bond subsidiary," NEWCO, buys troubled bonds for restructuring. NEWCO was made possible by donor-based capital, which allowed INCA to assist troubled credits without encumbering its own capital base.[42] This "bad loan" approach might be a model for the PDAM loans in Indonesia.

[41] Upon the exercise of a put option by lenders, the options' counter-party needs to pay out to the lenders as in the case of the guarantor. When the party lacks adequate credit standing, its credit needs to be enhanced one way or another. This technique has yet to be used, but is said to be under consideration in the case of TNUDF, which belatedly starting using a call option on its market offerings.

[42] INCA's publicly held bonds carry covenants that require its meeting capital adequacy requirements that restrict its ability to hold sub-par bonds in portfolio.

Table 4. Subnational Bonds Comparison

Country	Debt Service Ratio Limit	Debt "Revenue" Limit	Other Restrictions
Brazil	Debt service cannot exceed 15 percent of total revenue or operating surplus for previous year, whichever is less.	Borrowing cannot exceed 27 percent of total "revenue" in approved budget.	• State governments cannot borrow from their own State bank; • No new bond issues; • Long-term credit only for investment; • Restrictions on foreign-currency debt.
India	None.	None.	• No borrowing in foreign currency; • Long-term credit only for investment; • Need case-by-case approval of State government for municipal loans or bonds.
Mexico	None	None	• No borrowing in foreign currency • Loans and bonds by states and local governments must be rated by rating companies (through bank regulation) • Loans/bonds are secured in intergovernmental payments
Philippines	Debt service not to exceed 20 percent of "regular income" which includes inter-govern-mental payments. Of those payments, not more than 20 percent can be used for debt service, All LGU debt is effectively general obligation. Some special district borrowing (water).	None	• Bank loans for current and long-term investment needs. Use of intercept of transfer payments as loan security • Bonds are restricted to "self-supporting" (revenue-producing) investments. • Bond issues subject to central government review for meeting debt guidelines • Localities must budget for committed debt service payments for their budgets to be valid.

Source: Petersen and Soriano (2008)

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