CIRJE-F-541

Subnational Borrowing in Japan
: from ‘Implicit Guarantee’ to
Market Discipline and Fiscal Rule

Nobuki Mochida
University of Tokyo
January 2008

Discussion Papers are a series of manuscripts in their draft form. They are not intended for circulation or distribution except as indicated by the author. For that reason Discussion Papers may not be reproduced or distributed without the written consent of the author.
Subnational Borrowing in Japan
: from ‘implicit guarantee’ to
market discipline and fiscal rule

by
Nobuki Mochida
The University of Tokyo, Japan
mochida@e.u-tokyo.ac.jp

Abstract

In many countries, local borrowing is an important source for long-term development projects such as roads, bridges, and waterworks. Local borrowing for such projects is justified on the ground that benefit of these projects often last decades and the cost of these projects should be borne by future tax payers. However, there are serious concerns with issuance of local bonds by decentralized local governments. Local governments in Japan would not default on their borrowing because of such “implicit government guarantee.” As a result, lenders and tax payers have lost incentive to monitor subnational government because they view their investment as protected by a central government. The purpose of this paper is to review the local borrowing in Japan. At first, the transition from administrative control to rule-based, market oriented system is described. Following this, soft budget constraint and effectiveness of market discipline is investigated. Third, bank lending and local bonds as a way of financing long-term infrastructures are compared. Finally, we shed light on the credibility of local bonds in Japan and offer some proposals.

JEL Classification Numbers: H72, H74, H77

Keyword: local debt, fiscal discipline, soft budget constraint
INTRODUCTION

In many countries, local borrowing is an important source for long-term development projects such as roads, bridges, and waterworks. Local borrowing for such projects is justified on the ground that benefit of these projects often last decades and the cost of these projects should be borne by future tax payers. However, there are serious concerns with issuance of local bonds by decentralized local governments. When transfers are based on ex post financial needs rather than ex ante characteristics, the central government can bail out regions experiencing financial difficulties. Knowing that, local governments may be inclined to overspend, under-tax, and borrow excessively, since they can expect the central government to eventually guarantee repayment of local debts (Rodden and Eskeland 2003). Moreover, lenders also lose incentive to monitor subnational government because they view their investment as protected by a central government. This kind of soft budget constraint problem would not exist if the central government could commit to a non-bailout policy, but it is difficult for the center to do so in the short run.

Faced with these challenges, countries have adopted various institutional approaches to contain subnational borrowing. According to Ter-Minassian and Craig (1997), these approaches have been grouped into four broad categories. Some countries rely on capital markets to contain subnational borrowing. In several countries, the central government is empowered with administrative control over subnational borrowing. The central government can also try to contain subnational borrowing by imposing a fiscal rule. Under the cooperative approaches, a negotiation process between the central and the subnational government designs subnational borrowing controls.

Given these background, Japan is now under the transition period where implicit government guarantee as well as administrative control are being phase out in favor of fiscal rules and market discipline. So far, permission from the central government is required, repayment cost of local bonds are fixed by Local Public Finance Plan. In addition, the system of financial rehabilitation is used to put fiscally distressed local government under the direct control of the central governments. Local governments, therefore, would not default on their borrowing because of such “implicit government guarantee.” As a result, lenders and tax payers have lost incentive to monitor subnational government because they view their investment as protected by a central government. The general government debt outstanding amounted to about JPY 760 trillion and debt/GDP ratio exceeded 150 per cent in FY2005. About JPY 170 trillion was local government debts. The Japan’s local bond is now paid to attention not only in the domestic policy debates but also in foreign countries, as the bankrupt of Yubari City decorated top one side of the New York Times (The New York Times 2007).
The purpose of this paper is to review the local borrowing in Japan. At first, the transition from administrative control to rule-based, market oriented system is described. Following this, soft budget constraint and effectiveness of market discipline is investigated. Third, bank lending and local bonds as a way of financing long-term infrastructures are compared. Finally, we shed light on the credibility of local bonds in Japan and offer some proposals.

LOCAL BOND SYSTEM

Administrative control

We shall begin by brief overview of recent change in the local bond system. The Japan’s local bond system has been severely controlled by the central government. Adopting the no-loan policy as a rule, the case that local bond can be exceptionally issued is enumerated in the law. The cases stipulated in the article 5 of local public finance law include: 1) expenditure for public enterprises like traffic, gas, and water service, 2) investment, loan, 3) refinance of local bonds, 4) disaster restoration works expenditure, disaster relief expense, and 5) public works. Local governments have had to obtain permission from the central government, when they want to issue local bonds. For local bonds that have received such permission, the entire amount of future expenses for repayment cost was appropriated in Local Finance Plans where revenue sources are secured by the Local Allocation Tax. Investors and financial institutions can lend to financially weak local governments without monitoring credit risk.

The Ministry of Internal Affairs and Communications (MIC) monitored the financial position of the local government directly, and have not permitted bond issuance if debt-service ratio would exceed a certain limit. In addition, when fiscal deficit becomes more than a certain limit, the local government must offers applying for the Local Fiscal Reconstruction Promotion Special Law, and is put under the direct control of the central government (The Ministry of Internal Affairs and Communications 2006a). Thus, it can be said that local governments would not default on their loans under the current local finance system.

The main creditors of local governments were the central government and public enterprise. Looking at the creditors a decade ago (FY1988), the private capital amounted to only 40 percent of the total. On the contrary, public fund –Fiscal Investment and Loan Program and the Japan Finance Corporation for Municipal Enterprise- reached to almost 60 percent. Local borrowing depended heavily on the public fund. In addition, three-quarter of private fund was derived from private placement bond procured from the related local financial institution. The share of publicly advertised bond for many and unspecified investors was only 9 percent or less. To put it in another way, neither the taxpayer nor the investor were able to monitor the
fiscal management of the local authority. It was not surprising to see that cost of local bond was almost uniform across the countries, irrespective of liquidity and the creditworthiness. As for all of public advertisement groups, issuance conditions were uniform.

There is, however, serious concerns with implicit government guarantee. Neither the taxpayer nor the institutional investor takes into account credit risk of bonds issued by local authority with financial difficulties. Local residents have no incentive to defeat the mayor and the assembly member by the election. The more a mechanism that does not allow local government to go bankrupt is enhanced, the less credit market and taxpayer exert a disciplining role. In the following, we outline the recent reform packages and assess them.

**Prior consultation system**

Traditional approval system has been replaced by prior consultation system in FY 2006, since Diet approved the Omnibus Law of Decentralization in FY1999. Under the new scheme, the local government can issue bonds even if mutual agreement with MIC is not obtained. On the other hand, the permission system will be still applied to local governments whose debt service ratio exceeds 18 per cent, so that the creditworthiness of the entire local bond would not be changed. The level of 18 percent was decided so that the risk weight attached to the local bonds to be zero. It turned out that 12 prefectures and the designated major cities and 400 municipalities will become local bodies under the permission system at the first year (The Ministry of Internal Affairs and Communications 2006c). Taking deteriorating fiscal conditions since FY 1999 into accounts, this result is not surprising. Many experts expect prior consultation system to be not the final goal, but step to complete liberalization.

**Bond market**

The main creditors of local authorities have also been changed from public funds to private funds derived from capital market. Since the reform of the Fiscal Investment and Loan Program of 2000, public fund as of creditors to local government has been slashed. Until the m, postal savings and pension funds had to be deposited in the Trust Fund Bureau of Ministry of Finance by law. Since these deposits were loosely credited to local governments, it has been halted in April, 2001 as a part of deregulation in financial sector. Instead, the central government has to issue whole national bonds (investment-and-loan bonds) in the capital market, and can only sublease these funds to local governments. As a result of this reform,

1 The degree of implicit government guarantee for disagreement bond will change. It might be limited to non-receiving local authorities of the Local Allocation Tax that launch to issue of the disagreement bond.
local governments need to finance more money from the capital market on their own.

[Insert figure 1 near here]

The public sector funds now consists of three components; 1) “fiscal loan funds” in which the central government issues national bonds and subleases them to local governments; 2) direct financing of postal savings and the postal life insurance reserve fund; and 3) funds of the Japan Finance Corporation for Municipal Enterprises. The public sector funds will decrease further, because the direct financing of postal savings and the postal life insurance reserve fund will be abolished in fiscal year 2007. In addition, it has been decided that the Japan Finance Corporation for Municipal Enterprises will also terminated in FY 2008. These changes can be demonstrated by the fund raising structure of local bond (see figure 1). The public funds decreased absolutely, and its relative ratio reduced to only 40 percent or less in FY 2007. Fall in public fund has been compensated by increase in private capital, with growing volume of publicly advertised bond.

2 Direct financing to local government from postal savings and the postal life insurance reserve fund is still permitted.
Box 7.1 Bank lending or bond market?

There are two models of municipal credit markets: bank lending, which financed municipal investment in Western Europe throughout most the 20th Century; and municipal bonds, which have been the foundation of municipal borrowing in North America. The municipal bank philosophy can be summarized in three principles:

- Municipal bank strives to establish permanent partnership relations with its local clients. One argument for establishing municipal banks is that only they can afford to support municipalities in the early stages of their learning about the credit market.
- Municipality bank performs monitoring function in stead of individual investor. Monitoring is facilitated by the partner relationship that gives the municipal bank special knowledge of the municipality’s budgets and finance.
- The bundled services that municipal banks offer rarely are priced to correspond with incremental costs for particular services. As a result, credit assessments are used rarely to establish the risk premium that ought to be charged to a particular borrower.

Municipal banks, however, have been severely challenged by financial sector deregulation. Most have also lost their preferential access to sources of long-term savings, forcing them to compete with other financial institutions for savings. The problem of bank lending within the framework of standard commercial banking is exposing municipalities to short-term savings horizons. On the other hand, local capital financing through bond issuance offers a different approach to the three principles underlying municipal bank lending.

- The essence of a bond issue is that it is freshly competed for on each occasion. Neither institutional nor individual purchasers of bonds need have a long-term relationship with the issuer. In a municipal bond market, information on local financial conditions is provided by issuers to the market. Bond markets rely on public disclosure of municipal financial information. Credit-rating firms have developed a presence in every municipal bond market of significant size.
- Municipal bond market unbundled the various support functions that a municipality can receive from a municipal bank. Local governments can make separate decisions about where to maintain their liquid deposits and where to obtain financial advisory services. Because urban infrastructure in mature bond markets is financed through bond issues of 20-30 year maturities or even longer, bond issues are assumed to open access to longer-term sources of funds than bank loans.


There is no need to choose a single instrument as the “right” way to handle local government credit. Many countries simultaneously use bank lending to municipalities and local bond issuance. The policy rationale, however, justifies emphasizing development of local bond
markets (see box 1). The public monitoring and public disclosure required for efficient bond market operation are consistent with greater transparency for all public financial transactions. Financial sector deregulation has eliminated the possibility of having quasi-monopoly municipal banks draw on especially protected government allocations of low-cost, long-term savings to finance local infrastructure. In a competitive world, bonds have more ways to tap institutional and household long-term savings. Even when the ultimate credit extended to a local government continues to be a loan from a bank or other financial institution, the financial intermediary will increasingly raise its own capital for on-lending from bond issues. That is the direction of change for the most successful intermediation vehicles. Even Credit Local de France, the original municipal bank, now raises the bulk of its financing on the bond market. When it concerns the big city and administrative divisions in our country, the local authority should separately found the mechanism of a joint issue about a small-scale municipality expanding the funding from the private organization by the issue of publicly advertised bond etc.

One-to-one negotiation

The way of bond floatation has been changed too. 42 out of 1800 municipalities now issue publicly advertised local bond in the capital market in FY 2006 (Investigating Committee on Local Bond 2007). In the past four decade, Japan employed so-called “uniform negotiation system”, where only MIC was responsible for the negotiation with creditors so that cost of individual local bond would be uniform across the regions.

Reflecting the widening gap in the secondary market prices, the central government has allowed the Tokyo metropolitan government to issue bonds under different conditions than those applying to publicly advertised bonds issued by other local governments since April 2002. This new approach—called the two-table-approach—could have served to enhance market principle. In addition, four local bodies (Tokyo, Kanagawa Prefecture, Yokohama City, and Nagoya City) adopted “one-to-one negotiation” method in FY2006. Under this scheme, each local body negotiates with creditors voluntarily and sales bonds through their own marketing. However, remaining local bodies still adopted uniform negotiation method, since creditworthiness of local bonds was uniform thanks to implicit government guarantee.

However, the Fair Trade Commission argued that the uniform negotiation was inconsistent with a competition policy and does violate Antimonopoly Law in August, 2006. According to this statement, the MIC urged local governments to adopt one-to-one negotiation approach on August 14, 2006. In September 2006, a lot of local bodies could not find creditors; consequently issuance conditions came to reflect the price gap at the secondary markets. So far, there was no process in which both creditor and issuer search optimum conditions in the Japan’s local bond market. The intention of the MIC was strongly reflected in the uniform
issuance condition (Standard & Poor’s 2006b:2). The shift from uniform negotiation to one-to-one negotiation would have served to enhance market discipline.

**Early warning system**

It turned out that the financial condition of small local governments had deteriorated. Yubari City, Hokkaido falling into default declared to submit application to local body under the fiscal rehabilitation plan on June 20, 2006. The MIC agreed on the fiscal consolidation plan of Yubari City on March 6, 2007. The city was designated by the Ministry as the local government under the fiscal rehabilitation scheme. This means its budget will be directly controlled by the ministry, effectively stripping the city of its autonomy. Under the consolidation plan, 18 years financial reconstruction plan will last through FY2024: slashing the number of municipal officials; raising utility fees; and shutting down public facilities to pay off its JPY 35.3 billion debt. The source of defaults is lack of the fiscal discipline, an excessive investment, and myopic fiscal management that covers deficit by floating debts3. Until June 2006, Yubari had hidden its snowballing debt by window dressing its account, making it difficult for the MIC to learn the truth. As a result, it had accumulated JPY 63 billion of debts (14 times annual tax revenues)4.

To prevent a recurrence of “Yubari shock” became to be paramount importance. Several problems became evident with the current fiscal rehabilitation scheme. Local governments would be designated as fiscal rehabilitation authorities, if their deficit in the general account would exceed certain limit. However, the debt on the general account is recognized only when the maturity is more than one year, thereby floating debt is not considered. Moreover, the special accounts and public corporation’s debts are not taken into account, when the center designates financial rehabilitation authorities.

Underlying goal of new system is to prevent local body from going bankrupt by establishing early warning system. Law Concerning Improvement of the Financial Condition of local authority 2007 was consequence of this goal. The new system contains three elements: 1)

---

3 Looking at the local governments applying fiscal rehabilitation plan after the 1970s, it concentrated on the old coal production region in Fukuoka Prefecture. A common source of difficulties was urgent need for the regional economic development in response to change in the national coal policy. Because the time of the close of a mine in Hokkaido was later than that of Fukuoka prefecture, financial deterioration of Hokkaido’s area has delayed. Although Yubari City is an extreme case, 2nd and 3rd Yubari City would occur in near future (For detail, see Standard & Poor’s (2006a).

4 It also turned out that Yubari city had borrowed long term money illegally from the Hokkaido Development Fund without governor’s permission.
monitoring financial position of local government by new comprehensive index; 2) central and prefecture government’s involvement in rehabilitation planning; and 3) temporary financing of deficit covering local bond (Ministry of Internal Affairs and Communication 2006d). As Morgan Stanley report points out, “the transparency and the early warning were introduced. There is also a deterrent effect of moral hazard, which is more effective than market discipline. It is significant for containing tax payer’s burden” (Morgan Stanley 2007:5). On the other hand, the discussion on the debt adjustment continues among MIC informal study group. Nevertheless, debt adjustment would not apply to the existing debts and the probability of default would be minimized by the new Law.

In sum, the change in last few years was epoch-making in the history of Japan’s local finance since U.S. occupation after the World War II. The driving forces for these reforms include three factors: decentralization, deregulation in financial sector and the deterioration of the financial conditions of the small local governments. The reform is a step in right direction. It will take more time for the local government and the institutional investor to become accustomed to new system as a player. One of the concerns is that small-scale municipalities with scarce fiscal resources would become disadvantageous as decentralization progresses.

**FISCAL CRISIS AND LOCAL DEBT**

**Soft Budget Constraints**

The next issue to be dealt with is to examine the impact of existing local bond system on the fiscal behavior of the local government. Before investigating Japan’s case, we shall take a brief look at the theory of soft budget constraint (For detail, see Vigneault 2006). The possibility of a bailout does not stem from the existence of a common pool per se, but from the way it functions. When the transfers are based on ex post financial needs rather than ex ante characteristics, the central government can bail out the local government on the verge of bankruptcy. In this case budgets constraint faced by the sub-national government becomes soft (Kornai, Maskin and Roland 2003). If sub-national government under collect taxes, overspend, or default on the debt, they expect the federal government to cover the gap between actual and affordable expenditure. Moreover, lenders also lose incentive to police sub-national governments because they view their investments as protected by a federal government guarantee. This problem would not exist if central governments could commit credibly to never revising transfer allocations ex post, that is, to non-bailout policy. Although such a policy stance may be optimal in the long run, it is difficult to commit in the short run, especially if it involves painful local default or a reduction in the provision of basic public services. In addition, a default by one region can increase the cost of borrowing for all other regions in a federation, so neighbor regions may be interested in providing the defaulting
Recent survey revealed that the federal governments have provided bailout transfer to defaulting sub-national government in 22 out of 52 countries in the past 20 years (Singh and Plekhanov 2005:11). In Sweden, 1,697 bailouts were granted to municipalities during the 1970s and 1990s (Vigneault 2006:152). Fiscal equalization combined with borrowing autonomy in Sweden is likely to have contributed to fiscal indiscipline during this period. The reduction of regional fiscal autonomy in Italy was so severe that by the end of the 1970s regional governments were dependent on transfer for almost 97 percent of their financing. A continuous system of bailout was thus created. The reforms introduced in the 1990s went some way toward hardening local government budget constraints, but the soft budget constraints problem has not been eliminated in Italy (Vigneault 2006:150).

Second, when sub-national governments are heavily dependent on transfers and tax sharing, the central government can not commit to ignore future bailout requests, even if sub-national governments have full autonomy over how much borrow each year. Germany’s system of fiscal federalism provides a striking example. Creditors believe that the “equivalent living conditions” clause and the equalization system imply a rather straightforward federal guarantee of sub-national debt. Bailout expectation among the recipient states was quite natural. The expectations were confirmed explicitly in 1992 when the Federal Constitutional Court handed down its decision stipulating that the Constitution required the federal government to providing bailout transfer to Bremen and Saarland (Rodden 2003a:172-178).

Third, hierarchical or market-based oversight on sub-national borrowing can fail. The disastrous bailout episode of the late 1980s and 1990s among the Brazilian states provides striking example. The Brazilian constitution and intergovernmental relations provided voters with neither information nor incentive to monitor state governments. Creditor believed that state debt was guaranteed by the federal government. Thus, when faced with an unexpected external shock such as drop in inflation rate, high interest rate, state governments faced no incentive to adjust; rather the logical course of action was to demand a bailout. The center’s vulnerability is that some states like San Paulo are too big to fail. The most important reason for the center's vulnerability, however, was the fact that the center itself is often little more than a loose coalition of state-based interest groups (Rodden 2003b:229-237).

**Causes of Expanding Fiscal Deficits**

Turning our attention to Japan’s local finance, the share of local debts in gross domestic product is about 37 per cent in FY2005, which stand out in Japan’s history of public finance. In fact, the share in GDP was only 5 per cent during the high economic growth period of 1950-60 and roughly 15-20 per cent after the oil crisis of 1970. Therefore, increase in local
debts after the burst of bubble economy has been marked (Mochida 2004:243-244). In addition, the Japanese local debt is remarkably high, by international comparison. The Japanese local debt problem is very severe compared with other countries, since the debt/GDP ratio in Britain is only 5.5 per cent, 11.3 per cent in Sweden and 20.8 per cent in the United States as Figure 7.2 shows. Local debts in Japan are now worst not only in Japan’s history but also in international perspective.

[Insert figure 2 near here]

Why has the local debts soared in recent years? The answer to this can be derived from Table 7.1. This table shows the changes in net lending of local government as a percentage of GDP and they are divided into the improvement period (1989-1995) and deterioration period (1995-2001). This table suggests the following points. The source of deterioration in net borrowing was almost all in expenditure increases, and the contribution of revenue decrease was negligible. Expenditure increase was largest in government investment driven by public works, while government consumption and social transfer payment increased slightly. On the other hand, the source of improvement was almost evenly divided between cuts in spending and revenue increase. Expenditure cuts were largest in government investment, while final consumption and social transfer increased slightly. The source of increased revenues was concentrated on the indirect tax, grants and local allocation tax, while direct taxes decreased. In sum, the local debt has soared rapidly because local government spending on public works has increased as macroeconomic stabilization during recession periods.

[Insert table 1 near here]

The revenue side is not a main cause of the debts accumulation. Certainly, natural decrease and cuts in both inhabitant tax and enterprise tax has led to stagnation in total tax revenues. The forecast of economic growth rate was also so optimistic that there was unexpected natural decrease in tax revenues (Mochida 2004:245-246). But it is only of minor importance. Instead, the Japanese government implemented economic stimulus package several times during 1992-95 and 1998-2000. It is estimated that the total of the economic measure reaches JPY 136 trillion. Among these, the economic measure with an immediate effective demand was a JPY 17 trillion of tax reduction and JPY 66 trillion of the public works. Anyway, it is evident that the government has been consistently employing a Keynesian type fiscal policy through the 1990’s in order to stimulate shrinking Japanese economy.

Local government spending on public works remains very high by OECD standards (OECD 2005c), reflecting generous support from the central government. Capital formation corresponds to 8 percent of GDP in Japan, of which 80 percent is delivered by the local governments. It is difficult for the center to engage counter-cyclical fiscal policy without

---

5 Though it seemingly looks unnatural that the total annual revenue didn’t decrease during the recession period, this is so because an increase in the grants and local allocation tax had cancelled out decrease in indirect taxes and direct taxes.
cooperation of the local governments. The center also has policy instruments for inducing and controlling whole local governments to cooperate with macroeconomic policy: Local Tax Law; Local Finance Plan; and Local Bond Plan. On the other hand, the central government intended to make local governments expand public works, since it was urgent need to cut central expenditure by the slashing its own public works and intergovernmental transfer. Local governments were eventually forced to expand the public works project by issuing bond, of which principal and interest will be paid by the central government through Local Allocation Tax.

**Incentive to debt finance**

In the fiscal federalism literature, political economy model of grants has examined intergovernmental transfer that may be directly provided to residents (For detail, see Sato 2006). Individual legislators demand project that benefit a particular are or an identifiable group of constituents; the costs of these projects are funded by the center. These projects may be executed by the local government that receives the transfers or directory by the center. Cost sharing creates a fiscal wedge between social marginal costs and locally borne marginal costs. The result is that projects are over expanded, because individual legislators undervalue their prices and impose a large fiscal burden on the nation as a whole. The tragedy of the commons (also known as the common pool problem) occurs, as public expenditures become excessive and regions impose fiscal burdens on one another.

In Japan, common pool problems took the form of generous support to debt repayment cost by the intergovernmental transfer: the principal and interest repayment of the local bonds was included into to the standard fiscal needs of the local allocation tax. As grant entitlement are adjusted upward to finance most of the redemption costs of local bonds issued to finance public works, the LAT creates incentive to rely on debt financing instead of adjusting local taxes or spending levels. This also reflects the use of the LAT system to support national fiscal policy in recent years. In FY 2004, interest and redemption cost of local bonds accounted for 12 percent of local governments’ standard fiscal needs (Cabinet Office 2001). Despite a rapid increase in local debt, the existing fiscal rule on debt servicing costs has not become biding since it deducts bond repayment costs, which are financed through the LAT, from the total amount of local government servicing costs (OECD 2005c:130). According to the type of bond or the fiscal capacity of local government, from 30 to 100 percent of the repayment costs are to be financed through higher grant entitlement. In the scheme of “comprehensive development bond”, for example, 75 per cent of public works are financed by local bond, of which 55 per cent of repayment cost is included into the LAT entitlement. It means that 41.25 per cent (0.75×0.55) of the project cost would be financed by non-residents. Mochida (2004) estimated that the central government finances more than one-third of local government outstanding bond as revealed by table 7-2. Higo and Nakagawa (2001) have
produced similar estimation for FY1999. Council on Economy and Fiscal Policy argued that “inclusion of bond repayment costs into the basic financial need of LAT should be reviewed according to the nature of the project” (Council on Economy and Fiscal Policy 2003).

Three points are worth to mention. First, distinction should be made between individual and whole revenue guarantee of bond repayment costs. The former means that the center commits to guarantee repayment cost of individual local bond. It is not appropriate, since it gives rise to a fiscal wedge between social marginal costs and locally borne marginal costs. On the other hand, “whole revenue guarantee” is to sum up the repayment cost of the total local bonds and appropriate them into the Local Public Finance Plan. It makes sense, since fiscally weak local governments can borrow money to implement its mandated functions. “Whole revenue guarantee” thus works as a comprehensive credit enhancement but does not substitute for credit; thereby creditors to local governments buy local bonds without fear about bankruptcy.

Second, the extent of discretion on bond floatation varies depending on the type of debt. There are implicitly two types of local bonds: independent bonds and obligated bonds. As for the former where the local governments issued bond independently, it is not appropriate to cover repayment cost by LAT, even if “whole revenue guarantee” is necessary as credit enhancement. On the other hand, the center sometimes compelled the local government to issue obligated bonds for several reasons: to cover revenue shortfall in Local Finance Plan; to substitute for borrowing in the LAT special account, and to make up for revenue loss due to tax cut policy etc. Since local governments have no discretion on the issuance of such bonds, the center should have responsibility for providing “individual revenue guarantee” for repayment cost as a matter of course. Third, it is necessary to separate the newly issued bond from existing bonds. Generous support by LAT for the newly issued independent bonds should be terminated. However, the center should commit to provide the LAT to finance repayment cost of existing bonds, since change in the commitment would have adverse effects on the bond market.

**RULES-BASED APPROACH**

As at the central government level, there is an urgent need to restore fiscal sustainability at the local level, and to contain local debt in particular. The central government has removed the approval system in FY 2006. While this may have positive impact on local government

---

6 The risk weight of local bond in the B I S criterion was set to zero as sovereign bond was. Even after Basel II, it will be set to zero as sovereign bond in a standard technique of credit risk based on of BIS criterion.
fiscal discipline by weakening the implicit guarantee on their local bonds, it will deprive the
central government of a direct control instrument over local debt. This calls for a
strengthening other instrument—fiscal rules and market instrument—to discipline local
government fiscal behavior (OECD 2005c:139). A number of countries have relied on
approaches to the control of sub-national government borrowing that are based on standing
rules (Ter-Minassian and Craig 1997; Singh and Plekhanov 2005). Some of these rules set
limits on the absolute level of indebtedness of sub-national jurisdictions (Austria, Spain);
others limit sub-national borrowing to investment purposes (Germany); yet others limit on
sub-national debts to the indicator of their debt service on the revenues (Spain, Japan, Brazil,
Korea). Rule-based approaches have the advantage of transparency as well as avoiding short
term political factors. On the other hand, by their nature, rule-based approaches lack
flexibility and often end up the practices aimed at circumventing the rules. Such practices
include: reclassification of expenditures from current to capital or off-budgets (China); use of
sale and leaseback arrangements (Denmark, Hungary).

Turning our attention to Japan, existing fiscal rule should be gradually hardened, and their
coverage broadened. Central government dictate a number of rules to be respected if a local
government envisages issuing local bonds. The main ones are:
• So-called “Net revenue” should not exceed 5 and 20 percent, respectively, for prefecture
  and municipalities of general-purpose resources (i.e., mainly ordinary taxes, LAT and the
  Local Transfer Tax). The net revenue is defined by subtracting expenditure from the sum of
  local taxes, LAT, earmarked grants, fees and charges, and local bond issues.
• The average ratio of debt repayment costs (only principal and excluding those financed
  through the Local Allocation Tax) to general-purpose resources over the past three fiscal
  years should be below 20 per cent.
• Its ratio of tax collection to estimated tax revenues in the year should not fall to less than
  90 per cent. In addition, a local government setting tax rate below standard rates set by the
  central government is not allowed to issue bonds to finance public works.

If local governments do not comply with these rules, they can not, under certain conditions,
continue to issue bonds. For example, if a local government’s average ratio of debt repayment
cost is between 20 and 30 percent, local bonds for general works projects without central
government subsidies and bonds for recreation, sports, and social welfare facilities are not
permitted. Where the ratio is 30 percent or over, bonds are not approved except for natural
disaster restoration, local public enterprise expense, and other specific expenditures. Also,
municipalities running a “net revenue” exceeding 20 percent of its general-purpose resources
can issue bonds if it has introduced “financial rehabilitation plan” approved by the MIC.
Although short-term financing and a special local allocation tax are provided to local
governments under financial rehabilitation plans, these governments are forced to reduce
excessive personnel, cut salaries, raise their collection of usage and handling fees, and take
other measures under the jurisdiction of the central government. The recent example of a local government under a financial rehabilitation plan is Akaike Town in Fukuoka Prefecture. Akaike became a local government under a financial rehabilitation plan in 1991 and completed its rehabilitation plan in FY2000. Currently, Yubari city of Hokkaido is designated as local governments under financial rehabilitation plans.

Despite a rapid increase in local debt, the existing fiscal rule has not yet become binding. The primary reason for this is that portions that are repaid through the local allocation tax are deducted from public bond expenditures that are included in the ratio of repayment cost. Since the latter half of the 1980s, between 30% and 100% of the cost of repaying principal and interest (determined based on the type of local bond and the fiscal capacity of the issuing local government) has been included in the basic financial needs of the local allocation tax. Another reason is that so far fiscal rules are based on flow-based indices, and thus they have little binding authority against debt outstanding. Mochida (2004) estimated correlation between the ratio of repayment cost and credit risk of local bonds with conclusion that there are no significant correlation between them. This means that current fiscal rule has not been effective for containing local debts. Third, the concept of “net revenue”, which is the basis for dropping local governments to “local government under financial rehabilitation plan” status, is too generous. Local governments can manipulate their net revenue flexibly by issuing more public bonds or liquidating funds. Thus, in order to measure net cash flow for individual fiscal years, local bonds and liquidated funds should be excluded from revenue when calculating net revenue.

Recent reform initiatives could contribute to enhancing the role of fiscal rule. Several problems became evident with the current fiscal rehabilitation scheme. Local governments would be designated as fiscal rehabilitation authorities, if their deficit in the general account would exceed certain limit. However, the debt on the general account is recognized only when the maturity is more than one year, thereby floating debt is not considered. Moreover, the special accounts and public corporation’s debts are not taken into account, when the center designates financial rehabilitation authorities. Underlying goal of new system is to prevent local body from going bankrupt by establishing early warning system. Law Concerning Improvement of the Financial Condition of local authority 2007 was consequence of this goal. The new system contains three elements: 1) monitoring financial position of local government by new comprehensive index; 2) central and prefecture government’s involvement in rehabilitation planning; and 3) temporary financing of deficit covering local bond (Ministry of Internal Affairs and Communication 2006b). As Morgan Stanley report points out, “the transparency and the early warning were introduced. There is also a deterrent effect of moral hazard, which is more effective than market discipline. It is significant for containing tax payer’s burden” (Morgan Stanley 2007:5).
MARKET DISCIPLINE

Disclosing information

The private sector has underwritten an increasing share of local government bonds and each local body is allowed to negotiate with creditors voluntarily and sales bonds through their own marketing since FY2006. However, market mechanisms have not been playing major role in enhancing local government fiscal discipline in Japan. Some other countries use market discipline as a regulation on sub-national borrowing. In this case, sub-national governments have no constitutional or legal limits on their borrowing, and are not subject to central government controls on it. Sometimes, they are subject to self imposed balanced budget rule in order to enhance credit rating. Major countries that use this approach are Canada, Switzerland, and USA. However, it has been suggested that a number of stringent conditions need to be satisfied for financial markets to exert effective discipline on sub-national government borrowing.

There seems to be no universal agreement in the literature about the role of market discipline in disciplining local government fiscal behaviors. Ter-Minassian and Craig (1997) suggests that sole reliance for government borrowing is unlikely to be appropriate in many circumstances. They argue that market discipline has been not fully effective as it can be found in the experience of Canada and Brazil, instead rule based approaches to debt control would be appear preferable, in terms of transparency and certainty, to administrative control (Ter-Minassian and Craig 1997:169-171). On the other hand, Rodden and Eskeland (2003) argues that the U.S. States and Canadian provinces are the clearest example of success of market discipline, while it is rare. In addition they suggest that decentralized public sectors with relatively balanced budgets - the local and municipal sectors in Norway, Canada, and Hungary - apply strong hierarchical oversight on sub-national borrowing (Rodden and Eskeland 2003:433-438).

Turning our attention to recent debate in Japan, some commentators and analysts argue that implicit government guarantee to local bond should be removed completely and let market mechanism play a major role in enhancing local government fiscal discipline. Such a market-oriented policy stance has been increasingly accentuated since “Yubari shock” of 2006. Issuers having low bond ratings should have to pay high cost, and thus are forced by the market to enhance their creditworthiness. In the worst, local government goes bankrupt if it fails in improvement of the fiscal behavior. This is clearly shown by fiscal consolidation episode in Canada of the late 1990’s. Provincial budget constraints in Canada have been considered to be relatively soft. While there is no federal control at all over provincial borrowing, so long as there is no implied federal guarantee for provincial debts, monitoring
by the capital market seem to perform quite well. Even before the federal government began to get its own fiscal house in order in the latter half of 1990s, many provincial governments had already begun to deal with the fiscal problems. As Bird points out “Democracy plus market works to overcome a number of institutional features that can be considered to be soft budget constraints” (Bird and Tassonyi 2003:111-115).

It is necessary to satisfy some preconditions, however, so that “market discipline” may perform effectively, as the example of Canadian provinces shows. These preconditions are as follows: 1) adequate information on the borrower’s outstanding debt and repayment capacity should be available to potential lenders; 2) there should be no regulations on financial intermediaries than place government in a privileged borrower position; 3) there should be no perceived chance of bailout in the case of impending default; 4) the borrower should respond to market signals before reaching the point of exclusion from new borrowing (Lane 1993; Ter-Minassian and Craig1997:157-162).

Given these theoretical background and international experience, Japan’s local bond system satisfies is unlikely to satisfy most of these conditions at the moment. Instead of sole reliance on market discipline, Japan should learn a lot from the experience of France (see box 7.2): political and financial accountability for local borrowing by disclosing information on the borrower’s repayment capacity. The central government should ensure that adequate information on local government financial position is available and recognize differences in the creditworthiness of local bonds. For financial markets and fiscal rules to exert effective discipline on local government borrowing, adequate information on borrower’s outstanding and implicit liabilities, as well as on their repayment capacity, must be readily available.

Table 7.3 shows that almost all prefecture and designated cities have disclosed relevant financial statements: balance sheet; income statement; balance sheet including public enterprise; and consolidated balance sheet. But ratio of municipalities with balance sheet is limited to 53 per cent, and less than 4 per cent of municipalities has consolidated balance sheet. The central government should request local governments to disclose information on their implicit liabilities, including those associated with retirement allowances for local public employees, as well as net assets of local public enterprises and so-called “third sector” companies.

[Insert table 3 near here]

**Box 7.2 Local borrowing: episode in France**

In France, local governments’ budgets are basically balanced, while the central government budget is heavily unbalanced. Local government debt represents only two-thirds of the local governments’ yearly income and debt/GDP ratio is only 7 per cent. How does one explain the relative moderation of local governments in borrowing? Prud’homme (2006) points out following four points.

- It does not result from central government-imposed constraints. Local governments have no legal limits on their borrowing, and are not subject to central government controls on it since FY1983
when administrative control was completely abolished. During 1970s and early 80s, local governments could borrow only from state-owned institution. This constraint on free market was relaxed.

- Prud’homme points out that moderation does not result from the market discipline. This U.S.-type model does not function in France, at least at present. The international agencies do operate in France, and they have rated some regions and departments, as well as a few large cities. But the share of the bond market is too small for this model to function, at least for the time being.
- The constraints on borrowing are financial and political accountability. Banks know what ratios of interests to revenue are socially and politically sustainable, and they refuse to make loans that would lead to significantly higher ratios. Local governments themselves are prudent, because they fear that their political image would be affected by excessive indebtedness.
- In principle, the central government would not bail out a failing local government. When a relatively large commune (Angouleme) nearly went bankrupt in the 1980s, banks asked the central government to bail the commune out. However, the Ministry of Finance showed that there was no government guarantee for the local debt since the decentralization reform, and insisted the liability of the banks for irresponsible lending to the commune.


Facilitating local access to credit

As decentralization process goes on, the difference in repayment ability of local government will begin to widen. It is no longer appropriate to consider creditworthiness of local bonds uniform. It is likely to differentiate into two poles of large cities and fiscally weak small local governments. As the decentralization proceeds, for seasoned and sizable issuers such as prefectures and the major cities, market competition is likely to produce savings. However, this kind of competition leaves an unfilled niche for smaller and less experienced local governments with low creditworthiness.

We shall describe briefly some episodes of evolution since late 1990s. During 1997 financial crises, Hokkaido Takushoku Bank, main bank of the City of Sapporo, went bankrupt and also the rumor of the advanced redemption gave rise to spread in the secondary markets. In addition, “third sector” of Izumisano city in Osaka prefecture defaulted with huge indebtedness. Tokyo and Osaka prefecture also declared being “fiscal emergency” in 1998. Bond market evaluated that a part of local authority might default or declare postponement of repayment at that time. During 2001 to 2006, spread between sovereign bonds and publicly advertised local bonds had narrowed, reflecting quantitative easing monetary policy. Temporary widening of spread in early 2002 reflected the shock of Fiscal Investment and Loan Program reform and withdrawal of some banks from Hokkaido’s Syndicate members. Using December 2001 data, Mochida (2004) found that the main factor behind the price gap
was the difference in the degree of liquidity, but the influence of creditworthiness could not be totally denied. On the other hand, Norincyukin Research Institute (2002) notes that the interest rate spreads across local bonds widened markedly since the latter half of 2001 and that the influence of creditworthiness became clearer between 2000 and 2002.

[Insert figure 3 near here]

Since spring of 2006, however, with “Yubari shock” and argument for bankruptcy law by the study group within the MIC, spread started to widen again. Not only had the spread between sovereign and local bond and also difference among local bonds widened in the secondary market. According to empirical study (for this, see Oyama, Sugimoto and Tsukamoto 2006), local bonds market faced two different factors since spring 2006. First, the market participants recognized the possibility of local debt adjustment in near future and ending of quantitative easing monetary policy made the credit market more volatile. These common factors widened price gap between sovereign and local bonds. Secondly, a few local governments experienced financial distress since “Yubari shock” and the uniform negotiation approach for bond issuance had been replaced by one to one negotiation approach. These specific factors discriminated between local governments through different interest rate of bonds.

There might be scarce demand of institutional investor to buy local bonds issued by such a small-scale municipalities. This niche can be partly filled by credit enhancement mechanism such as “bond bank”. Recently, the idea of bond bank and pooling a number of smaller issues was frequently referred by various groups7. Some private research institute also published a concrete plan concerning the local bond bank (National Institute for Research Advancement 2006). After the termination of the Japan Finance Corporation for Municipal Enterprises in FY2008, the government should make a final decision about alternative organization. As Akiyama (2002) pointed out, investment trust doesn’t develop enough in Japan like U.S., option of local bond bank would be more realistic than a financial guarantee by commercial entity.

Various U.S. states assist borrowing by small local governments through the establishment of municipal bond bank. Municipal bond banks are established as autonomous state agencies that issue tax-exempt securities to investors and apply the proceeds to purchase the collective bond issue of several local governments. By pooling a number of smaller issues and by using the superior credit rating of the state, municipal banks reduce the cost of borrowing to smaller communities. An important lesson from industrial countries’ experience is that municipal finance cooperation operates well when they are run on commercial principles and

7 These groups include: advisory committee for decentralization within six national associations of chief executives; private consulting group of minister of MIC, named “21st century vision”.

19
compete for capital and borrowers. In such an environment, such agencies allow risk pooling, use economies of scale better, and bring to bear their knowledge of local governments and their financing potential to provide access to commercial credit on more favorable terms (Shah 2006:34-35).

**BANKRUPTCY MECHANISM**

**Debt adjustment**

The default of Rumoi town of Hokkaido in 1925 was epoch-making in the history of local finance (Ishii 2001:128-129), since no municipalities went bankrupt in Post War period. Being faced with “Yubari shock of 2006”, however, some commentators and analysts argued for establishing bankruptcy law, so that “2nd Yubari city” would not emerge. Many of them have paid attention to Chapter 9 of federal Bankruptcy Law of the US as a reference (see box 7-3). One of the reasons of such concern is that municipalities can not negotiate with creditors for adjustment its debts within the current framework of financial rehabilitation scheme (Doi 2004). While argument for bankruptcy law is sensational, it is neither desirable nor feasible in Japan that distressed local government is allowed to reorganize (i.e., extending debt maturities, reducing the amount of principal and interest, refinancing the debt by obtaining a new loan) its debts in near future. The reasons for this are two folds:

<table>
<thead>
<tr>
<th>Box 7-3 Municipal bankruptcy legislation in US.</th>
</tr>
</thead>
<tbody>
<tr>
<td>The first municipal bankruptcy legislation was enacted in 1934 during the Great Depression. Congress enacted a revised Municipal Bankruptcy Act in 1937. In the more than 60 years, there have been fewer than 500 municipal bankruptcy petitions filed. Although chapter 9 cases are rare, a filing by a large municipality can -like the 1994 filing by Orange County, California -involve many millions of dollars in municipal debts. The ingredients of the law are as follows</td>
</tr>
<tr>
<td>- There is no provision in the law for liquidation of the assets of the municipality and distribution of the proceeds to creditors. The purpose of chapter 9 is to provide a financially distressed municipality protection from its creditors while it develop and negotiate a plan for adjusting its debts.</td>
</tr>
<tr>
<td>- Only a “municipality” can file for relief under the chapter 9. There are three additional eligibility requirements for chapter 9: the municipality must be insolvent; be specifically authorized to be a debtor</td>
</tr>
</tbody>
</table>

8 Since July 2006, Minister of MIC’s private consulting group studied bankruptcy legislation. It submitted final report to the government (December 8, 2006) with conclusion that debt adjustment is one of the future options. On the other hand, the new decentralization promotion committee inaugurated in April, 2007 will come up with a new framework of bankruptcy law. Government official has confirmed that debts adjustment will not be applied to the existing debts.
by law; and has obtained the agreement of creditors holding at least a majority in amount of the claims.

- Chapter 9 is designed to recognize the court’s limited power over day-to-day operations of the debtors, while the debtors has broad powers to use its property, raise taxes and make expenditure as it sees fit. This ability is important to the survival of a municipality that has exhausted all other resources.
- The creditors’ role is also limited in chapter 9. Though creditors’ committee can select and authorize the employment of attorneys, creditors may not propose a plan of adjustment.


First, we should pay attention to the impact of municipal bankruptcy on the bond market. The debt adjustment contributes to make creditors withdraw from inefficient public works. However, creditors might be reluctant to easing the eligibility requirement for filing by the local government. In the United States, it is not easy to obtain the agreement of many creditors with regard to debt adjustment plan. In fact, in the more than 60 years since US Congress established a federal mechanism for the resolution of municipal debts, there have been fewer than 500 municipal bankruptcy petitions filed, according to Administrative Office of United States Courts (2004). Among petitions filed, general purpose local governments were rare; many were concentrated on small special districts. 500 is a tiny number, given there almost 100,000 local governments in the US. As Wildasin says, “state or local fiscal crises are ‘curious incidents’ in US experience, exception to the general rule” (Wildasin 2004:251).

Second, it is not self-evident that bankruptcy mechanism can enhance distressed local governments’ fiscal discipline as a ‘credible threat’, preventing them from going bankrupt in advance. This can be clearly illustrated by the experience of US. Although a filing by large municipality can —like the 1994 filing by Orange County, California— involve many millions of dollars in municipal debt, chapter 9 cases of general local government are rare. This is not to say that sub-national governments in the US never experience fiscal distress. New York City, Philadelphia etc. has gone through episodes of threatened if not actual insolvency. It must be because actions of state governments create an environment that rescues sub-national government from inappropriate policy prior to bankruptcy. Oversight and intervention devices vary greatly in the United States. As a general rule, so called “Dillon Rule” states in the eastern part of the country have tighter controls over the local governments. If the local government gets into trouble, the state is typically in a position to step in and take over the operation of the governments (Petersen and Crihfield 2000). There is, however, 9

---

9 This in illustrated by following episodes. In New York in the mid-1970s, the State of New York stepped in at the time of the New York City crises and established a control board that effectively dictated city finances. Another example of strong intervention by the state occurred in Connecticut with the City of Bridgeport. The City overspent its budget and attempted to go into bankruptcy under the federal bankruptcy code. The State subsequently
another salient tradition of much less oversight in the U.S. which follows from a tradition of home-rule whereby the local governments have much more autonomy. The most important recent example is that of Orange County California. These episodes make it clear that if the local government gets into financial trouble, the state is typically in a position to step in and take over the operation of the governments. The states rescue them from financial distress prior to bankruptcy. Of course, the local government is a creature of states and bankruptcy court has to take care to adjust its authority so as not to interference with the sovereign power of the states as guaranteed by the Tenth Amendment to the Constitution. On the contrary, the central government in Japan can enact both local government and bankruptcy law. Implementation of bankruptcy mechanism in Japan may not be more difficult than in federal countries (Fitch Ratings 2006). However, it is naive to say that bankruptcy mechanism can prevent financially distressed local government from going bankrupt as a ‘credible threat’. It may be difficult to let some financially distressed local governments go into bankrupt in Japan, where local governments provide core public services with relatively high minimum standards imposed by the central government.

Reference

stiffened the power of the control board and provided aid and the City did not default on its debts. The City of Philadelphia when faced with financial emergency in the 1980s came under the oversight of a New York City style state control board that had oversight over all spending decisions. (For more detail, see Petersen and Crihfield 2000: 61-64)
System,' [in Japanese], working paper 01-9, Research and Statistic Bureau of the Bank of Japan, Tokyo.


Ministry of Internal Affairs and Communications, Local Tax Bureau (2005c) Study on Assignment of Value Added Tax in the World, unpublished manuscript.

Ministry of Internal Affairs and Communications, Local Tax Bureau (2005d), Local Taxes Surveys in Japan [in Japanese].


Shah, Anwar ed.(2006b) *Local Governance in Industrial Countries*, World Bank, Washington, DC.


Figure 7.1 the main creditors of local government (%)

- Other private-sector fund
- Publicly-advertised fund
- Treasury fund
- Central government

Source: Investigating Committee on Local Bond (2007) Liberalization of Local Bonds Issue in Transition period to Prior Consultation System
Figure 7.2—Gross debt outstanding as percentage of GDP, FY2004


Note: Social security fund is excluded. For USA, States is excluded.
<table>
<thead>
<tr>
<th></th>
<th>Per cent of GDP</th>
<th>Change in expenditure</th>
<th>Change in revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>total expenditure</td>
<td>final consumption</td>
<td>investment</td>
</tr>
<tr>
<td>Deterioration phase 1989-95</td>
<td>4.3</td>
<td>1.0</td>
<td>2.2</td>
</tr>
<tr>
<td>Consolidation phase 1995-01</td>
<td>- 0.7</td>
<td>0.8</td>
<td>- 2.0</td>
</tr>
</tbody>
</table>

Note: grants include specific purpose grants and general grants.
### Table 7.2 Sharing the repayment costs of selected local bonds FY2001, billion yen

<table>
<thead>
<tr>
<th>Name of local bonds</th>
<th>Outstanding local bonds</th>
<th>Share of repayment costs accounted for in the LAT formula (per cent)</th>
<th>Estimated central government repayment costs</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Independent bond</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General public works</td>
<td>25,452</td>
<td>-</td>
<td>11,068</td>
</tr>
<tr>
<td>Temporary public works</td>
<td>13,835</td>
<td>80</td>
<td>11,068</td>
</tr>
<tr>
<td>General independent public works</td>
<td>52,487</td>
<td>-</td>
<td>10,249</td>
</tr>
<tr>
<td>General regional development</td>
<td>10,871</td>
<td>30-55</td>
<td>3,261</td>
</tr>
<tr>
<td>Temporary local road building</td>
<td>16,071</td>
<td>30-55</td>
<td>4,821</td>
</tr>
<tr>
<td>Temporary rive related projects</td>
<td>2,147</td>
<td>30-55</td>
<td>644</td>
</tr>
<tr>
<td>Temporary economic package</td>
<td>2,051</td>
<td>45</td>
<td>923</td>
</tr>
<tr>
<td>Public housing construction</td>
<td>5,150</td>
<td>-</td>
<td>0</td>
</tr>
<tr>
<td>Compulsory education facilities</td>
<td>5,031</td>
<td>30-70,100</td>
<td>1,509</td>
</tr>
<tr>
<td>Advanced purchase of land</td>
<td>2,226</td>
<td>Interest only</td>
<td>0</td>
</tr>
<tr>
<td>Natural disaster recovery</td>
<td>1,304</td>
<td>-</td>
<td>1,072</td>
</tr>
<tr>
<td>Tokyo metropolitan development</td>
<td>1,178</td>
<td>-</td>
<td>0</td>
</tr>
<tr>
<td>General waste disposal</td>
<td>4,702</td>
<td>50/100</td>
<td>2,351</td>
</tr>
<tr>
<td>Depopulated area aid</td>
<td>2,418</td>
<td>70</td>
<td>1,693</td>
</tr>
<tr>
<td>Government affiliated organization loans</td>
<td>1,203</td>
<td>-</td>
<td>0</td>
</tr>
<tr>
<td><strong>Sub total</strong></td>
<td><strong>96,235</strong></td>
<td></td>
<td><strong>17,467</strong></td>
</tr>
<tr>
<td><strong>Special bonds</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial support to fill financial gap</td>
<td>3,109</td>
<td>80</td>
<td>2,488</td>
</tr>
<tr>
<td>Revenue decrease supplement (82,93, 97)</td>
<td>5,302</td>
<td>75-80</td>
<td>4,242</td>
</tr>
<tr>
<td>Temporary special fiscal</td>
<td>2,689</td>
<td>100</td>
<td>2,689</td>
</tr>
<tr>
<td>Tax cut supplement</td>
<td>6,227</td>
<td>100</td>
<td>6,227</td>
</tr>
<tr>
<td>Temporary tax cut supplement</td>
<td>1,265</td>
<td>100</td>
<td>1,265</td>
</tr>
<tr>
<td>Temporary fiscal aid</td>
<td>1,227</td>
<td>80</td>
<td>982</td>
</tr>
<tr>
<td><strong>Sub total</strong></td>
<td><strong>34,643</strong></td>
<td></td>
<td><strong>29,927</strong></td>
</tr>
<tr>
<td><strong>Memorandum item:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total outstanding local bonds(excluding borrowing from LAT Special Account)</td>
<td><strong>130,954</strong></td>
<td></td>
<td><strong>47,403</strong></td>
</tr>
</tbody>
</table>

**Note:** Repayment costs borne by the central government were calculated by multiplying the outstanding amounts of local bonds and the LAT compensation rate. When the LAT compensation rate varies with local government ‘fiscal strength’, the lower rate was used, leading to an underestimation of future repayment costs for the central government.

<table>
<thead>
<tr>
<th></th>
<th>number of prefectures</th>
<th>number of designated cities</th>
<th>number of municipalities and towns</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance sheet (general account)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>47</td>
<td>45</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>(100%)</td>
<td>(95.7%)</td>
<td>(100%)</td>
</tr>
<tr>
<td>Income statement for public services</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>45</td>
<td>43</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>(95.7%)</td>
<td>(91.5%)</td>
<td>(100%)</td>
</tr>
<tr>
<td>Balance sheet (general account, public enterprise)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>47</td>
<td>30</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>(100%)</td>
<td>(63.8%)</td>
<td>(100%)</td>
</tr>
<tr>
<td>Consolidated balance sheet (general account, public enterprise, 'third sector companies')</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>47</td>
<td>8</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>(100%)</td>
<td>(17.0%)</td>
<td>(100%)</td>
</tr>
</tbody>
</table>

Note: total number of designated cities was 14 in FY2004, 13 in FY2003 respectively. Total number of municipalities and towns was 1829 in FY 2004, 2531 in FY2003.

Source: Ministry of Internal Affairs and Communications
Note: Spread between sovereign and local bonds, mid price, 10 years of maturity
Source: Nikko City Group Securities (Corporate bond research bureau: Akane, Enatsu)