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Local Tax Structure and Expenditure Responsibilities: Japan

By Nobuki Mochida
University of Tokyo, Japan

1. Introduction

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 of government ought to be responsible for raising significant amounts of their own revenues at the margin. On the other hand, there are significant possibilities for inefficiency and inequality arising from decentralized taxes.

The original intention of the 2013 CPH workshop is to explore what are the driving forces for the local tax structures¹. Is tax policy determining the local expenditure portfolio, or is the relationship the other way around? Organizers expect some research venturing to explore the interplay between the local expenditure responsibilities and tax policy. This paper examines these fresh issues in the light of Japan's recent experiences, and tries to bring not only analytical framework but also qualify information on local tax structures. The traditional fiscal federalism approach was evolved in the context of large federal countries with a heterogeneous and mobile population. Japan's case study would serve as a touchstone which verifies the relevancy of traditional theory in the context of small unitary countries with a homogeneous and relatively immobile population.

This paper argues that expenditure has not been decided by making tax revenue given; instead expenditure does Granger causes tax revenue in Japan. That is, in order that expenditure might be determined for a certain reason and for financing it, it turned out those tax revenues is influenced. The supply side theory could hardly explain the massive increase in the local public sector that occurred between 1950s and 1980s. The demand side theory seems to provide a more convincing explanation of development over this period. While Japanese are one of the 'most reluctant tax

¹ Kim, Junghun, Niels Jorgen Mau and Jorgen Lotz[2013]

payers' in the world², they allowed for moderate increase in tax revenues as a result of automatic tax elasticity and taxpayers' illusions. Taxpayers are aware that they are paying local income tax, but may not notice how much, as it is withheld at source. The supply side theory have provided a more convincing explanation than demand side theory since 2000, but the constraint on local public sector growth may also be due to disenchantment with government spending program and their disappointment efficiency in delivering expected improvement, which itself led to calls for smaller government and privatization.

The question is why tax policy has lagged behind expenditure decision and tax preference of voter could not determine the tax levels and levels of expenditure? Turning our attention to local tax structure, the Japanese system seems to attempt combine Northern European expenditure decentralization with Continental style centralized methods of financing. This is a problematic match. As local public sector would evolve from 'agency' model to 'autonomy' model, those problematic matches will come into question. One of the controversial proposal is to trade corporate tax in return for sub-National VAT. The paper discusses some options for the future development.

2. Interplay between Tax and Expenditure

Granger causing test

The theme of this workshop is how to understand interplay between expenditure responsibility and tax policy. With time series data we can make slightly stronger statements about causality simply by exploiting the fact that time does not run backward. These ideas can be investigated through regression models using the notion of Granger causality. Demand for expenditure "Granger causes" tax revenue, if past value of demand for expenditure can help explain tax revenue. One of the quantitative studies was done by Horiba [1999] with respect to Japan's local government data. Using 1956-1987 data, it concludes that expenditure Granger causes tax revenue. Unfortunately, it does not check whether two variables are stationary or non-stationary.

If variable X and Y turned out to be non-stationary, we need to transform them into stationary data. Non-stationary data, as a rule, are unpredictable and cannot be modeled or forecasted. The results obtained by using non-stationary time series may

² Quoted from 'Japan's Consumption tax : Taxonomics: crucial rise in controversial levy may be in doubt' in *the Economist*, August 3rd.

be spurious in that they may indicate a relationship between two variables where one does not exist. In order to receive consistent, reliable results, the non-stationary data, we need transform them into stationary data by differencing. In this paper we have done unit root test by using Augmented Dickey-Fuller (ADF) statistics. With respect to expenditure (LEX) and tax revenue (LTX), we can not reject Null hypothesis as shown in table 1. Repeating unit root test with respect $\Delta^2 LEX$ and ΔLTX , we confirmed that these differences are stationary.

Table 1 Unit-root test

(1) Null Hypothesis: LEX has a unit root	
Augmented Dickey-Fuller test statistic	-0.011742 (Prob.=0.6743)
(2) Null Hypothesis: $\Delta^2 LEX$ has a unit root	
Augmented Dickey-Fuller test statistic	-9.062066 (Prob.=0.0000)
(3) Null Hypothesis: LTX has a unit root	
Augmented Dickey-Fuller test statistic	1.428219 (Prob.=0.9603)
(4) Null Hypothesis: ΔLTX has a unit root	
Augmented Dickey-Fuller test statistic	-6.561517 (Prob.=0.0000)

With stationary data($\Delta^2 LEX$ and ΔLTX), we can use the ADL model with p Lags as follows,

$$Y_t = \alpha + \beta_1 Y_{t-1} + \dots + \beta_p Y_{t-p} + \gamma_1 X_{t-1} + \dots + \gamma_p X_{t-p} + e_t \quad (1)$$

In equation (1), variable X_t denotes second difference of expenditure demand of time t , Y_t denotes first difference of tax revenue of time t respectively. The proper way to do Granger causing testing is to test null hypothesis that $\gamma_{t-1} = \gamma_{t-2} = \dots = \gamma_{t-p} = 0$. Expenditure demand Granger causes tax revenue only if the hypothesis is rejected. Joint test of $\gamma_{t-1} = \gamma_{t-2} = \dots = \gamma_{t-p} = 0$ can be done using F-test.

Table2 Granger Causing test between Expenditure and Tax Revenue (1955-2011, Prefecture)

Null Hypothesis	Obs	No. of Lags	F-Statistics	Prob.	Decision	Direction of Causality	Causality
$\Delta^2(LTX)$ does not Granger Cause ΔLEX	53	2	4.60239	0.0148	Reject	$\Delta^2(LTX) \rightarrow \Delta LEX$	Exist
	50	5	3.56092	0.0095	Reject		Exist
	47	8	2.02347	0.0777	Not Reject	$LTX \rightarrow \Delta^2(LTX)$	Does not Exist
	45	10	2.0445	0.0735	Not Reject		Does not Exist
ΔLTX does not Granger Cause $\Delta^2(LTX)$	53	2	0.97293	0.3853	Not Reject	$\Delta LTX \rightarrow \Delta^2(LTX)$	Does not Exist
	50	5	1.78503	0.1386	Not Reject		Does not Exist
	47	8	2.14783	0.062	Not Reject	$\Delta^2(LTX) \rightarrow \Delta LTX$	Does not Exist
	45	10	1.92388	0.0918	Not Reject		Does not Exist

(Source) *Annual Statistics of Local Government Finance (in Japanese)* <http://www.soumu.go.jp/iken/zaisei/toukei.html>

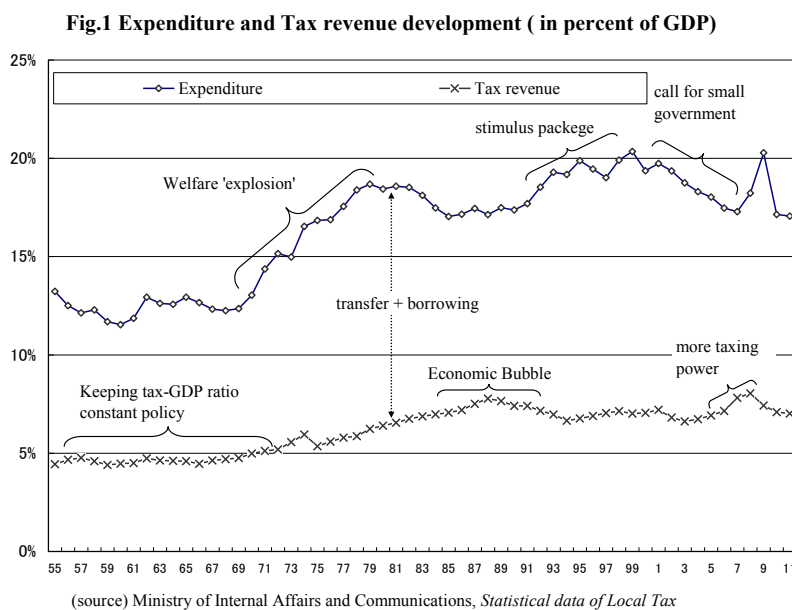
Interpretation

Table 2 shows the result of joint test of the hypothesis. We assess the significance of F-test with 5 percent level. Two points are worth to mention. First, null hypothesis that $\Delta^2 LEX$ does not Granger causes ΔLTX is rejected in case of 2 and 5 lags. Second, Hypothesis that ΔLTX does not Granger causes $\Delta^2 LEX$ can not be rejected in every case of lags. Considering the result of causal relationship between tax revenue and expenditure, we can tentatively conclude that expenditure has not been decided by making tax revenue given; instead expenditure does Granger causes tax revenue in Japan. That is, in order that expenditure might be determined for a certain reason and for financing it, it turned out those tax revenues is influenced.

3. Dynamics of local public sector development

Expansion of Local Public Sector

For what reason, expenditure might be determined in Japan? On the surface there is interplay in all countries where the decisions on spending and taxing go through different procedures, there may be no coherent overall tax/spending program of the government. This holds true to Japan's post-war development. Although the local expenditure kept constant with GDP growth during 1950s and 1960s, the upper curve in figure 1 show that welfare expenditure rose sharply during 1970s, of which demand came from local residents. Local public investment was also extensively used for macroeconomic stabilization during 1990s and local government spending on public works has increased sharply. Since 2000 expenditure ratio has been declined constantly due to austerity fiscal policy. On the other the central government tried to keep local taxation at 5 percent unchanged levels during 1950s and 60s, local taxes steadily increased (see figure 1). The lower curve in the figure shows that local tax ratio as percentage of GDP has steadily and incrementally increased during the 1970s and 1980s. From the 1990s the ratio has steadily declined due to so called 'lost decade'.



Income elasticity approach

The question here is how far are governments influenced in their decisions by their need to meet demand for increased expenditure from their voters, or on the contrary, how far will the demand of voters for no or small increase in their tax burden constrain the growth of government spending?³ Demand side explanations as exemplified by Wagner’s Law of 1883 states that it is the need for higher public expenditure, especially on infrastructure and social welfare, which determined the level of tax revenues. The base for the Wager’s Law is that the goods supplied by the public sector have a high income elasticity of demand. While the preference of the government is to spend money, the public do not want pay taxes. Supply side explanation as represented by Peacock and Wiseman’s ratchet effect argued that in the ‘normal’ time voter preference should determine the tax levels and levels of expenditure will remain relatively constant⁴.

There may be close connection between the increase in expenditure/tax revenue and the rate of economic growth. We assume that these relations can be determined by the following simple formula:

³ Messere, Kam and Heady [2003]p.50

⁴ As to theory of public sector development, see Hindriks and Myles [2006] Ch.4. Ratchet models argue that wartime permits the government to raise expenditure with the consent of the taxpayers on the understanding that this is necessary to meet the exceptional needs that have arisen. See, Peacock and Wiseman[1961]

$$\log LEX = \alpha_1 + \beta_1 \log GDP + u \quad (2)$$

$$\log LTX = \alpha_2 + \beta_2 \log GDP + u \quad (3)$$

We estimate these regression equations in four sub-periods, roughly coinciding with distinct phase of economic developments. Here parameter β_1 denotes income elasticity of expenditure to GDP growth and β_2 represents income elasticity of tax revenues to GDP growth respectively. In Table 3, the empirical estimates are summarized, although some of the results are not statistically significant. We can find four points worth noting.

Table 3 Empirical results: income elasticity of expenditure/tax revenues

Period	Income elasticity of expenditure	Income elasticity of tax revenue
1950-74	$\log LEX = -2.995^{***} + 1.0748^{***} \log GDP$ <p style="text-align: center;">(-12.998) (59.306)</p> $R^2 = 0.9949$	$\log LTX = -3.912^{***} + 1.068^{***} \log GDP$ <p style="text-align: center;">(-22.211) (77.189)</p> $R^2 = 0.9969$
1975-89	$\log LEX = -1.660^{***} + 0.9952^{***} \log GDP$ <p style="text-align: center;">(-3.266) (28.973)</p> $R^2 = 0.9847$	$\log LTX = -8.361^{***} + 1.3813^{***} \log GDP$ <p style="text-align: center;">(-49.275) (120.476)</p> $R^2 = 0.9991$
1990-99	$\log LEX = -17.998^{***} + 2.060^{***} \log GDP$ <p style="text-align: center;">(-4.121) (7.268)</p> $R^2 = 0.8684$	$\log LTX = 5.456 + 0.473 \log GDP$ <p style="text-align: center;">(1.3453) (1.7985)</p> $R^2 = 0.2879$
2000-11	$\log LEX = 8.397 + 0.345 \log GDP$ <p style="text-align: center;">(0.768) 0.487</p> $R^2 = 0.023$	$\log LTX = -5.911 + 1.212 \log GDP$ <p style="text-align: center;">(-0.530) (1.675)</p> $R^2 = 0.219$

Note: R^2 is the coefficient of determination adjusted for degree of freedom. ***,** and * indicate significance at the 1,5 and 10 percent levels respectively.

Demand side theory

First, income elasticity of expenditure demand between 1950s and 1980s was very close to 1 or more than 1. This evidence supports Wagner’s law. The demand side theory seems to provide a more convincing explanation of development between 1950s and 1980s. There was strong economic growth and standards of living in Japan increased markedly. This led to massive increase in welfare expenditure in late 1960s and 1970s.

Income elasticity of tax revenue between 1950s and 1980s was also more than 1, even though local income tax was significantly reduced every year to avoid

overburdening the tax payers through 'bracket creep'⁵. However, supply side explanation could hardly explain the massive increase in the local public sector. Because the welfare 'explosion' in 70s was not accompanied by corresponding readiness of taxpayers to accept higher tax burden to contribute to a more extended welfare state. Rather, they allowed for moderate increase in tax revenues as a result of automatic tax elasticity and taxpayers' illusions. Taxpayers are aware that they are paying local income tax, but may not notice how much, as it is withheld at source⁶.

Supply side theory

Second, income elasticity of expenditure has declined markedly from 2.0 to 0.3 during 2000s, reflecting taxpayer's attitude toward welfare state. It was accompanied by slight increase in tax burden. The supply side theory might have provided reasonable explanation than demand side theory since 2000, but the constraint on local public sector growth may also be due to disenchantment with government spending program and their disappointment efficiency in delivering expected improvement, which itself led to calls for smaller government and privatization.

To what extent does the tax payer support the local public sector since 1990? One of the best data bases is the International Social Survey Program (ISSP). Asking respondents whether they prefer cuts in government spending, one can observe a quite different picture among the countries. Disenchantment with spending is extraordinary high in Japan, compared with other countries⁷. This attitude led to call for smaller local public sector and privatization, which was realized during fiscal austerity of Koizumi administration (2001-06)⁸.

⁵ For tax policy during high economic growth era, see Ishi[2000],p.187

⁶ Although from 1975 economic growth became sluggish, it took another 15 years for tax resistance to manifest itself in Japan. Such factors as economic bubble in late 1980s, full scale immovable property revaluation having taken place every 3 years(!), all delayed the slow down in local tax revenues.

⁷In 2006 surveys, asking 14 countries respondents whether they prefer cut in government spending, 29 % of them answered 'strongly in favor of' and 31% 'in favor of' respectively. However, 41% of respondents in Japan answered 'strongly in favor of' and 40% 'in favor of' respectively.

⁸ Since 1990s income elasticity of tax declined drastically into less than 1, as a result of reducing top rate of PIT and to flatten the tax rate schedule as well as of economic stagnation. On the other, income elasticity of expenditure rose sharply into more than 2. The reason for sharp rise in income elasticity of expenditure is in the large fiscal stimulus package, instead of expansion of welfare expenditure.

4. Regulation and Shared tax

Previous section clarified that expenditure side has played more important role and tax policy filled the more passive role in the past. The question here is why tax policy is lagged behind expenditure decision and tax preference of voter could not determine the tax levels and levels of expenditure?

On the one hand, sub-national jurisdictions can be seen simply as agents of national government, which can more conveniently from an administrative point of view provide local services. On the other hand, sub-national jurisdictions may be seen as independent bodies elected by the local taxpayers to provide certain service in accordance with their preferences. The first and most general issue is the conflict between what has been called the 'agency' versus the 'local autonomy' approach, which raise question of how much sub-national jurisdictions should have in fixing the rates and base of the taxes from which revenue accrue to them and what percentage of total tax revenues they should receive⁹.

Agency delegated functions

Japan has together with the Nordic countries the highest degree of decentralization among the OECD countries. In Japan local governments are responsible for a major share of public spending, including on national land conservation and development expenditure, education expenditure, police and fire brigades, social welfare, sanitation and general administration. Lots [2005] demonstrated that measures of the degree of decentralization, based on official statistics on local expenditure, show that also Japan ranks high together with the NCs.

Nevertheless, high sub-national spending shares give a misleading picture of the actual degree of local decision making power. The problem is that there are many ways for central authorities to influence functions delegated to the local governments sector, as Japan so clearly demonstrates. In Japan local provision was done by "agency delegated function" meaning that the national government remains heavily involved in almost every aspect of local public spending. Unlike the current theories of today on "local public goods", but very much in line with contemporary thinking in the Nordic countries, there is in Japan no clear separation between central and local functions. As a result, major programs (education, health, and welfare) are formulated by national ministries and financed by many specific grants. Therefore the issue for Japan is not so

⁹ Messere, Kam and Heady [2003]p.52

much to change/enlarge the expenditure assignments themselves, but to redefine responsibilities for designing, implementing, and financing these assignments. This also is expressed by virtual elimination of agency-delegated functions (Kikan-Inin Jimu) in 1999 and the reduction in the number and volume of specific purpose grants in “Trinity reform” during 2004-2006.

Tax sharing system

The outstanding points of interest about local tax is first of all the ratio of national tax to local tax is 60:40, which led vertical fiscal imbalance in the public sector and call for grants to fill the gap. Local own tax represents only 30% in the total revenue of local governments. Secondly tax revenues are derived from various tax bases. It is the firmly established, productive local income tax in the Scandinavian countries. The opposite model is the English speaking countries where property tax dominates the local revenue. In Japan, own revenue sources are mainly derived from revenues shares of central taxes on income, property and consumption, local authorities have the authority to vary tax rate. These arrangements have many similarities with the Central European tax sharing systems.

On the surface Japanese local tax system seems to be different from continental tax-sharing because the major source of local own revenue is a kind of piggy-backing which are similar to surtax on national income tax base. However, almost all localities use uniform rate for the same tax base (see table4). McLure has argued that Piggy-backing with uniform rate would be tantamount to an institutionally clumsy form of tax-sharing¹⁰. It can be said that even an elegant form of tax sharing is in terms of accountability inferior when compared to own local taxation.

Table 4 Effective use of discretion power in tax rate setting (2010)

main taxes		Number of local government setting		
		below standard rate	at standard rate	above standard rate
Prefecture	inhabitant tax	0	46	1
	inhabitant tax on corporation	0	1	46
	enterprize tax	0	39	7
	local consumption tax	0	47	0
	automobile tax	0	46	1
Municipalities	property tax	0	1647	158
	inhabitant tax on personal income	0	1826	1

(source) Ministry of Internal Affairs and Communications

¹⁰ McLure [1983]p.103

Tax sharing is a well known in Continental Europe and also in Norway, but strong theoretical arguments can be made against tax sharing, namely: their lack of local accountability, that they tend to be distributed to the richest authorities, and that the development of the tax bases and revenue over time will depend on conjunctive developments which has nothing to do with the needs coming from for example demographic change. The latter problem has forced Japan to seek to expand on the number of taxes to be shared¹¹. But there are more practical reasons why tax sharing is used in many countries. First of all, seen from Japan's experience, is its presumed revenue adequacy. The revenue of the local allocation tax changes over the years like national major taxes, because this is what is multiplied by the fixed tax-sharing ratio. Because this tax-sharing ratio has been quite stable, an automatic increase in major national taxes has provided continuous increase in the financial pool of local allocation tax during rapid growth era. On the other, total fund of transfer is sensitive to business condition because major component of the fund consists of income-elastic national taxes. The question to be asked, however, is whether a better revenue path could have been realized without tax sharing.

One alternative would be a simple, general grant with clauses of negotiated annual increases. Another is the system of powerful own local taxes, so that local authorities themselves could have secured the missing revenue. In neither case there would today have been the need to discuss projects like expanding the number of taxes to be shared, or to increase Consumption Tax in the financial pool of equalization. In conclusion, the Japanese system seems to attempt combine Northern European expenditure decentralization with Continental style centralized methods of financing¹². This is a problematic match.

5. Current issue of tax policy

Now let us consider what will be the problems and what issues will arise if we were to develop local tax system further as accountable, stable and evenly distributed local tax over the next decade. Strong theoretical arguments can be made against current Japan's tax sharing, namely: their lack of local accountability, that they tend to be distributed to the richest authorities, and that the development of the tax bases and revenue over time will depend on conjunctive developments which has nothing to do with the needs coming from for example demographic change. As local public sector would evolve from 'agency' model to 'autonomy' model, those problematic matches

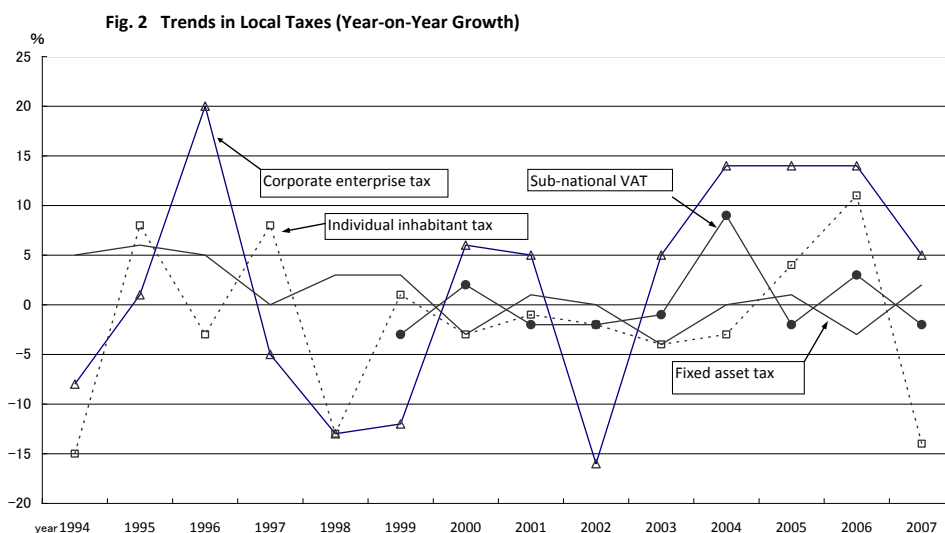
¹¹Mochida and Lotz [1999]p.61

¹² Mochida and Lotz [1999]p.62

will come into question¹³.

Argument against current tax system

Fluctuation over business cycle: Comparing existing local taxes in terms of stability over time (one of the local tax principles), Fig. 2 clearly shows pros and cons of each specific local tax. The graph shows trends in main local taxes based on the “Reference Data on Local Taxes”. The tax with the largest fluctuation is corporate enterprise tax, followed by individual inhabitant tax. Partly for system-related reasons, property tax is relatively stable and also has much growth potential. Sub-national VAT is far more stable than local corporate taxes. It clearly stands out from the rest in terms of its stability over time.



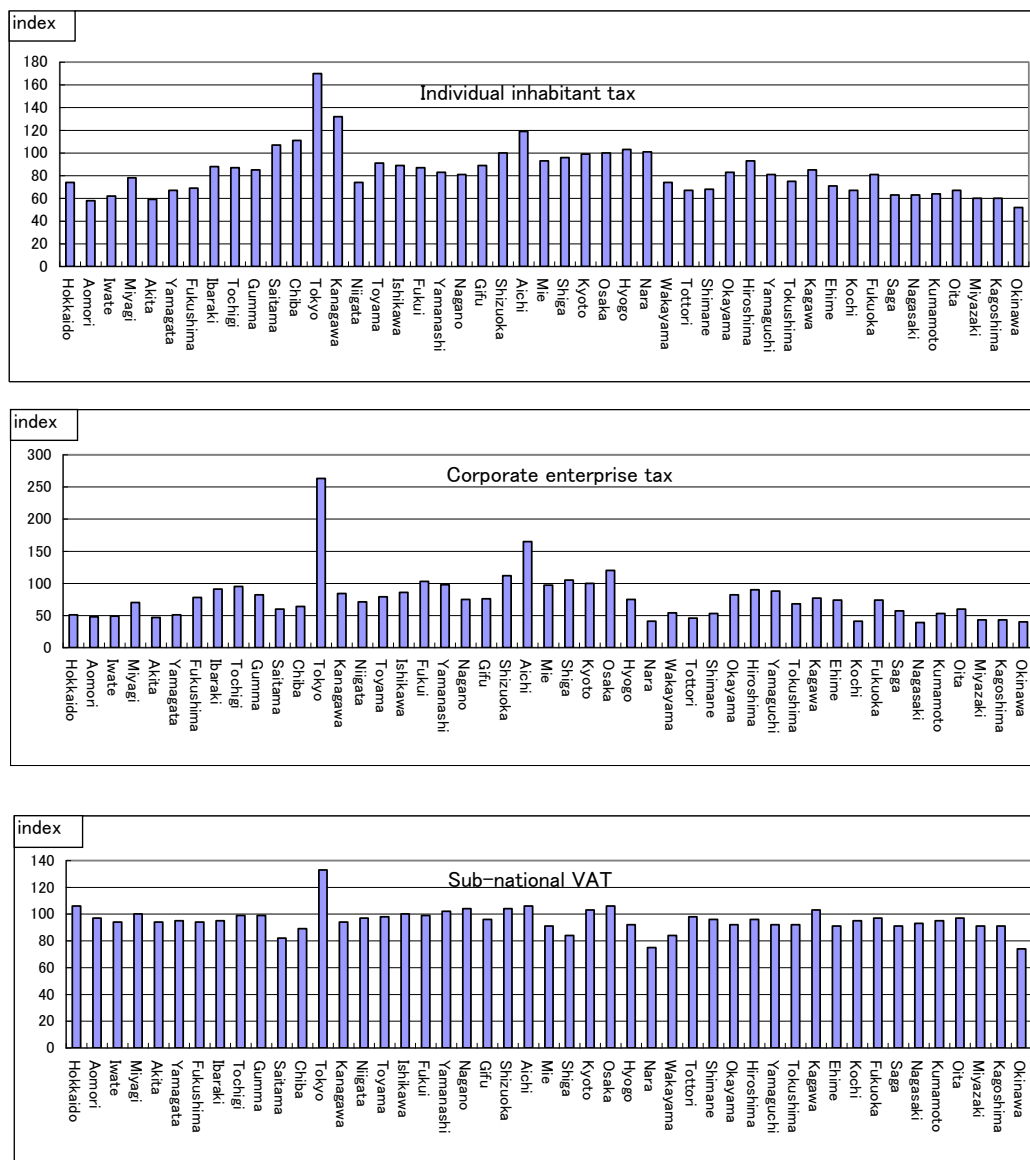
(Source) Local Tax Bureau, Ministry of Internal Affairs and Communications, Reference Data on Local Taxes

Uneven distribution across local jurisdictions: Fig. 3 also draws on material from the “Reference Data on Local Taxes” to show distribution across regions. In the FY2007 final per capita prefectural tax revenues, the ratio calculated by dividing the largest revenue (Tokyo Metropolis) by the smallest revenue (Okinawa Prefecture) is 3.2 for individual inhabitant tax, 6.6 for the corporate enterprise tax, and 1.8 for sub-national VAT. In other words, this shows that the tax revenue of sub-national VAT on a per capita basis is evenly distributed across different local jurisdictions.

¹³ Recent tax reforms in OECD countries are summarized in OECD and Korea Institute of Public Finance [2012].

Local Tax Structure and Expenditure Responsibilities: Japan

Fig. 3 Indices of Per Capita Tax Revenues (by Prefecture)
(based on national average of 100, FY2007 settled accounts)



(Source) Local Tax Bureau, Ministry of Internal Affairs and Communications, Reference Data on Local Taxes

Lack of accountability to the electorates: According to an OECD survey, 94 per cent of municipal taxes and 83 per cent of prefectural taxes have overlapping national-local tax bases and are classified as taxes for which the local government body has the authority to set tax rates¹⁴. But real picture is different from such institutional setting. The personal inhabitant tax, local consumption tax, and property tax are essentially very close to tax sharing. The tax rates of these local taxes are nearly uniform throughout the country. Local governments, especially prefectures, heavily depend on corporate tax revenue which might be ‘exported’ to non-residents and no one knows

¹⁴ As to Taxing power of state and local government, see OECD[1999][2009]

who pay for what.

Vertical fiscal imbalance: Although the ratio of national to local public expenditure in Japan on a final disbursement base is 40 to 60, the ratio of the distribution of tax revenue is just reverse 60 to 40 in favor of national government in FY2012. As a result, relative magnitude of grants in Japan is high by international comparison. In Japan, like in most other countries, the reason for fiscal imbalance is more insufficient local tax capacity rather than size of grants *per se*.

Corporate tax reform

Against these backgrounds, there are many tax policy proposals. One of the controversial proposals is trading corporate income tax in return for sub-National VAT. Local business tax (*Jigyo zei*) has been the most important prefecture tax in Japan, and it still is, despite recent reform in its tax bases. They constitute 30 percent of prefectural tax revenues. Until 2004, local business tax has been imposed on income (profit) of firms and deducted from national corporate income taxes. Beginning in April 2004, the local tax imposed on corporations with capital of more than ¥100 million will be altered to include both a value added component and a capital component. The value added tax bases is the sum of wages, net interest paid, net rents paid, and taxable income (profit) and the capital base consists of paid in capital plus capital surplus. The larger corporations subject to this new tax continue to be subject to local business tax based on their taxable income (profit), but at a reduced rate (maximum of 7.2 percent, compared with the normal maximum of 9.6 percent for the local enterprise tax). In addition, however, these larger corporations will now be taxed at rate of 0.48 percent on value added and an additional 0.2 percent on capital.

The purpose of this new system was essentially to reduce the sensibility of local tax revenues to economic fluctuations, thereby insulating local finance from the effects of Japan's continuing recessions. Advocate of this new tax supports the idea of 'benefit principle'. To the extent that particular local public service directly benefits business, those firms should pay tax on its value added which reflects business activities. This idea goes back to Shoup Recommendation in 1949. In the case of Japan, Hayashi [2008] estimates that on average close to 16 percent of prefecture expenditures benefits commercial and industrial activities. This study concludes that the taxes imposed business constitute a higher share than benefits received by business.

However, the original proposal was faced strong opposition from business to paying taxes when firms had no profit. Official tax statistics reveal that 1.7 million out

of 2.5 million corporations report no profits. As a result of political backlash against pro-forma based local business tax; the scope of tax base on value added has been substantially eroded. Mochida [2008] estimates that only 1.1 percent of total corporations (i.e. 29,000 out of 2.5million corporations) actually pay taxes on value added.

Sub-national VAT

Amid demands to strengthen and enhance the local tax system in today's "aging society", consensus has been reached on the point that a stable and universal tax on consumption is more desirable as a local tax than a tax on corporations, which would have a strong character of revenue volatility and regional disparity. However, since it was ultimately a question of policy judgment as to whether or not to create a multi-stage, credit-method sub-national VAT, and various issues have undeniably mounted up in terms of the theory¹⁵. Local consumption tax is relatively new prefectural tax. But it has been third largest tax in prefectural budgets since 1997 as figure 2 demonstrates. LCT is essentially local surtax on national VAT. Central government imposes VAT at rate of 4 percent and local government at uniform rate of 1 percent. Local component of VAT is collected by prefectures on origin basis. After collecting taxes, each prefecture transfers it among them in proportion to the amount of final consumption, thereby attributing the local VAT to prefectures on destination basis. Each prefecture, then, allocates half of tax received to its municipalities in proportion to the number of population and employees.

Opponents saw main problems of LCT to be lack of accountability. Because LCT relays collection on national tax administration and has no flexibility on tax rate setting, it looks like tax sharing. Local Tax Law stipulates that tax rate of LCT is automatically peg to 25 percent of national VAT rate. Prefectures are discouraged to from increasing tax rate, hoping that the central government will pay a high political price for implementing tax hike.

In contrast, local consumption tax has several advantages. It has essentially low sensibility to economic fluctuations, thereby insulating local finance to some extent from the effects of Japan's continuing recessions. In addition, distribution of tax revenue across the country is more even, compared with other taxes such as local business tax, inhabitant tax¹⁶.

¹⁵ Mochida [2008]

¹⁶ Mochida, Horiba and Mochizuki [2010]

Accountability

There are a few progresses in enhancement of taxing power of subnational governments. First, flexibility of tax rate has been enhanced by the removal of the ceiling (upper limit) on the municipal inhabitant taxes on individuals in 1998 and of the maximum property tax rate in April 2004. Second, tax autonomy of local governments has been further enhanced by the 2000 Amended Local Taxation Act which enable them to invent and create ‘supra-legal taxes’ (i.e. taxes not stipulated by national laws, but local ordinance) after consultation with Ministry of Internal Affairs and Communications. Many subnational governments introduce new taxes, including some on nuclear and industrial waste, hotel stays, fishing, holiday house etc. However, several tax experts point problem of ‘supra-legal taxes’. These taxes often fall on non-residents or can be shifted on non-voting company and revenues are in many cases low, while obtaining the consent of local residents is time-consuming task.

Appendix: Local Taxes

Concerning prefecture, there are three main tax sources (see fig2). Inhabitant tax on personal income constitutes 38 percent of prefecture tax revenues. Enterprise tax on value added and corporate income is second largest tax sources. Local VAT on national VAT constitutes 17 percent of prefecture total tax revenues. With respect to municipalities, there are two main tax sources (see fig3). Personal inhabitant tax on personal income generates 35 percent of total tax revenues. Property tax is largest tax sources.

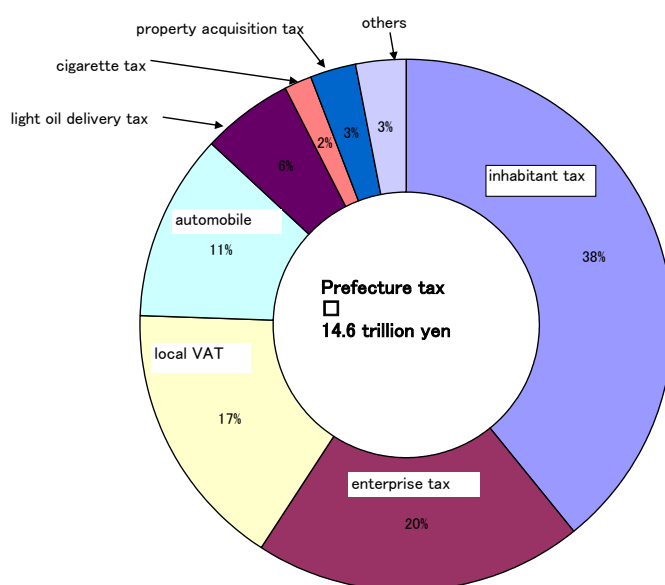


Figure 2 Local taxes in Prefectures, FY2009
 Source: Ministry of Internal Affairs and Communications (2011) White paper on local public finance, figure29.

Local Tax Structure and Expenditure Responsibilities: Japan

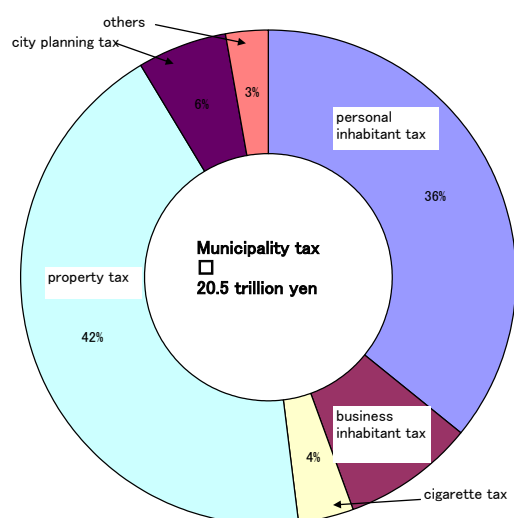


Figure 3 Local taxes in Municipalities, FY2009
source: Ministry of Internal Affairs and Communication(2011) White paper on local public finance, figure30.

References

- Hayashi,Y[2008]Local Government Finance,(in Japanese)Yuhikaku.
- Hindriks, J.,and Gareth D. Myles[2006] *Intermediate Public Economics*, the MIT press.
- Horiba,I[1999] *The Economics of Fiscal Decentralization*,(in Japanese)Toyokezai shinposya.
- Ishi, H. [2000]*Making Fiscal Policy in Japan: Economic Effects and Institutional Settings*, Oxford University Press.
- Kim, Junghun, Niels Jorgen Mau and Jorgen Lotz[2013]Interaction between local expenditure responsibilities and local tax policy, proposal on 2013 Copenhagen Workshop.
- Lotz, Jørgen [2005] 'Grants and Equalization; a Nordic perspective', paper presented for the workshop on Fiscal Equalization in the Drive to Decentralize: Global Trend in Sweeping Reform,' held in Tokyo, Japan, November 12-13, 2005.
- McLure, Charles E. [1983] 'Assignment of Corporate Income in a Federal System', in McLure, Charles E. (ed.) *Tax assignment in Federal Countries*, Center for Research on Federal Financial Relations, The Australian National University, Canberra.
- Messere, K., Flip de Kam and C. Heady [2003], *Tax Policy: Theory and Practice in OECD Countries*, Oxford University Press, New York
- Mochida, Nobuki [2008] *Fiscal Decentralization and Local Public Finance in Japan*, Routledge.
- Mochida,N.,I.Horiba and M. Mochizuki[2012]*The Economics of Sub-National VAT* (English translation of Chapter1,2,5 and 8 of Japanese publication Chiho Shohizei

no Keizaigaku, Yuhikaku Publishing Co.,Ltd.)

Mochida, Nobuki and Jørgen, Lotz [1999] 'Fiscal Federalism in Practice, the Nordic Countries and Japan', *the Journal of Economics* (the University of Tokyo), 64(4), 55-86.

OECD [1999] *Taxing Powers of State and Local Government*, OECD Tax Policy Studies,1, OECD, Paris.

OECD Network on Fiscal Relations Across Levels of Government[2009a]'The fiscal autonomy of sub central governments: an update,' COM/CTPA/ECO/ GOV/WP9

OECD and Korea Institute of Public Finance [2012] *Institutional and Financial Relations Across Levels of Government*, editors. Kim and C. Vammalle

Peacock, Alan T. and Jack Wiseman [1961] *The Growth of Public Expenditure in the United Kingdom*, Princeton University Press.