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Abstract

Intergovernmental fiscal relations in Japan have been strained in recent years. This paper seeks to assess the Japanese equalization transfer in the light of the theory of fiscal federalism. This paper argues that the case for equalization lies in offsetting net fiscal benefit (NFB) differentials across jurisdictions. It has been shown that the case for equalization and its design depend on the type of public good being provided as well as the mode of finance. Moreover, where equalization is called for, its form and level can be very different depending on whether the relevant policy goal is that of fiscal equity or fiscal efficiency. Studying the institutional context, we arrive at the conclusion that the system of equalization transfers in Japan is consistent with the application of those principles.

Key words

Fiscal federalism, fiscal efficiency, fiscal equity, net fiscal benefit, equalization transfers

1. INTRODUCTION

In virtually every country, some amount of decentralized fiscal decision-making is a fact of life. Lower-level jurisdictions—be they states or provinces, prefectures or regions, cities or municipalities—are typically given responsibility for delivering some of the most important public services, such as schools, health services and social services. This responsibility may entail varying degrees of discretion ranging from full legislative responsibility for program design to the delivery of programs according to standards set by a higher level of government. Moreover, the lower jurisdictions may be responsible for financing part or all of the cost of the services from their own sources, relying on

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transfers from the higher level to meet any shortfall. The system of inter-governmental fiscal relations is intended to facilitate the decentralization of public service provision to lower jurisdictions, while at the same time ensuring that the provision of the services and their financing does not violate national efficiency and equity objectives.

The design of the system of inter-governmental fiscal relations flows from this objective. To understand the principles behind this design, it is worth briefly summarizing in turn: 1) the nature and rationale for decentralization, 2) the types of inefficiency and inequity that this decentralization can cause, and 3) the manner in which the fiscal relations can be designed to avoid the bulk of these inefficiencies and inequities while retaining the advantages of decentralized decision-making. The key element of this system of fiscal relations is the set of intergovernmental transfers and their role in equalizing the ability of lower-level jurisdictions to provide comparable levels of public services to their citizens. However, equalization transfers are not the only component of fiscal relations. To appreciate their important role, it is useful to put them into the broader context of the whole system of inter-governmental fiscal arrangements.

Japan represents a case in which significant expenditure responsibilities are assigned to local governments while the central government remains dominant in terms of revenue raising responsibilities. In 1995, national and local tax revenues combined totaled almost 89 billion yen. Before fiscal transfers, local taxes accounted for only 37.6% of combined revenues. After fiscal transfers, local governments' share of tax revenues is 64.6%. Roughly 25% of national government revenue is transferred to local governments. The Japanese fiscal system is predicated on the notion of equal access to public goods at comparable levels of taxation. Interregional redistribution has therefore been central to the development of the Japanese welfare state. Japan's fiscal arrangements have been strained in recent years as a result of the major downturn in the national economy. The fiscal arrangements rely heavily on explicit revenue sharing arrangements between the national and local governments. As a result of the downturn, revenues to be shared have been significantly reduced. The growing gap between revenues and expenditures at the local level has led to an increase in equalization entitlements under the existing formula, while the revenue pool available for equalization purposes has been in decline. Accordingly, local government debt has been rising. The equalization system

has had to rely on sizable loans from the Fiscal Investment Loan Program, giving rise to serious concern over its sustainability. The debate is further fuelled by concerns that the equalization system breaks the link between expenditure responsibility and responsibility for raising the revenues to pay for expenditures, the perennial concern that lack of accountability gives rise to an incentive to over-spend.

This paper seeks to assess the Japanese intergovernmental fiscal relations in the light of the theory of fiscal federalism. We proceed as follows: In the next section, we outline the key principles of intergovernmental fiscal relations; this is followed by a section which focuses on local taxation and the application of the principles of intergovernmental fiscal relations to the design of central-local equalization schemes; with this as background, we assess the set of intergovernmental fiscal relations in Japan; we end with a brief conclusion. To anticipate our key results, we find that there is a strong case on grounds of both fiscal efficiency and fiscal equity for the system of central-local transfers that characterize the present system in Japan.

2. PRINCIPLES OF INTER-GOVERNMENTAL FISCAL RELATIONS[2]

Rationale for Fiscal Decentralization

Governments undertake a wide variety of types of expenditures. The traditional emphasis has been on the provision of *pure* public goods, exemplified by defense, foreign affairs, the justice system, and so on. The efficient provision of *pure* public goods requires intervention by the public sector to overcome the so-called free-rider problem. Some *pure* public goods are local in nature, such as parks, roads, fire prevention and police services, and there is little dispute about the local provision of such goods. Local jurisdictions know best the preferences of their own citizens for local public goods. It is simply as matter of efficiency that they be decentralized.

[2] For a survey of the recent literature on fiscal federalism, see Boadway (2000). This paper sets out the arguments for fiscal decentralization and the implications of that decentralization for inter-governmental fiscal arrangements.

It is increasingly recognized that *pure* public goods—national or local—represent a relatively small, and uncontroversial, component of public expenditures. The bulk of spending takes two other forms—quasi-private public services and transfers to individuals. The former includes such major items as health care, education, and social services, while the latter includes public pensions, unemployment insurance, and transfers to the poor and needy. It is with respect to these categories of spending that major issues of decentralization arise. Broadly speaking, there are two major considerations. The first is that the case on efficiency grounds for decentralizing the delivery of these services is very strong. Indeed, even unitary nations do so, such as Japan and the Scandinavian countries. The second is that, unlike with *pure* public goods, these public goods and services undoubtedly fulfill broad redistributive objectives, including equality of opportunity, social insurance and equality of economic outcomes. One could argue that governments are largely institutions for redistribution, and only secondarily institutions for collectively overcoming the free-rider problem. To the extent that the national government is responsible for redistributive equity, the manner in which public services and targeted transfers are provided is of interest to it, even if their provision is decentralized.

The efficiency arguments for decentralizing the provision of public services and targeted transfers are as follows.

Local Conditions: Need, Costs and Preferences

The amount of expenditures required to provide given levels of public services will vary by locality. Local jurisdictions will be in a better position to assess the needs and costs of provision in light of their particular demographic and economic conditions. Moreover, different jurisdictions may have different preferences for local public services. Decentralization will enable public services, even those of national importance, to be tailored to local preferences.

Information Advantages

The delivery of public services and targeted transfers depends on being able to identify the target population. This must be done on the ground close to the population being

served. Local jurisdictions and their administrations are presumed to be better able to monitor and identify those for whom the expenditures are intended.

Agency Problems

Related to the informational advantage of local government in terms of identifying those in need is its advantage at monitoring the agencies responsible for on-the-ground delivery of the services. Public services and targeted transfers will inevitably be delivered by such agencies, be they schools, hospitals or welfare agencies. Monitoring such agencies involves overcoming well-known moral hazard and adverse selection problems. Lower-level jurisdictions should be able to do this more effectively than higher level ones, which are inevitably further away. In addition, lower-level responsibility will do away with one or more layers of bureaucracy.

Innovation

If individual jurisdictions are responsible for providing public services, there are more chances for innovations in delivery than if there is a single provider (assuming the incentives are in place). Moreover, the existence of several jurisdictions providing the same public service can give rise to yardstick competition, whereby each jurisdiction is judged by the cost-effectiveness with which it delivers the service relative to other jurisdictions.

Political Economy Arguments

Finally, decentralization of service provision to lower jurisdictions may give rise to a sort of inter-jurisdictional competition that serves as a way of disciplining otherwise non-benevolent governments. For example, if households or businesses are mobile across jurisdictions, lower-level jurisdictions will be induced to provide public services as efficiently as possible for fear of losing mobile productive factors.

Together, these arguments have led many scholars and observers of government to argue strongly in favor of decentralizing major public services and transfers to lower levels of government. And, most OECD countries have decentralized major public

expenditures. The actual extent of decentralization may vary according to national circumstances. History, political and institutional structure, and national geography all play a mediating role. The structure of the fiscal arrangements can adapt to any degree of decentralization. The key features of the system, especially the equalization component, remain intact in virtually all cases.

While most countries decentralize significant expenditure responsibilities to lower-level jurisdictions, this is accompanied by very different degrees of revenue-raising responsibilities. The case for decentralizing revenue-raising responsibilities is a mixed one. On the one hand, accountability arguments suggest that lower-level governments ought to be responsible for raising significant amounts of their own revenues, including all revenues at the margin. On the other hand, there are significant possibilities for inefficiencies and inequities arising from decentralized taxes, possibilities that we return to below. Moreover, there are sound reasons for having some imbalance in expenditures and own-source revenues—so-called VFIs. These imbalances are necessary if there is to be a set of inter-governmental transfers from higher to lower levels of government. As we shall argue, these transfers are necessary counterparts of decentralization.

Inefficiencies Arising from Decentralization

Inefficiencies arise when fiscal decisions are decentralized because the economies of lower-level jurisdictions are interdependent. They are linked by the flow of goods, services, labor and capital across internal boundaries, comprising what is referred to as the *internal common market*. Since lower-level jurisdictions are responsible only to their own residents in their decision-making, inefficiencies can arise to the extent that their actions spill over to the residents of other jurisdictions. Several types of inefficiencies arising from inter-jurisdictional spillovers can be identified.[3]

Expenditure Spillovers

Benefits from expenditures in one jurisdiction may accrue to residents of other jurisdictions, analogous to the standard case of externalities. This is the traditional

[3] For a recent survey of the various types of spillovers that can occur among jurisdictions and their implications for the design of inter-governmental transfers, see Dahlby (1996).

argument for matching grants from the central to the lower jurisdictions. In terms of importance, it accounts for a relatively small proportion of actual transfers.

Distortions in the Internal Common Market

Unless all lower jurisdiction tax and expenditure programs are fully coordinated, they will inevitably introduce distortions into the internal common market. Taxes will apply to slightly different bases and will have different rate structures. Expenditure programs will provide different structures of benefits, and may be discriminatory with respect to non-residents. As well, benefits may not be portable across jurisdictions. As a result, inter-jurisdictional resource flows can be distorted, even if unintentionally.

Tax Competition

To the extent that resources are mobile across jurisdictions, there will be an incentive to set tax rates too low to attract resources from other jurisdictions. If all jurisdictions behave this way, the result will be self-defeating. All that will happen is that tax rates on mobile resources get competed down to an inefficiently low level. Technically speaking, there is a horizontal fiscal externality associated with taxes on mobile resources. An increase in the tax rate will cause resources to flow to other provinces, thereby providing a benefit spillover to them. From the lower jurisdiction's point of view, the perceived marginal cost of public funds (MCPF) is higher than the true social one.

Vertical Fiscal Externalities

Lower-level jurisdictions can also impose vertical externalities on the higher level, although in this case they will be negative. These externalities come about if the two levels of government levy taxes on bases that are overlapping. An increase in the lower-level tax rate will cause the base to decline. Since the base is co-occupied by the higher-level government, tax revenues will fall in the latter and that fall in revenues will not be taken account of by the lower-level jurisdiction. The result will be a tendency to underestimate the true MCPF, thereby offsetting to some extent any horizontal externalities that might apply on the same base.

Fiscal Inefficiency

A pervasive effect of decentralization is that different jurisdictions have different capacities to provide public services, targeted transfers and local public goods. They may have different tax capacities, that is, different sizes of tax bases per capita. Therefore, given tax rates will yield different per capita tax revenues. Or they may have different needs for public expenditures. Jurisdictions with a higher proportion of elderly will have higher per capita expenditures on health care in order to provide the same level of services as jurisdictions with proportionately fewer elderly. The implication is that, in the absence of corrective measures, decentralization will entail that persons with a given income will receive different *net fiscal benefits* (NFBs) in two different jurisdictions, where NFBs refer to the difference in the value of benefits received from and taxes paid to the local jurisdiction. This is important for efficiency because, if differences in NFBs exist between two jurisdictions, households and their firm will have a fiscal incentive to relocate from high- to low-NFB jurisdictions. Instead of resources being allocated such that the marginal productivity is equated across jurisdictions, the marginal product plus NFBs will be equated. Jurisdictions with high NFBs will attract relatively too many resources.[4]

This problem does not arise in a unitary state. In a unitary state, a common set of public services would be provided, financed out of national tax revenues. Persons of a given income would pay the same taxes everywhere and receive the same set of public goods and services. Nor would it arise under decentralization if lower-level jurisdictions financed all their expenditures using benefit taxes, since under the benefit principle NFBs are zero. But, given the redistributive nature of government, benefit taxation is not the norm.

The actual way in which NFBs differ across jurisdictions varies according to the sorts of functions that are decentralized. Suppose first that only expenditures are decentralized, and the lower jurisdiction finances all their spending by transfers from the higher government. In this case, the NFB differentials would come from two sources.

[4] Inefficiency in inter-jurisdictional resource allocation resulting from decentralization was first pointed out by Buchanan (1952). Its implications for equalization were analyzed by Boadway and Flatters (1982).

First, NFB differentials on average would reflect differences between the per capita expenditures required to provide common public services across jurisdictions and the per capita transfer received. Thus, one can calculate, given the demographic structure of the population and the differences in groups of persons in economic need, the amount of funding per capita it would require to provide a standard set of public goods and services as well as targeted transfers in each jurisdiction. Second, even if NFB differentials are zero on average, particular income groups could face NFB differentials if lower jurisdictions provided differing mixes of public services and targeted transfers. These groups would have an incentive to relocate.

When lower level jurisdictions can raise their own revenues, this can lead to NFB differentials arising from differences in tax capacity. Two sorts of differences can be identified, those arising from the use of source-based and residence-based taxes. If lower jurisdictions use source-based taxes (e.g., natural resource taxes, business property and capital taxes, taxes on firms' profits), any differences in the bases for these taxes per capita times the average tax rate applied to those base will represent NFB differences. On the other hand, with residence-based taxes (e.g., income taxes, sales and excise taxes, payroll taxes, residential property taxes), NFB differences will depend on the way in which the use of the revenues departs from benefit taxation. The benchmark case is where residence-based taxes are roughly proportional to income, and the benefits of public spending are roughly equal per capita. In this case, if the jurisdictions provide comparable levels of public services, the NFB differential arising from this source equals the difference in per capita revenues raised by residence-based taxes between jurisdictions. If the fiscal structure is more progressive than that, the NFB differential in the higher income jurisdiction will greater than its advantage in per capita residence-based tax revenues, and vice versa. In practice, NFB differential will reflect both differences in need for public spending and differences in revenue-raising capacity. We return shortly to the design of a system of equalizing transfers to alleviate these NFB differentials.

Inequities Arising from Decentralization

Decentralization can also affect the redistribution inherent in the fiscal system since the budgets of lower-level jurisdictions will be part of the overall redistributive stance. In particular, it is likely that the fiscal competition that accompanies decentralization will serve to damp the extent to which government policies redistribute. Evaluating the consequences of this depends on normative considerations. It also depends upon how benevolent one considers the government to be. For example, if government is seen as a self-interested Leviathan, it can be argued that the redistribution it pursues will be ineffective and possibly perverse, and that decentralization will induce the sort of fiscal competition that will 'tame the Leviathan'. We take a more benevolent view of government, assuming that it has as a main objective achieving fairness and equity in the economy, constrained, of course, by the need for an efficient and productive private sector. In this case, the effect of decentralization on redistribution can be viewed as adverse.

Redistributive equity has many dimensions, all of which have implications for decentralization. They are as follows.

Vertical Equity

The conventional view of equity concerns the redistribution of market outcomes. Given the perceived equity-equality trade-off, vertical equity will entail a preferred degree of progressivity of the fiscal system. Instruments for achieving vertical equity include not just the conventional income tax-transfer system, but also various transfers in kind as well as targeted transfers delivered outside the income tax system. Decentralization can have two sorts of adverse effects on redistributive equity. The first is that competition among lower-level jurisdictions may reduce progressivity, given that it is desirable from a local point of view to reduce the number of low- and increase the number of high-income persons—the 'race to the bottom'. Second, different jurisdictions may simply adopt different degrees of progressivity, which will violate national standards of vertical equity.

The weight one puts on national standards of vertical equity is clearly an important question. On the one hand, one could argue that the citizens of different jurisdictions can legitimately have differing views of vertical equity and ought to be able

to pursue them independently. On the other hand, one can take the view that all citizens ought to be treated equally within a nation, that is, that citizenship itself entails a notion of equal treatment. Different nations will adopt different norms with respect to common standards of vertical equity. Thus, those that are relatively homogeneous across regions may prefer a common standard, while those that are regionally diverse may let local standards dominate. More generally, nations may have dominant national standards of vertical equity, but may allow for some diversity by regions.

Horizontal Equity

Closely related to this latter discussion is the notion of horizontal equity—the equal treatment of equals by the public sector. Horizontal equity in a decentralized setting is a direct application of the notion that citizens of a given type ought to be treated equally no matter where they reside in a nation. In fact, horizontal equity requires that NFBs be the same for persons of given income in different jurisdictions. If NFB differentials exist, not only will inefficiency be induced, but so will horizontal equity be violated. This is one of those rare instances in economics where efficiency and equity considerations are complementary rather than being in conflict. In a decentralized setting, full horizontal equity would require that lower-level jurisdictions provide identical public services and levy identical taxes on each income group. This is not only unachievable, but also could conflict with one of the purposes of decentralization, which is to give discretionary fiscal responsibility to lower level jurisdictions.

In practice, it will not be possible or desirable to eliminate all NFB differentials. Instead, a slightly looser notion of horizontal equity is usually adopted, that of *fiscal equity*.[5] Fiscal equity requires that NFB differentials be eliminated on average, or that all jurisdictions have the potential ability to provide common levels of public services at common tax rates for all citizens. Abiding by fiscal equity in the design of inter-governmental fiscal relations is a minimal requirement that is compatible with varying degrees of harmonization of vertical equity across jurisdictions according to national preferences and circumstances. The notion of fiscal equity is also useful for policy

[5] The concept of fiscal equity was first enunciated by Buchanan (1950). For a recent discussion of it, see Mieszkowski and Musgrave (1999).

design purposes. It allows one to separate the design of fiscal equalizing transfers, whose purpose is precisely to achieve fiscal equity, from other aspects of fiscal relations aimed at harmonizing local policies to national norms.

There is an additional source of horizontal inequity in decentralized systems of government that arises since the base for national income taxation does not account for NFBs as part of the tax base. Thus, a uniform national rate of income tax, levied on a base that consists only of earned income, will discriminate against residents of jurisdictions in which NFBs are relatively low and favour residents of those jurisdictions in which NFBs are relatively high, even though their comprehensive incomes are the same; the fiscal actions of the national government exacerbate the fiscal inequity associated with differential NFBs. A progressive income tax structure will only serve to increase this discrimination. That is, the national income tax is horizontally inequitable across jurisdictions in the presence of NFB differentials.

Thus, the national government should seek to undo both sources of horizontal inequity (that is, inequity that arises from both local and national budgetary actions). Full equalization of NFBs will ensure not only fiscal equity but also horizontal equity in the context of the national income tax.

Equality of Opportunity

Although vertical equity is the traditional notion of equity in the economics literature, there are two other important dimensions of equity that are very important for policy purposes. One is the facilitation of equality of opportunity among citizens. Major policy instruments for this are education and training, both of which are often delivered by lower jurisdictions. Decentralization may cause departures from equality of opportunity to the extent that jurisdictions apply different or insufficient standards.

Social Insurance

Economic insecurity is a feature of any dynamic market economy. So is bad luck in terms of one's economic opportunities in life. Many types of economic uncertainly cannot be insured in the market, either because of standard adverse selection and moral hazard problems or because the event being insured against is revealed before one has an

opportunity to insure (e.g., at birth). Moreover, the outcome of economic events may be influenced by government policies, and insurance companies may not be able to provide insurance against government actions. Thus, governments provide some major forms of insurance, such as unemployment insurance, worker compensation, disability insurance and health insurance. Two issues are of relevance here. The first is that many of these forms of insurance are delivered by lower-level jurisdictions. This gives rise to the possibility that different standards will apply across jurisdictions, and inter-jurisdictional competition will dilute the value of the insurance to those most in need. Second, the need for social insurance will vary across jurisdiction either because of systematic differences in need or because of idiosyncratic shocks to the jurisdictions. The national government may, among other things, serve as an insurer of jurisdictions against these differences and shocks.

The Design of Fiscal Arrangement in a Decentralized Setting

The fiscal arrangements between jurisdictions at various levels can include several elements: inter-jurisdictional transfers (unconditional and conditional), tax harmonization measures, cooperative agreements among governments, and measures, such as mandates or directives, by which the higher level government induces the lower-level ones to incorporate elements of national importance into the design of their programs. The purpose of these elements is to facilitate effective decentralization by offsetting the various inefficiencies and inequities outlined above that would otherwise occur. Features of the set of fiscal arrangements that would serve that purpose are the following.[6]

Equalization Grants

The cornerstone of a good set of fiscal arrangements is the set of equalization grants. The purpose of these grants is to achieve both fiscal efficiency and fiscal equity. They do this to the extent that they offset NFB differentials across jurisdictions. We can infer from our discussion of the source of NFB differentials how equalization transfers should be

[6] For a general discussion of these principles, and an application to the Canadian setting, see Boadway and Hobson (1993).

designed. Broadly speaking they should reflect both differences in tax capacity and differences in need across jurisdictions.

The former depends on how much revenue-raising responsibility resides with the lower jurisdictions. To the extent that they have access to source-based taxes, the ability to raise revenues from these sources should be fully equalized. Similarly, if they have access to residence-based taxes, these should also be fully equalized, unless the taxes are used to finance expenditures on a benefit basis. The way in which tax capacity equalization is pursued is typically by using the representative tax system approach. For each tax type to be equalized, a common base is defined and measured for each jurisdiction. Then, the average tax rate used by all jurisdictions is calculated by dividing total revenues by the total tax base across all jurisdictions. Finally, for each jurisdiction, the amount of revenue it would raise per capita by applying the national average tax rate to its tax base compared the per capita revenues obtained by applying the national average tax rate to the aggregate national tax base. The difference represents equalization entitlements owing from that tax base. The procedure is applied to each tax base to obtain aggregate equalization entitlements. On balance, net entitlements will be zero with positive entitlements for some provinces being offset by negative entitlements by others.

Equalization according to needs involves a similar type of calculation on the expenditure side (again exempting those expenditures that are financed on a benefit basis). A common national standard for services is defined, based on some judgment about what is required to satisfy national norms of equity in its various forms. For a given type of service, the average cost of providing the national standard level is calculated for the various demographic groups being served. Then for each jurisdiction, the need for expenditures of each category is calculated, given the population of each type of person being served.

In each case, the transfers are based on national parameters that are influenced only minimally by the actions of the lower jurisdictions themselves. National average tax rates and bases are used to equalize tax capacities, while national average costs and standards of service are used to equalize for need. The transfers themselves are thus not affected by the actions of the recipient government: otherwise, adverse incentive effects

would result. This leaves the jurisdictions free to choose the levels of expenditures and tax rates most suited to their circumstances, and to seek ways of economizing on expenditures without being penalized.

Two further important features of equalization transfers should be mentioned. The first is that they are formula-driven rather than being determined at the discretion of higher-level governments. Discretionary grants lend themselves to distortionary use by the bureaucracy as well as the possibility of abuse. The second feature is that they are broadly unconditional in the sense that governments are not constrained to spend them on various programs in specified amounts. This fungibility also facilitates efficiency in the recipient government. Nonetheless, there may be broad conditions attached to the use of major transfers, as discussed next.

Conditions on Transfers

As we emphasized above, inefficiencies and inequities of decentralization involve more than just differences in the ability of lower-level jurisdictions to provide important public services. They also involve the possibility that the structure of services provided may violate national standards. Responding to this possibility is one of the most difficult design issues in inter-governmental relations. For one thing, one must actually specify what is in the national interest, and that is no easy task. Different observers will likely disagree about the standards, and will also typically disagree about the extent to which it is the responsibility of the national government to set and enforce such standards. Nonetheless, in most nations with multiple levels of government, some mechanisms are in place by which national governments can influence how lower-level governments design their programs. It can be argued that the benefits of decentralization can best be achieved if these mechanisms are as unobtrusive or possible. But, given the dominance of the national government, it is not clear how that can be guaranteed.

In some countries, national governments directly influence the design of public services delivered by lower-level governments. In the extreme, the lower jurisdiction may simply administer programs that have been legislated above. In federations, state or provincial jurisdictions are likely to have legislative responsibility over important public services. Nonetheless, the national government may impose mandates that specify

attributes of lower-level program design. Alternatively, the national government might have the power to disallow lower-level legislation that violates nationally set norms.

These direct methods of influence can be heavy-handed. An alternative procedure used is to impose conditions on transfers from the national government. These conditions will require that certain features must be built into program design in order to be eligible for the full amount of the transfer. The key issue here concerns how detailed or specific the conditions are. The more detailed are the conditions, the less discretion will lower-level jurisdictions have to design their programs in accordance with their own special needs and preferences. The conditions imposed should ideally be sufficient to ensure that national interests are taken into account in the design of public services. For example, benefits of health insurance and welfare assistance should be portable; qualifications set for education and training programs should be harmonized; and common standards of need should apply to social insurance and targeted transfers. The key property that conditions should satisfy is that they should leave as much discretion with lower-level jurisdictions as is compatible with achieving national standards. Moreover, the conditions should be transparent and not subject to discretion, for the same reasons as equalization grants should be formula-driven.

It may be possible, and would certainly be desirable, to harmonize public service through cooperative negotiated agreements. The trouble is that one cannot rely on such agreements being consummated. Bargaining is extraordinarily difficult among governments, especially when there are a large number involved. In effect, each one has a veto. That is why nations must often rely on the initiative of the national government to establish and enforce national standards.

Tax Harmonization

Given the heavy expenditure responsibilities often decentralized for lower-level jurisdictions, it is also beneficial to decentralize revenue-raising responsibilities to enhance the accountability of lower-level jurisdictions. The decentralized choice of taxes will inevitably lead to fragmentation of the tax system if there are no constraints on tax design. To avoid the inefficiencies and inequities of that, it is conventional for tax structures to be harmonized. Here again, the relevant consideration is to achieve the

desired harmonization, while at the same time retaining the ability of lower-level jurisdictions to exercise discretion in deciding how much of their own revenues to raise.

A couple of issues are relevant here. The first is the issue of tax assignment: to which taxes should the lower-level jurisdictions have access? In the case of local governments, property taxes are typically used, given the immobility of their base. For governments responsible for large amounts of expenditures that require significant own-source revenues, some form of broad-based tax is desirable. Ideal candidates might be payroll or income taxes. The other broad-based tax, general sales taxation, may be difficult for lower-level jurisdictions to gain access to if a VAT form is used.

The second issue concerns the means of harmonization. One system that combines harmonization, administrative efficiency and decentralized responsibility for revenue-raising involves lower-level jurisdictions piggy-backing on national tax sources. The lower jurisdictions set their own tax rate either as a surtax on national tax revenues or to apply to the national base, and the taxes are administered centrally along with the national tax system. This maintains a common tax base as well as a nationally determined rate structure, while at the same time allowing lower-level jurisdictions to set their own tax rates. Such a system works well as long as the national government retains a high enough share of the tax room from the common base to be able to maintain legitimacy in terms of choosing the base and rate structure. If the lower-level jurisdictions become important enough as raisers of revenue from a given source, they may demand more discretion in setting tax policy, and the system can fall apart, a real possibility in the case of Canada with its harmonized income tax.

Other means of harmonization are possible, involving more or less discretion by the lower jurisdictions. At one extreme, revenue-sharing arrangements may apply for certain taxes. For example, the lower level jurisdictions may be given a certain proportion of revenues raised from a particular source. Revenue-sharing arrangements really constitute systems of transfers rather than discretionary revenue-raising responsibility. On the other hand, lower level jurisdictions may be given more discretion than under the piggy-backing system. They may be able to set their own tax rate structures and apply them to the given base. This discretion is accompanied by the

danger that the discretion will be used in ways that compromise the efficiency and equity of the internal common market

Whatever the form of tax harmonization, it is important that it be accompanied by a system of equalization to ensure that differences in tax-raising capacity do not remain uncorrected. This is as true for revenue-sharing schemes as it is for tax sources completely decentralized to lower level jurisdictions.

3. FISCAL CAPACITY AND EQUALIZATION

So far, we have outlined the key principles of intergovernmental fiscal relations. Traditionally, the case for central-local equalization schemes has been made on equity grounds, the argument being that fiscal capacities must be equalized if comparable levels of public services are to be provided at comparable levels of taxation. As it turns out, there can also be an important efficiency dimension to this argument.

This section focuses on fiscal capacity as source of NFB differentials and the application of the principles of intergovernmental fiscal relations to the design of an equalization scheme. As mentioned, fiscal capacity refers to a government's ability to generate revenues on a per capita basis from a particular revenue source or set of revenue sources. In examining these equity and efficiency issues, it is important to take into consideration the choice of instrument used to finance public expenditure mainly because local taxes can be divided broadly into two types; 1) those levied on the incomes received or expenditure made on the basis of the residence of the taxpayer (e.g., personal income tax, sales and excise taxes, payroll taxes, residential property tax); 2) those levied on income or wealth at its source, regardless of the place of residence of ultimate recipient of the income (e.g., natural resource taxes, business property and capital taxes, tax on firms' profits) .

Needless to say, it is also important to take into consideration the nature of the goods and services provided by the local public sector. Pure public goods are defined as goods that are non-rival in consumption—that is, consumption by any one individual does not reduce the amount available to others. Included in this category would be local

government services such as parks, street lighting and the like. Local infrastructure, such as water and sewer lines, also exhibits the characteristics of pure public goods—the fixed costs of establishing water and sewer lines, for example, are independent of the number of users. In contrast, services such as garbage collection and education can be characterized as publicly provided private goods. The services provided by local infrastructure may also be viewed as publicly provided private goods—consumption of a unit of water by one individual, for example, precludes other individuals from consuming that same unit. Of course, the characteristics of many of the goods and services provided by the local public sector lie somewhere between these two extremes; the distinction, however, will prove to be important in establishing a role for central-local equalization schemes.

Fiscal Equity Issues

As mentioned, differences in NFBs across jurisdictions can arise from the choice of fiscal instruments used to finance public expenditure. Whether the goods and services being provided are private or public in nature also has a bearing on the outcome. Table 3 summarizes the various equalization scenarios developed in this section. To begin with, suppose that publicly provided private goods are financed from revenues that are entirely incident on non-residents. This might be the case where tax burdens are easily exported, either through higher product prices or through lower factor returns paid to absentee owners. In this example, the level of NFBs conferred on local residents is equal to the level of per capita expenditures (or, equivalently, the per capita level of transfer from non-residents to residents). In this case, fiscal equity would be achieved by equalizing per capita revenues across jurisdictions to allow for equal per capita expenditures (equalization of NFBs).

Table 3: Summary of Equalization Scenarios		
	Residence-based Taxes	**Source-based Taxes**
Publicly Provided Private Goods (1)	*Fiscal Equity*	*Fiscal Equity*
	--Poll taxes, uniform user charges: No case for equalization (no NFBs) --Income taxes, sales taxes, property taxes [(2)]: Equalize per capita revenues (equalizes NFBs)	--Sales taxes, business taxes, property taxes [(3)]: Equalize per capita revenues (equalizes NFBs)
	Fiscal Efficiency	*Fiscal Efficiency*
	--Poll taxes, uniform user charges: No case for equalization (no NFBs) --Income taxes, sales taxes, property taxes [(2)]: Equalize per capita revenues (equalizes NFBs)	--Sales taxes, business taxes, property taxes [(3)]: Equalize per capita revenues (equalizes NFBs)
Pure Public Goods	*Fiscal Equity*	*Fiscal Equity*
	--Poll taxes, uniform user charges: Equalize total revenue (equalizes NFBs) --Income taxes, sales taxes, property taxes [(2)]: Equalize total revenues (equalizes NFBs)	--Sales taxes, business taxes, property taxes [(3)]: Equalize total revenues (equalizes NFBs)
	Fiscal Efficiency	*Fiscal Efficiency*
	--Poll taxes, uniform user charges: Equalize per capita taxes (equalizes fiscal externalities; if populations differ, will not equalize NFBs) --Income taxes, sales taxes, property taxes [(2)]: Equalize per capita revenues (equalizes NFBs)	--Sales taxes, business taxes, property taxes [(3)]: No case for equalization (no fiscal externality; NFBs may differ)

(1) Assumes equal per capita provison
(2) Assumes incomes differ within jurisdictions and average income differs across jurisdictions as well as positive income elasticities of demand for all goods and services
(3) Assumes burdens to be exportable to other jurisdictions

On the other hand, with residence-based taxes (e.g., income taxes, sales tax, residential property tax), NFB differences will depend on the way in which the use of the

revenues departs from the benefit taxation. Suppose the same equal per capita expenditures were financed instead through, say, a poll tax or a flat user charge as a form of benefit taxation. In this case there would be no NFBs generated, since local residents pay for the services they receive. Therefore, no equalization would be required. Instead, if individuals are heterogeneous with respect to income, a proportional residence-based tax (income tax or sales tax) levied to finance equal per capita expenditure on publicly provided private goods will no longer be distributionally neutral, and horizontal equity will be violated if average per capita incomes differ across local jurisdictions. In this case, the appropriate response is to equalize per capita residence-based taxes.

The results differ somewhat for pure public goods. Again, the first scenario is one where public expenditures are financed through revenues that are entirely incident on non-residents. Here, the level NFBs conferred on local residents is equal to the level of expenditures (or, equivalently, the level of transfer from non-residents to residents)—that is, the full value of public services supplied, since public goods are non-rival and are available to all residents on a non-exclusive basis. In this example, fiscal equity would require a system of transfers that equalizes aggregate revenues across jurisdictions to enable the same level of provision of pure public goods across jurisdictions.

If, on the other hand, the provision of pure public goods were financed through some form of poll tax or flat user charge, each local resident would receive NFBs equal to the amount of the cost of provision borne by others through their taxes/charges. Each resident pays only her/his share of the total cost of provision, while enjoying the full benefit of the services provided, regardless of the number of other users. For a given level of tax, NFBs will tend to be higher in more heavily populated jurisdictions. Achieving fiscal equity in this case would require a system of transfers to ensure that comparable levels of service can be provided at comparable levels of tax—that is, full equalization of tax revenues.

Fiscal Efficiency Issues

Migration of individuals between jurisdictions may have an impact on the level of NFBs accruing to existing residents, either through the effect on per capita tax liabilities or through the effect on per capita benefits resulting from public expenditures. Any changes in NFBs accruing to other individuals as a result of any one individual's migration

decision is termed a fiscal externality. Since self-interested individuals will fail to take into account fiscal externalities in making migration decisions, the migration of individuals between jurisdictions may not be efficient from society's point of view.

In the case of pure public goods financed through poll taxes, for example, one of the effects of migration will be to reduce per capita tax liability (for a given level of service provision) of existing residents. Summed across existing residents, NFBs will increase by the amount of tax liability assumed by the migrant—a positive fiscal externality. By the same token, there will be a negative fiscal externality in the jurisdiction from which the migrant departs. The migration process will be efficient only if the associated fiscal externalities are offsetting. In the case of poll taxes, this would require that the level of poll tax be the same across jurisdictions. Note that, where jurisdictions have different population sizes, this would imply higher levels of service in those jurisdictions with higher levels of population and, accordingly, higher levels of NFBs. That is, the degree of equalization called for on grounds of fiscal efficiency is less than that called for on grounds of fiscal equity.

If however, the same public goods are financed out of revenues that are exportable to residents of other jurisdictions, there is no fiscal externality associated with migration, since existing residents' NFBs are unaffected by migration. Accordingly, there is no case for equalization. In other words, where pure public goods are concerned, there is only a case to be made for equalization on efficiency grounds when financing is undertaken from some form of residence-based tax. The equity case remains, however.

The results are quite different in the case of publicly provided private goods that provide equal per capita benefits to all residents. If this type of expenditure is financed out of taxes incident solely on non-residents, the effect of migration (the fiscal externality) is to reduce the per capita benefits accruing to existing residents. Summing across all existing residents, NFBs fall by an amount equivalent to the share of total expenditures claimed by the migrant. The opposite effect occurs in the migrant's jurisdiction of origin. Fiscal efficiency requires that these fiscal externalities be offsetting; this would require that per capita revenues be equalized. This is the same level of equalization as that called for on grounds of fiscal equity.

On the other hand, there is no fiscal externality associated with migration if publicly provided private goods are financed through residence-based taxes, such as poll taxes or flat user charges. In the example used here, local expenditures are assumed to be equal per capita. Therefore a poll tax or a user charge set equal to the per capita cost of local service provision will generate no NFBs. If publicly provided private goods are financed by proportional residence-based taxes, such as income taxes or sales tax, this will give rise to inefficient migration, as result of distributionally non-neutral local budgets in the presence of disparities in average income across regions

It is useful to summarize the results so far. In the case of publicly provided private goods, equalization is called for if local tax burdens are exportable to other jurisdictions or if residence-based taxes are roughly proportional. In that case, it is per capita revenues that ought to be equalized. The result is the same on grounds of both fiscal equity and fiscal efficiency.

In the case of pure public goods, fiscal equity requires that total revenues be equalized (comparable levels of service at comparable levels of taxation), regardless of the mode of finance. Fiscal efficiency, on the other hand, requires only that per capita residence-based revenues be equalized.

The Property Tax

In discussing local equalization schemes, particular attention needs to be devoted to the property tax, since it is an instrument used almost solely by local governments. As with any tax, consideration needs to be given to the issue of tax shifting—the potential for owners of real property to shift the burden of the tax to others. In this regard, it is important to distinguish between the residential and the non-residential property tax. It is also important to distinguish between owner-occupants and tenant-occupants.

The Residential Property Tax

The residential property tax can be thought of as a tax on the land and capital embodied in real property in residential use. Moreover, property taxes are levied simultaneously in the myriad of jurisdictions comprising the local public sector, although not necessarily at uniform rates. The so-called new view of the incidence of the property tax holds that

property taxes result in a reduction in the net return to capital and land in the economy as a whole in proportion to the average rate of tax across jurisdictions. Local differentials in property taxes may, however, be capitalized into housing rentals depending on the degree of mobility of individuals among jurisdictions; otherwise, local differentials must be capitalized into land values, as land is an immobile factor of production.

If ownership of residential property is tied to jurisdiction of residence, then the property tax ought to be viewed as a residence-based tax. Moreover, if average property values vary systematically with, for example, average household incomes across jurisdictions and if property taxes are used to finance publicly provided private goods, NFB differentials will be created across jurisdictions: For example, NFBs will be greater for like individuals residing in relatively high income jurisdictions. There will therefore be a case for equalization of per capita property tax revenues on grounds of both fiscal efficiency and fiscal equity.

It is equally the case that if property taxes are used to finance pure public goods, there will be resulting NFB differentials, again due to economies of scale in public goods consumption. On grounds of fiscal equity, then, full equalization of property tax revenues is called for. On grounds of fiscal efficiency, only per capita property tax revenues need be equalized.

If, on the other hand, ownership is not tied to jurisdiction of residence, then those jurisdictions with a high concentration of tenant-occupants will be able to export a significant share of the burden of the property tax to property owners resident in other jurisdictions. In this context, the residential property tax can then be viewed as a source-based local revenue source. If property tax revenues are used to finance the provision of publicly provided private goods, equalization of per capita revenues will be called for on grounds of both fiscal equity and fiscal efficiency. If it is pure public goods that are being financed, then total revenues ought to be equalized on grounds of fiscal equity. There is no case for equalization on grounds of fiscal efficiency.

The Non-Residential Property Tax

Trade between jurisdictions should make it difficult in most cases to shift non-residential property tax differentials forward to consumers. Moreover, trade between countries may

make it difficult to shift any part of the non-residential property tax forward, at least to the extent of differentials between countries. In these circumstances, the non-residential property tax should be viewed as a source-based tax, which will be shifted back to landowners and capital owners. Even where the burden can be forward shifted, if the burden is exported to residents of other jurisdictions, the property tax remains a form of source-based taxation. Finally, in the case of non-residential property, there is no natural link between ownership and jurisdiction of residence. This would further support the view of the non-residential property tax as a form of source-based taxation.

The implication is that there should be equalization of non-residential property tax revenues used to finance publicly provided private goods on grounds of both fiscal equity and fiscal efficiency. Non-residential property taxes used to finance pure public goods should be fully equalized on grounds of fiscal equity.

Summing Up

To summarize, it has been shown that the case for equalization at the local level depends on the type of public good being provided as well as the mode of finance. Moreover, where equalization is called for, its form and level can be very different depending on whether the relevant policy goal is that of fiscal equity or fiscal efficiency. For example, in the case where pure public goods are financed through source-based revenues, achieving fiscal equity would require full revenue equalization, whereas there is no case for equalization on grounds of fiscal efficiency. Indeed, implementing equalization transfers on grounds of fiscal equity would lead to inefficient levels of migration.

Fiscal equity and fiscal efficiency also lead to different standards for equalization when residence-based taxes, such as poll taxes or uniform user charges, are used to finance the provision of pure public goods. Fiscal equity, in this case, would require that revenues be fully equalized; fiscal efficiency would require that only per capita revenues be equalized.

When publicly provided private goods are financed from source-based revenues, equalization of per capita revenues is called for on both fiscal equity and fiscal efficiency grounds, whereas if these were financed, for example, by poll taxes or uniform user charges, there would be no need for equalization under either criterion. To the extent that

publicly provided private goods are financed by proportional residence-based taxes, per capita revenue equalization is called for, as result of distributionally non-neutral local budgets in the presence of disparities in average income across regions

With regard to the property tax, the potential for exporting burdens either through higher product prices on manufactured goods or lower returns to non-resident property owners indicates that both residential and non-residential property taxes ought to be classed as source-based revenues. In that case, if property tax revenues are used to finance publicly provided private goods, then per capita revenues should be equalized on grounds of both fiscal equity and fiscal efficiency. If property tax revenues are used to finance pure public goods, there is no case for equalization on grounds of fiscal efficiency.

All this suggests that by implementing an appropriate mix of property taxes and user charges at the local government level, equalization grants would not be required on efficiency grounds. The fixed costs of infrastructure might be viewed as having the characteristics of pure public goods; the services provided by infrastructure might be viewed as having the characteristics of publicly provided private goods. Thus, if property tax revenues are used to finance the provision of infrastructure while user charges are used to ration the services provided by infrastructure, there will be no fiscal externality associated with migration and, therefore, no efficiency-based reasons to establish an equalization program.

A further implication of all this is that, where fiscal equity concerns dominate in providing provincial pure public goods, there is a case for full equalization of revenues, since uniform levels of provision are called for. As has been shown, the case can be made here whether the property tax is viewed as a residence-based tax or a source-based tax. This might, for example, be used to make the case for a significant provincial presence in the financing of infrastructure.

Finally, the analysis suggests that where property tax revenues are used to finance publicly provided private goods such as education and welfare, equalization of per capita revenues is required on grounds of both fiscal equity and fiscal efficiency. As has been shown, the case can be made whether the property tax is viewed as a residence-based tax or a source-based tax. In the case of education, a uniform property tax rate levied by or on behalf of the province, used to fund equal per student distributions to school boards will

achieve the equalization goal. By the same token, funding for welfare ought to be centralized and distributed in accordance with case-loads across jurisdictions. Two-tier local government structures can achieve these goals. Equally, it might be argued that neither education nor welfare ought to be financed out of local tax bases, such as the property tax.

4. IMPLICATIONS FOR JAPAN

Institutional context of the Japanese system

Now we are able to assess the Japanese system of fiscal transfers against the principles outlined in the above sections. To begin with, it is important to take into consideration the institutional context. Japan has a two-tier system of local government, consisting of prefectures and municipalities. The system can be characterized by using aggregate public finance data. On the expenditure side, local government expenditure accounts for a very large proportion, over 70%, of general government expenditure, which is considerably in excess of the ratio found in average OECD countries.

Table 1 summarizes local government expenditure by function. General affairs—diplomacy, defense, judiciary and criminal law—are the responsibilities of the central government. Fire and police accounts for 5.2% of local government expenditure. Public works expenditures loom large at 23.3%. Most such expenditures are property related: 50% on urban development; 26% on local roads; and, 10% on housing.

Prefectures are responsible for junior high school education; municipalities are responsible for elementary and kindergarten education. Total expenditures on education amount to 23.1% for prefectures and 12.8% for municipalities—a weighted total of 18.9%. Social welfare is the joint responsibility of prefectures and municipalities—6.6% of prefectures' expenditures and 18.3% of municipalities' expenditures, for a weighted total of 12.1% of their spending. Municipalities manage water supply, waste disposal and sewerage.

Table 1: Local government expenditure by function, 1995						
	Prefecture		Municipality		Total	
	Yen (bn)	%	Yen (bn)	%	Yen (bn)	%
Local assembly	95	0.2	496	1.0	591	0.6
General affairs	3,853	7.3	6,803	13.1	9,991	10.1
Fire protection and police	3,520	6.7	1,652	3.2	5,107	5.2
Social security and welfare	3,498	6.6	9,501	18.3	11,979	12.1
Health and hygiene	2,006	3.8	4,623	8.9	6,474	6.5
Education	12,201	23.1	6,647	12.8	18,742	18.9
Social infrastructure	12,051	22.8	11,451	22.1	23,032	23.3
Other economic affairs	9,023	17.1	4,694	9.1	12,440	12.6
Debt service	3,847	7.2	4,700	9.3	8,612	8.7
Others	2,395	4.5	929	1.7	1,431	1.4
Total	52,823	100.0	51,901	100.0	98,944	100.0

Source: Ministry of Home Affairs (2000).

It is evident from Table 1 that local government functions in Japan comprise elements of both pure public goods and publicly provided private goods. The single largest category is social infrastructure, largely expenditures on urban development and roads, which might be thought of as pure public goods. Similarly, fire protection and policing might be categorized as pure public goods. Together these represent 35 percent of local government expenditures. Expenditures on education, social security and welfare might be thought of as publicly provided private goods. Together, these represent 50 percent of local government expenditures. It is straightforward to say that the equalization formula can reflect varying degrees of expenditure needs.

On the other hand, high local expenditure ratios mask the fact that a substantial fraction of local expenditures are mandated by central ministries, with discretion over standards and levels residing at the center. The central government is heavily involved in almost every aspect of local government spending: there is no clear separation of central and local government functions under the Constitution. Major functions such as education, health, and welfare are controlled by the central government, but carried out by local governments. The Ministry of Home Affairs maintains a vigilant watch on local government budgets. This is not surprising, given that the defining feature of the Japanese system has been the strong collective preference for equal access to public goods since World War. But, since different regions have populations with systematically different

demographic make-ups, they will have different resource needs even if they are providing centrally determined uniform levels of public services.

While significant expenditure responsibilities are decentralized to lower-level jurisdictions in Japan, this is not accompanied by discretion of local governments over revenue raising powers with regard to tax bases, tax rates or the ability to borrow. Table 2 summarizes local revenue components. Local taxes account for only 29.3% of revenues for prefectures and 33.6% of revenues for municipalities. It is interesting to note that the median for prefectures is 23% and for municipalities 18%, indicating that the distribution of local taxes is skewed towards the upper end. Local governments have borrowed heavily. The local allocation tax is an unconditional grant from a defined pool. Fees and charges are negligible. The local transfer tax is a variant on the local tax: it is collected by the central government for administrative purposes.

Table 2: Total annual revenue of local government, fiscal 1995

Source of revenue	Prefecture		Municipality		Total	
	Yen (bn)	%	Yen (bn)	%	Yen (bn)	%
Local tax	15728	29.3	17946	33.6	33674	33.2
Local transfer tax	870	1.6	1068	2.0	1939	1.9
Local allocation tax	8436	15.7	7716	14.5	16152	15.9
Specific purpose grant	9943	18.5	5047	9.5	14990	14.8
Fee and charges	1123	2.1	1224	2.3	2347	2.3
Local borrowing	9061	16.9	8056	15.1	16978	16.8
Others	8565	16.0	11187	20.9	15230	14.0
Total	53730	100.0	53365	100.0	101315	100.0

Source: Table 1.

Prefecture taxes represent a combination of residence-based taxes and source-based taxes. The enterprise tax constitutes a form of source-based tax. Other prefectural tax, such as the inhabitant tax and the local consumption tax — piggybacking on national VAT — constitute residence-based taxes. Municipal taxes contain elements of both residence-based taxes, such as the residential property tax and the inhabitant tax, and source-based taxes, such as the non-residential property tax. In spite of access to such an uncommonly wide range of revenue instruments, the Japanese system is characterized by a significant vertical fiscal gap. Although the ratio of central to local government

expenditure in Japan is 34.5 to 65.5, on a final disbursement basis, the ratio of central to local tax collections is the reverse: 62.4 to 37.6 for the central government.

Given these differentials between expenditure responsibilities and revenue raising capacities, the lower level of government would end up with a deficit and the central government with a surplus. A huge volume of transfers serves to close this 'fiscal gap'. This occurs explicitly through the Local Allocation Tax as well as Specific Purpose Grants. It also occurs indirectly as a result of local governments piggy-backing on the national VAT and, to all intents and purposes, on the national income tax. As a result of centralized collection but also, de facto, in the presence of decentralized collection, there is a significant degree of harmonization in both bases and rate structures.

The Local Allocation Tax plays a key fiscal equalization role in the Japanese transfer system in Japan. Local Allocation Taxes are funded out of a revenue pool based on fixed portions of five national taxes, and allocated according to formula based on differences in basic needs and fiscal capacities. The total size of equalization is a fixed portion of national taxes from individual, corporate income, alcoholic, tobacco taxes. The Local allocation tax is paid annually to local governments whose basic financial needs exceed basic financial revenues. Those rich localities whose revenue exceeds need are neither eligible for the grants nor liable to contribute money for fiscal adjustment[7].

Specific purpose grants are funded out of general revenues. Some involve full payment by the national government for functions performed by local governments on behalf of the national government. Some involve substantial subsidies to local governments in recognition of large spillover effects. Some involve incentives for local governments to undertake specific projects. In total, central-local grants comprise almost one-third of local government revenues.

As mentioned above, significant revenue raising responsibilities are not decentralized to the regions in Japan. And, for those that are, tax rates tend to be similar across localities. Despite this fact, the capacity to raise revenue is an important element in determining the allocation of equalization grant among regions. This is so because the common local tax rate masks the fact that there is substantial difference in revenue raising capacities among local governments. Given the strict uniformity in the local tax

system, differentials in tax bases, such as income, consumption and property values, produce an uneven distribution of tax revenues across the country. For instance, per capita tax revenue in the richest prefecture is about four times of that in the poorest prefecture in Japan. The implication is that, in the absence of a corrective device, decentralization will entail that persons with a given income will receive very different net fiscal benefits in two different regions. This differential would violate horizontal fiscal equity and induce an inefficient allocation of the labor force.

It is worth noting the extent in which the Japanese equalization system reduces territorial fiscal inequalities. Comparing per capita local tax revenues and per capita revenues from general fiscal sources (i.e. local taxes and local allocation tax) at prefecture level, the disparity in the financial resources among rich and poor districts is considerably reduced. A marked difference is observed in per capita prefectural tax revenues among localities, the largest being Tokyo with 270,000 yen, and the smallest Okinawa with only 53,000 yen. After receiving equalization transfers from the center, the rank ordering will actually be reversed.

Summing up, local government in Japan can be characterized by: Centralized tax administration; decentralized provision of public services; and heavy dependence on intergovernmental transfers. The Japanese system is also characterized by a substantial degree of revenue sharing. This occurs explicitly through the Local Allocation Tax as well as Specific Purpose Grants. It also occurs indirectly as a result of local governments piggy-backing on the national VAT and, to all intents and purposes, on the national income tax.

Source of NFB differentials

The mix of residence- and source-based taxes at the local government level set against the mix of expenditure functions at the local government level provide a fertile field for application of the equalization principles outlined in the previous section. In practice, the system of national-local transfers in Japan is consistent with the application of those principles. Next, we investigate the major source of difference in NFBs in Japan, beginning with differences in revenue-raising capacity.

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[7] For the detail discussion about formula of Local Allocation Tax, see Mochida (1998).

Inhabitant Tax

There seems to be almost universal agreement that the inhabitant tax — a combination of head tax and income tax — should be viewed the most important local residence-based tax in Japan, accounting for over 32.2% of total prefectural tax revenues and 44.6% of total municipal tax revenues in 1995. The inhabitant tax is essentially a piggy-backing tax on the national income tax. The tax consists of three components, each based on different tax source: per capita (*kinto wari*), income (*syotoku wari*) and interest income (*rishi wari*) components. Most tax revenue, however, comes from the second component, which is a tax levied on the income of a year previous to the income assessed for the national income tax. A modest progressive rate structure is applied to this harmonized tax base, with a relatively high minimum taxable income level. The tax is collected at source by employers and transferred to local governments on the basis of residence rather than of employment.

Local Consumption Tax

There seems to be broad, albeit not universal, consensus in the literature that the local VAT, called the local consumption tax, can be viewed as indirect form of residence based tax. The local consumption tax was introduced in April of 1997 and accounts for 20% of total prefectural tax revenues. It is piggy backed on the national VAT with a uniform rate of 1%. Advocates points out its revenue stability and the relatively even distribution of tax revenues across the regions as a main advantage. Critics complain about the lack of discretion of local governments over tax rate setting.

The distinction between the origin principle and the destination principle is an important determinant of whether the tax is residence- or origin-based in nature. On the one hand, if each prefectural government imposed a VAT within its jurisdiction according to the origin principle, the tax would be a source-based tax. The prefecture of origin might export a substantial part of VAT liabilities to other jurisdictions where final consumption would occur. On the other hand, if each prefecture levied the VAT based on the destination principle, local consumption tax would be assessed as a residence-based tax.

Which of these two systems applies is determined by the tax collection procedure and the way in which tax revenue are finally distributed. In fact, the inter-regional trade of goods and service are taxed on the basis of the origin principle. But the place of origin where the value added occurs does not receive the tax revenue in the Japanese system. On the contrary, place of final consumption, which is roughly coincident with residence, are entitled to get the tax revenue, because the law requires prefectures of origin to assign local consumption among the prefectures *ex post* in proportion to the amount of final consumption statistics. Japan's local consumption tax is unique in the sense that it combines origin-based piggy backing on the national VAT with a clearing system that is intended to reflect the destination principle indirectly.

From this viewpoint, one may reasonably say that the local consumption tax should be regarded as an indirect form of residence-based tax. Moreover, it is one that is roughly proportional to income. That being the case, local budgets are progressive in nature, and the local consumption tax revenues should be fully equalized.

Property Tax

The residential property tax is one of the most important municipal taxes along with the inhabitant tax, accounting for over 40% of total municipal tax revenues. The tax base includes the capital value of land, structure and tangible business assets, which are assessed every three years in accordance with a uniform assessment method undertaken by the MOHA. The standard tax rate is set by national law at 1.4 percent of assessed value. The residential property tax is legally imposed on the owner-occupants of the land and structure within the local tax jurisdiction rather than tenant occupants.

The desirability of equalizing residential property tax is somewhat problematic, since it depends on one's view of the incidence of that tax. On the one hand, if ownership of residential property is tied to jurisdiction of residence, the property tax ought to be viewed as a residence-based tax. On the other hand, if ownership is not tied to the jurisdiction of residence and the tax is levied not necessarily at uniform rate, the residential property tax can be viewed as a source-based tax. In the latter case, property taxes result in a reduction in the net return to capital in the economy as a whole, as the 'new view' discussed above suggests.

To judge which of these views is applicable, it is important to consider the diversity of tax rates, and the relationship between ownership and residence in Japan. In fact, there is an option available to local government for setting the tax rate. But almost all localities opt for the same tax rate. For instance, 2,944 out of 3,233 municipalities applied same standard rate (1.4%) on property value. Moreover, since the number of jurisdictions with a high concentration of tenant-occupants has decreased substantially over the past decades, the extent to which tenant-occupants will be able to export the burden of the property tax to property owners resident outside the jurisdictions is limited. Ownership of Japan's residential property is also generally tied to the jurisdiction of residence in the sense that both tenant-occupiers and owners reside within the same tax jurisdiction.

To sum up, Japan's residential property tax should be viewed as a residence-based tax. As the Shoup mission pointed out in its recommendation, 'the tax (on dwellings) is usually supposed to be borne by the occupier rather than landlord, at least in the long run' in Japan. If property taxes were imposed according to the strict benefit principle, no NFB is generated. But the chance of this scenario happening is unlikely in Japan. Because average property values vary systematically with average household incomes across jurisdictions, NFB differentials will be created across the jurisdictions.

Progressivity in Local Budgets

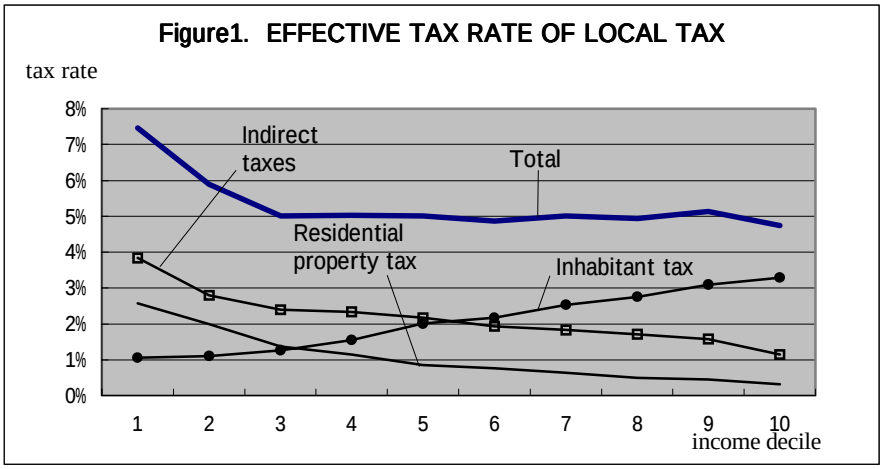
In following two sections, we investigate the question of whether local budgets are distributively neutral or progressive/regressive in Japan.

Let us take a brief look at incidence of the three broad residence-based taxes: the inhabitant tax, indirect taxes and the residential property tax. Indirect taxes include the local consumption tax, tobacco tax, automobile acquisition tax, and special local consumption taxes. In estimating the incidence of these taxes, we can gather the relevant data from *Annual Report of Family Income and Expenditure* published by the statistics bureau of management and coordination agency[8]. For the inhabitant tax, we can obtain family household data and calculate the average tax rate by income decile group. On the

[8] For data source, see Statistics Bureau of Management and Coordination Agency (1998).

other hand, no household data are available for indirect taxes or the residential property tax.

We have to make an assumption about the shifting of these two sets of taxes and use those assumptions to generate estimate of tax incidence[9]. For instance, indirect taxes on consumer goods are borne by consumer of the taxed product; property taxes on land are borne by property owners; property taxes of structures are borne by users. Then we allocate aggregate tax payment into each income decile by means of some proxy measure (consumption, imputed rent, rent etc.). Due to the statistical lack of relevant proxy measure, we are forced to exclude the average tax rate of land from our estimation.



Source: Statistics Bureau of Management and Coordination Agency (1998), Ministry of Home Affairs (2000), Authors' own estimation.

Different types of taxes turn out to have very different pattern of progressivity. The main results of our estimation are shown in figure 1. Inhabitant taxes are progressive throughout the income distribution. This result is as expected, given that rate structures are modestly progressive and the minimum taxable level is high. Regarding indirect taxes, there is limited scope for redistribution, since they are imposed on expenditure and are not levied according to the ability-to-pay principle. The local consumption tax as a general sales tax is slightly regressive to income, while other specific indirect taxes are

[9] For analyses of local tax incidence, see Hayashi (1995) chapter 7 and 8. Hayashi's analyses is based on yearly income group, while authors' estimation is calculated by yearly income decile group.

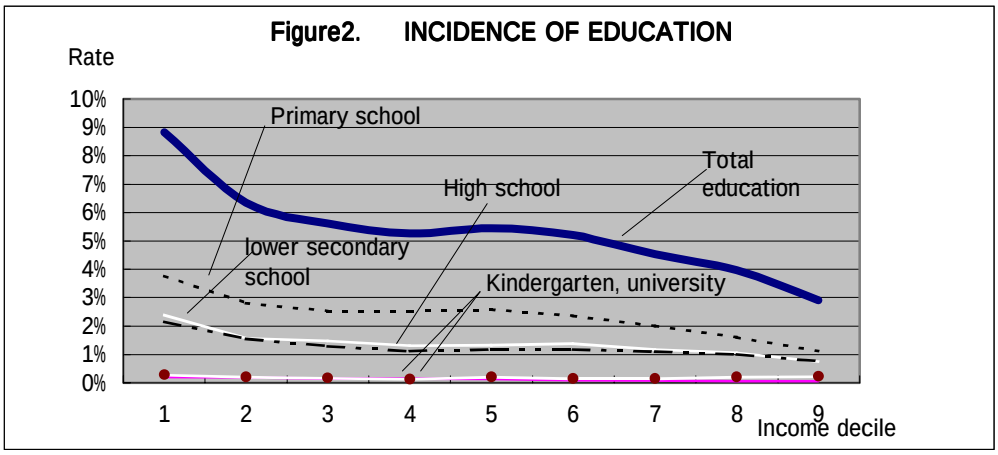
much more regressive. Local indirect taxes as a whole are modestly regressive in Japan. Residential property taxes are regressive over the bottom two deciles, but slightly regressive over the residual eight deciles. This distribution reflects the fact that elderly homeowners/occupants whose current incomes are not sufficient to meet tax payment are concentrated in the bottom two deciles.

Several observations in the previous paragraph have shown that on the tax side so-called benchmark case does apply to Japan. To put it another way, as a whole residence-based taxes are roughly proportional to income with the exception of the bottom two deciles. This result is not surprising, given that combined set of local taxes offset progressivity of inhabitant tax against regressivity of indirect and residential property taxes.

Incidence of Local Expenditure by Income

On the expenditure side, local governments have more instruments for redistribution in some program than in others. Japan's local governments undertake a wide variety of types of expenditures, spending almost 65% of total public spending, but pure local public goods represent relatively small component of total expenditure. Though it is not easy to calculate accurately, we estimate that pure local public goods, such as parks, roads, fire prevention, police service, tax collection, water/sewer line, waste disposal facilities, public health and river improvement accounts for only 35% of total local expenditure. Of course, this kind of spending by its nature does not fulfill redistributive goals.

The bulk of spending, however, is used to pay for publicly provided private goods, accounting for almost 50% of total expenditures. This spending can be divided broadly into three categories: external economies, redistribution in kind, and local monopolies. The first accounts for 26% of total expenditure, including such major item as education, prevention of tuberculosis, preservation of health, loans to agriculture, forestry and fishery industries, harbor facilities, and land adjustment. The second category (redistribution in kind) accounts for 24%, including the aged welfare, child welfare, welfare benefit to household, and public housing. The third category (local monopolies), which includes grant to municipal enterprises, accounts for only a negligible share.



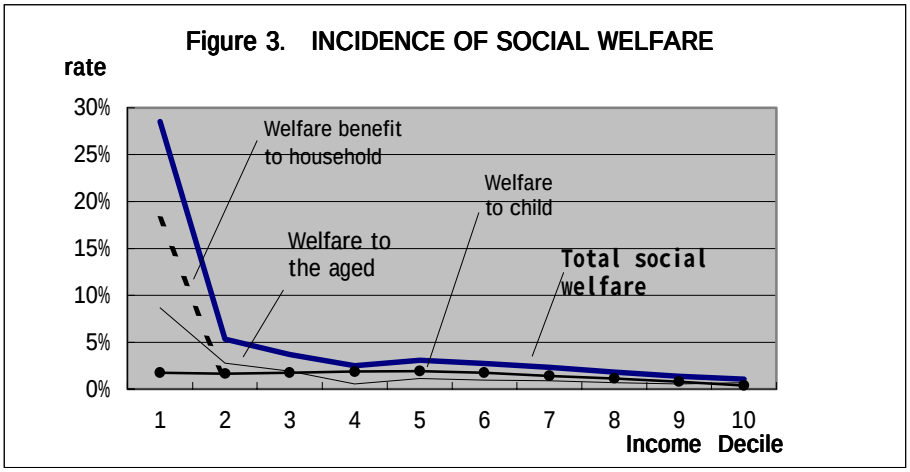
Source: Statistics Bureau of Management and Coordination Agency (1998), Ministry of Home Affairs (2000), Authors' own estimation.

Let us briefly consider the incidence of major two sets of public expenditures on private goods: education and social welfare. Although the benefits of public services are not readily measurable, the beneficiaries of these two expenditures are relatively clear. Gathering information from the *Annual Report of Family Income and Expenditure*, we allocated aggregate expenditure on educaiton into each decile by the number of various kinds of pupil. For social welfare, aggregate expenditure should be assigned by a proxy measure that reasonably reflects the number of specific beneficiaries[10]. For instance, we used the number of children under 18 years, the number of persons who need nursing, and the number of tax-exempt families as proxy measures. A main result of our estimation is provided by figure 2 and 3.

In the usual benchmark case, certain expenditures by their very nature are assumed to provide roughly equal per capita benefits, which are spread uniformly over the population. Education and health are usually thought of in this way. The real world seems to be somewhat different from this assumption. Figure 2 shows that the benefits of primary, lower secondary and high schools are modestly progressive, while expenditures on kindergartens and universities are roughly proportional. On balance, the benefits of education are *de facto* slightly progressive in Japan.

[10] The data for proxy measure are derived from Ministry of Health and Welfare (1995).

Other expenditures, like the social welfare responsibility of local governments, are likely to be more progressive, in the sense that their benefits accrue relatively more to low-income groups. This supposition is verified almost completely by the estimation provided in figure 3. As figure 3 demonstrates, welfare benefits to household are sharply progressive, welfare to the aged is progressive, while child welfare is roughly proportional to income. All these things make it clear that benefit of publicly provided private goods in Japan should be viewed as slightly progressive relative to the benchmark case.



Source: Statistics Bureau of Management and Coordination Agency (1998), Ministry of Home Affairs (2000), Authors' own estimation.

While it is difficult to be certain, we may reasonably conclude that local budgets, apart from the contribution of source-based tax and pure public goods, tend to be redistritutive. It would not be too misleading to characterize total local residential taxes as being proportional to income, and local expenditure being distributed on a slightly progressive base. If this were so, it would imply that local budgets are redistributive at least in part and slightly progressive relative to benchmark case. This progressivity leads to call for full or more than full equalization of the residence-tax capacity in Japan.

Source-Based Tax as an Implicit Form of Benefit Taxation

So far we have assumed that local governments use their residence-based taxes to provide quasi-private consumer goods to the residents of the prefectures. This is an

oversimplification of the nature of the local government activity in Japan. Roughly one-third of the goods and service provided by the local governments are public rather than private in nature, and comparable local own revenues derive from source-based taxes.

The desirability of equalizing source-based taxes devoted to providing pure public goods is somewhat controversial, since pure public goods accrue not only to residents but also to firms and non-residents. On the one hand, if social infrastructure were financed entirely by local governments and the benefits accrued to residents, fiscal equity would require full equalization of NFB differentials as argued in the previous section. A significant presence of the national government in financing social infrastructure (viewed as a pure public good) is entirely consistent with the fiscal equity criterion. For instance, parks financed by non-residential property taxation leads to a case for full equalization of aggregate tax revenues.

On the other hand, to the extent that source-based tax revenues are spent on intermediate goods, residents no longer derive benefits from them directly, and our earlier argument should be revised somewhat. Intermediate goods financed by source-based taxes might have three scenarios with regard to equalization. First, if the intermediate inputs provide benefits in the form of increased factor incomes, the equalization base should fall by the amount of tax revenue devoted to providing intermediate goods. Secondly, if the benefits of the intermediate goods are reflected in reduced output prices (a rise in the real income of residents), full equalization of source-based taxes will be required. Thirdly, if source-based taxes were, in part at least, an implicit form of benefit taxation levied on firms to cover the provision of public services, the tax should not be fully equalized.

There seems to be almost universal agreement that the nature of local government expenditure in Japan is such that a large proportion of local public goods is used as intermediate inputs in the production process of firms. Obvious examples include roads, bridges, river improvement, ports, water/sewer lines, and waste disposal facilities. That being the case, this leads to the question of which scenarios are most plausible in the Japanese context. Though we have no definite information with respect to the first two scenarios, we can probably say that source-based taxation should be viewed as a implicit form of benefit taxation levied on firms, at least in part.

First, non-residential property taxation obliges the owners of the business or the consumers of the product (if the tax is shifted forward in higher selling price) to help pay for the police, fire and other protection that the business gets from the locality. This judgement is fully consistent with the spirit of Shoup Report, which gave a solid foundation to the property tax in Japan.

Secondly, the enterprise tax, which accounts for largest share of local tax revenues, is another example of implicit benefit taxation. The enterprise tax, which is collected by prefectures, is imposed at a slightly progressive tax rate on the net profits of corporations rather than on sales. This tax is, as is well-known, officially justified in order that the businesses and their patrons help defray the cost of governments services that are made necessary by the existence of the business and its employees in that local area. Given that enterprise taxes are viewed as a cost of corporate activities, it is not surprising to see that the tax revenues are deductible from the national corporate tax base. The current tax base, however, is not an appropriate proxy of corporate activities within the local area concerned. The best solution may be expanding the base of the tax by applying the rate, not to profits, but to the sum of profits, interest, rents, and payrolls (value-added) as many proposals have suggested.

Viewed in this light, major forms of source-based taxation — the non-residential property tax and the enterprise tax — can be regarded as implicit forms of benefit taxation levied on firm to cover the provision of public service. Source-based taxation devoted to providing intermediate goods, therefore, should not be fully equalized[11].

Differential in Needs

As mentioned in an earlier section, given that different demographic groups in the population require different resources to provide a given level of public service, these differences can in principle be measured and included in the equalization transfers. The

[11] During the discussion of this paper, Udagawa suggested that Japanese firms should be viewed as a 'resident' of each jurisdiction at least in part. From this point of view, tax on firm profit can be seen as a combination of source- and residence-based taxes.

Japanese system includes elements of needs in the equalization transfer system, and as such is basically similar to Australian and Nordic countries' arrangements[12].

The actual way in which needs-based equalization is pursued is by calculating standard fiscal needs that are not influenced by the actions of local governments. For each public service item, measurement units, which reflect the number of the beneficiaries of particular expenditures, are selected. Then, standard unit costs per measurement unit are decided by the center, assuming an imaginary local government with standard demographic make-up and area. Finally, fiscal needs of particular public services are calculated as the number of measurement units by multiplying the unit cost, adjusted by modification coefficients. Modification coefficients reflect cost differential factors, such as economies of scale in the provision of pure public services.

What is noticeable is the uniqueness of the Japanese system. In fact, equalization transfers intends to eliminate differentials of NFB arising from needs. But it also closes the full amount of the gap between each region's fiscal needs and fiscal capacity. There seems to be broad, albeit not universal, consensus in policy-making circles of the case for this full gap-closing approach. It ensures that any local government with reasonable tax effort would be able to provide a uniform level of public service to all citizens regardless of his/her residence. This argument is often used as a main reason why equalization transfers have played a key role in evolution of the post-war Welfare State in Japan.

The desirability of the full gap-closing approach is controversial in academic circles, however, since the Japanese system is characterized by a significant vertical fiscal gap. On the one hand, so-called vertical fiscal imbalances are necessary if there should be a set of intergovernmental transfers from higher to lower level of governments as well as tax harmonization. On the other hand, accountability arguments suggest that lower levels of governments be responsible for raising significant amount of their own revenues.

In Japan's case, vertical fiscal imbalances are so significant that nearly all prefectures and municipalities are in the need of equalization transfer from the central government. Some Japanese students suggest reducing vertical fiscal gap entirely, and transforming current system from 'gross scheme' into 'net scheme' in which revenues are

[12] The similarity and difference in equalization transfer in Nordic countries and Japan are examined by Mochida and Lotz (1999).

taken from the regions with higher tax capacity and transferred to those with lower tax capacity. But it seems to be hard to implement this proposal in near future, because of potential conflict between have-regions and have-not regions[13].

Notwithstanding this, the equalization system has given unconsciously priority to addressing the vertical gap rather than eliminating NFB differentials, since needs continue to rise whereas fiscal capacities have taken a beating. For instance, let us divide equalization grant into three components: a capacity component, a needs component and a vertical gap component. To discuss this matter as a whole is beyond the scope of a brief paper. But we can probably say that the need component is slightly larger than the capacity component, while the vertical gap component exceeds substantially the sum of capacity and need components. On balance, more emphasis should be put on pure equalization which eliminates NFBs arising from both capacity and needs. The vertical fiscal imbalance should be reduced as much as is compatible with keeping both a 'gross' equalization scheme and tax harmonization, or closed by equal per capita unconditional block grants.

We might speculate along the following lines. The central government has sought to control its own spiraling deficit by cutting back on grants for capital projects. Local governments have been forced to borrow from the Local Loan Program, with compliance of the central government, to finance capital spending. The end product is annual deficits and spiraling debts. The design of Japan's equalization program provides an incentive for local governments to borrow to finance capital spending. In particular, repayment of

[13] The issue of a net versus a gross scheme is an important one. When equalization is separated from general transfer system and run as a net scheme, it is very difficult to enforce negative payment on prosperous regions. In some countries, such as Canada, since the system is run as gross scheme it only equalize up the have-not province, and does not equalize down the have province (which is politically unfeasible). Some of Canadian economists have advocated combining equalization with Canada Social and Health Transfer so as to be able implicitly to equalize both up and down. In the case of Japan, where there is a relatively large vertical fiscal imbalance, it should not be the issue. All local governments can be equalizes to a common norm, both upwards and downwards, under gross scheme. That can be viewed as an advantage. In Japan, the benefits of the net scheme can effectively be realized when equalization is integrated with the general transfer system.

principal and interest will constitute a component of the calculation of fiscal need. Thus, a viscous cycle is created.

5. CONCLUSION

This paper has sought to assess the Japanese system of intergovernmental fiscal relations in the light of the theory of fiscal federalism. We have argued that there is a case on grounds of both fiscal efficiency and fiscal equity for the system of equalization transfers that characterize the present system in Japan. This conclusion derives from taking account of the various components of the system and their overall effect.

While the case for decentralizing revenue-raising responsibilities is a mixed one, the efficiency arguments for decentralizing the provision of public services and targeted transfers are fairy strong. At the same time, there are significant possibilities for inefficiencies and inequities arising from decentralized fiscal decisions. The system of intergovernmental fiscal relations — equalization and conditional grant, and tax harmonization — is intended to achieve the full benefits of decentralization, while at the same time ensuring that decentralized decision making does not violate national efficiency and equity objectives.

There are several types of inefficiency and inequity arising from decentralization. Expenditure spillovers and tax competition arises when fiscal decisions are decentralized because the economies of lower-level jurisdictions are interdependent. Perhaps more important, fiscal inefficiency and inequity are significant in assessing the equalization scheme. In the absence of corrective devices, decentralization will entail that persons with a given income will receive different *net fiscal benefits* (NFBs) in different jurisdictions. Instead of resources being allocated such that their marginal productivity is equated across jurisdictions, the marginal product plus NFBs will be equated. This means that different NFBs will induce inefficient migration among jurisdictions. On the other hand, fiscal equity requires that all jurisdictions have the potential ability to provide common levels of public services at common tax rate for all citizens. If NFBs differentials exist, not only will inefficiency induced, but so will fiscal equity be violated.

The case for a well-designed equalization scheme — the cornerstone of intergovernmental fiscal relations — lies in mitigating above-mentioned inefficiency and inequity by offsetting NFBs differentials across jurisdictions. How equalization transfers should be designed can be derived from our discussion of the source of NFBs differentials. In practice, NFBs differentials will reflect both differences in revenue-raising capacity and differences in need for public spending. It has been shown that the case for equalization at the local level depends on the type of public good being provided as well as the mode of finance. Moreover, where equalization is called for, its form and level can be very different depending on whether the relevant policy goal is that of fiscal equity or fiscal efficiency.

Our discussion demonstrates that the appropriate features of equalization are crystal-clear in principle. In the case of publicly provided private goods financed by source-based local taxes, equalization of per capita revenue is called for on both efficiency and equity grounds. On the other hand, if these were financed by residence-based benefit taxes, such as a poll tax or uniform user charges, there would be no need for equalization under either criterion.

The benchmark case commonly used is where residence-based taxes are roughly proportional to income, and the benefits of public spending are roughly equal per capita. Local budgets will no longer be distributionally neutral, and fiscal equity will be violated if average per capita incomes differ across jurisdictions. In this case, the appropriate response is to equalize per capita residence-based taxes. These results are the same on grounds of both fiscal equity and fiscal efficiency.

In the case where local governments provide pure public goods, fiscal equity requires that total revenues be equalized, regardless of the mode of finance. Fiscal efficiency, on the other hand, requires only that per capita residence-based revenues be equalized. If, however, the same public goods are financed out of source-based revenues, there is no fiscal externality associated with migration. Accordingly, there is no case for equalizations.

In the case of the property tax, which is particularly relevant for local government financing, special consideration needs to be given to the issue of tax shifting. Our analysis suggests that the non-residential property tax should be classified as a source-

based tax, while the classification of the residential property tax depends on whether the ownership of residential property is tied to the jurisdiction of residence or not.

Looking at the institutional context, we arrived at the conclusion that the system of equalization transfers in Japan is consistent with the application of those principles. This is so because the mix of residence- and source-based taxes at the local government level set against the mix of expenditure functions at the local government are broadly consistent with the case for equalization.

Our examination of the features of the Japanese fiscal system in this paper have shown that on the tax side, the so-called benchmark case does apply to Japan. To put it another way, as a whole, residence-based taxes are roughly proportional to income with the exception of lowest income families. This result is not surprising given the progressivity of the inhabitant tax (personal income tax) is offset against the regressivity of indirect and residential property taxes.

On the expenditure side, our estimation made it clear that the incidence of the two major types of publicly provided private goods should be viewed as slightly progressive. We can reasonably conclude that local budgets, apart from the contribution of source-based taxes and pure public goods, tend to be redistributive. It would not be too misleading to characterize total local residential taxes as being proportional to income and local expenditure being distributed on slightly progressive base. This progressivity leads to a call for full or more than full equalization of residence-based tax capacity in Japan.

On the other hand, the desirability of equalizing source-based tax devoted to providing pure public goods is somewhat controversial, since the benefits of pure public goods accrue not only to residents but also to firms and non-residents. We think that the major forms of source-based taxation — the non-residential property tax and the enterprise tax — should be viewed as implicit forms of benefit taxation levied on firms to cover the provision of public services. Source-based taxation devoted to providing intermediate goods, therefore, should not be fully equalized in Japan.

Given that different demographic groups in the population require different resources to provide a given level of public service, these differences can in principle be measured and included in the equalization transfers as the Japanese system does. The

system is intended not only to eliminate NFB differentials arising from need differences, but also to fully close the gap between each region's fiscal needs and capacity. The current equalization system gives priority to addressing the vertical fiscal gap rather than to eliminating NFB differentials, since needs continues to rise whereas fiscal capacities have taken a beating. More emphasis should be put on pure equalization, and the vertical fiscal imbalance should be reduced by enhancing local own revenue sources.

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