## THE VAT IN JAPAN<sup>1</sup>

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#### Abstract

The VAT came into being in Japan in 1988 after the struggle of three Prime Ministers. This is one of the most significant tax reforms in Japan after the War, and this paper unveils the background and the nature of this reform. Emphasis will be put on the concessions offered by the government to small and medium-size firms. The paper concludes that a revenue-beats-everything approach toward tax policy could eventually be very costly in terms of postponing long overdue reform of inefficient sectors of the economy.

## I. Introduction

The purpose of this paper is to put forward the process of tax reform in Japan. Tax policies have been the outcomes of various compromises of agents of conflicting interests. In fact, the tax structure itself has been no exception, and income tax aspects and consumption tax aspects have been mixed for long years. In the year 1950, five years after the second world war, one of the most sweeping tax reforms was carried out in Japan under the recommendations of a mission headed by Professor Shoup of Columbia University. This reform package was of strong income-tax nature. However, some crucial income-tax policies like comprehensive taxation of capital gains from equity transactions have literally never been institutionalized. On the other hand, corporate income tax has been strengthened since the beginning of the 1970s, and it is now one of the most important revenue raising machines in the fiscal arsenal of the government.

In the course of tax reforms, especially in the process of installing new taxes, much care has been taken of certain groups besides consumers and big enterprises. A simple view of Japan Inc. has been that Japanese tax policies along with much wider industrial policies have been so growth oriented that tax concessions have been dominated by special measures for corporate investment and R & D. This, however, has never been true except probably in the early years of the 1950s. Taking care of small businesses including agricultural households seem to have been a more important policy agenda in Japan than supporting (either explicitly or implicitly)

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big firms.

We would like to show how it has mattered to take care of small businesses and even middle-size firms in Japan. Our discussion will focus on one of the most controversial issues in political and business arena in Japan for the last several years. The VAT in Japan is our topic to tackle. What compromises were made between the government so eager to have a solid revenue instrument and the small businesses so deeply concerned with their vested intereststs? How adverse will be the effects of these compromises on productive efficiency, and how the costs of new taxes will be shifted to consumers? These are the issues we would like to shed as much light as possible.

Now, Japan has been far off from the double digit-growth path. And the recent resurgence of growth in the very late 1980s has rather put the Japanese economy in a terrible nightmare than in a happy day dream. Vested interests of small businesses and agricultural households are now at bay. Productive efficiency has again become a key word for strengthening the potentials of growth. In this vein it is of great importance to gear tax policies to a right direction. This paper is a step toward this goal.

The next section provides a background of tax reform in Japan and the chronological review of the process of the VAT introduction. The rest will be devoted to the VAT in Japan. A short elementary review of the VAT comes first. The two methods of the VAT, i.e., the invoice- and the cost-deduction-method, will be explained together with their pros and cons. A major contribution of this paper is to show how distortionary the various tax concessions are that were the outcomes from the aforementioned compromises. An equity issue of the VAT will also be touched, though only to the extent of surface scratching.

# II. Background of tax reform in Japan

We provide background information that has called for tax reform in Japan. Explanation here is brief and concentrates on one major problem in Japanese tax system; heavy tax burden on earnings. Throughout the high growth era from the last half of the 1950s to the very early 1970s, personal income tax was adjusted so that growth of income was not absorbed by the progressive income tax. And the last major personal tax cut took place in 1974 just before the first oil crisis.

The first oil crisis of 1974 and the second of the late 1970s threw the Japanese economy into a deep recession, and the government expanded its expenditures to stimulate the economy. This partly succeeded in rescuing the economy from being trapped in even a deeper recession; however, it caused high dependence on government deficits. The decade of the 1980s in Japan was an austere period struggling to keep a fiscal house in order. This has stopped an overhaul of ever increasing income taxes.

Table 1 shows the proportions of direct and indirect taxes to total (national) tax revenue. Direct taxes monopolize the tax revenues; more than three quarters of total tax revenues have come from direct (mostly income-based) taxes. When income increases either in a real or a nominal sense, very progressive tax structures have been able to raise tax revenue faster than the rate of income expansion. This is a principal reason for these extraordinary high shares of direct taxes.

The overall picture of tax structure may not be convincing enough to rationalize a major

TABLE 1. TAX STRUCTURE OF JAPAN:

PROPORTIONS OF DIRECT AND INDIRECT TAXES TO TOTAL TAX REVENUE
AND THE PROPORTION OF THE VAT TO INDIRECT TAXES: %

Fiscal Year	Direct tax	Indirect tax	VAT	
	Total tax	Total tax	Indirect tax	
1975	74.1	25.9	•	
1985	77.6	22.4		
1988	78.6	21.4		
1989	79.6	20.4	22.6	
1990	79.3	20.7	29.1	
1991	79.3	20.7	30.6	
1992	77.9	22.1	32.2	
1993	78.7	21.3	32.2	

Sourse: Tax Advisory Commission

tax reform. Table 2illustrates various shares by earning class: the shares of numbers of tax payers, earnings and taxes paid. These shares are divided by each other to show how earnings and taxes paid are distributed among various earnings classes.

The column designated by "(2)/(1)" shows the distribution of earnings. If the index in certain bracket is greater than unity, it implies that earnings are skewed upward in that class. Since the average earnings is about 4.8 million yen in 1992, the index is about unity in the earning bracket of 4 million yen to 6 million yen. The top ten-percentile received 5.8 times as much as they would have received if earnings had been divided equally.

The column, "(3)/(1)," treats the similar distributional nature of taxes paid. Comparison of this with the one discussed immediately above shows how progressive Japanese taxes are on

TABLE 2. SHARES OF TAXPAYERS, EARNINGS AND TAXES PAID BY EARNINGS: 1992

Earning						
classes	Taxpayers (%)	Earnings (%)	Taxes (%)		Shares/shares	
E:million yen	(1)	(2)	(3)	(2)/(1)	(3)/(1)	(3)/(2)
E<=4	46.8	25.7	15.1	0.55	0.32	0.59
4 < E < = 6	28.0	28.2	17.9	1.00	0.64	0.63
6 < E < = 8	13.4	18.9	15.0	1.40	1.11	0.79
8 < E < = 10	5.7	10.3	11.7	1.81	2.05	1.13
10 < E < = 12	2.8	6.3	9.9	2.24	3.51	1.57
12 < E < = 15	1.8	4.8	10.1	2.72	5.73	2.10
15< E<=20	1.0	3.5	10.5	3.51	10.42	2.97
20< E	0.4	2.3	9.9	5.81	25.40	4.37

Note (1): Average earnings is about 4.8 million yen.

Source: Calculated by the author, using Survey of Earnings in Private Firms, Japanese Tax Bureau, 1993.

<sup>(2):</sup> In the table, columns (1) through (3) are shares of taxpayers, earnings and taxes paid by earning classes. Columns on the right side of them are 'shares/shares', i.e., shares divided by other shares.

TABLE 3. HISTORY OF TAX REFORMS IN JAPAN

	TABLE 5. INSTORT OF TAX REPORTED IN JAPAN
Date	Event
I. The Ohira Cabinet	
8 September 26 December	The Tax Advisory Commission proposed the introduction of a broad-based indirect tax.  Named the general consumption tax in the LDP's Tax Reform Plan of 1979.
1979	
7 October 21 December	General election for the Lower House.  Both Upper and Lower Houses passed a resolution abolishing the general consumption tax.
II. The Nakasone Cabine	et
19 December	The necessity of a sweeping tax reform in the near future was accepted by both the Tax Advisory Commission and the LDP Tax Council in their proposals for the annual tax reform for fiscal 1985.
1985	
20 September	Enquiry from Prime Minister Y. Nakasone to the Tax Advisory Commission on the first sweeping reform.
1986	
25 April 6 May	Interim report on the individual and corporate tax reform from the Tax Advisory Commission.  Basic reform on the individual and corporate tax endorsed by the LDP Tax Council.
6 July 29 July 28 October	General election for both the Lower and Upper Houses.  Three types of new indirect taxes proposed by a Subcommittee of the Tax Advisory Commission.  Final report on a sweeping tax reform issued by the Tax Advisory Commission with the combined
28 October	package of income tax reduction and a new VAT.
5 December	LDP Tax Council decides on the basic principle of tax reform. A new VAT was named the sales tax.
1987	
16 January	Cabinet approve bill on the fiscal 1987 tax reform, including the sales tax.
10 February	Tax bill sent to the 108th Diet session.
27 May 31 July	The Diet closed. Tax bill withdrawn and the sales tax abolished.  Revised bill on the individual tax reform presented to the Diet.
25 September	Diet passed revised bill incorporating income tax reductions and the elimination of the tax-free savings system.
III. The Takeshita Cabine	et
12 November	Enquiry from Prime Minister Takeshita to the Tax Advisory Commission on a second stage of the tax reform process.
1988	
Mid-February to early March	Public hearings held by the Tax Advisory Commission in 20 places throughout the country.
25 March	Preliminary report from the Tax Advisory Commission.
28 April	Interim report from the Tax Advisory Commission to clarify basic forms of a new broad-based indirect tax.
14 June 15 June	Tax report from the LDP Tax Council named such a tax as the consumption tax.  Final report from the Tax Advisory Commission.
28 June	Cabinet approves 'The Outline for Tax Reform'.
29 July	Tax bill, including the consumption tax, sent to the 113th provisional Diet session.
16 November	Tax bill passed by the Lower House with minor amendments (Japan Socialist and Communist
24 December	Parties did not appear in the Diet).  Tax bill passed by the Upper House (a majority of opposition parties were absent for voting).
1989	
1 April	A new VAT, named the 'consumption tax' introduced.

Source: Ishi, H., 1993, The Japanese Tax System. Oxford Univ. Press.

earnings, i. e., an income of homogenous category. We can see tax revenue has mostly been raised from an earning group of 8 million and 10 million yen bracket or above. The last column is a similar index to "(3)/(1)". It again tells that Japanese taxes on earnings have been progressively raised from the earning brackets of 8 million yen or above.

This steep increase in tax burden is a fundamental problem which called for a major reform in Japanese tax system. In fact, marginal tax rates (inclusive both national and local) jump up in around this range of income and reaches 45% or above. This is a product of a long overdue overhaul of personal income tax. The 1988 reform finally embarked on cutting personal income tax rates. And serious attempts have been made to shift revenue sources from income-based taxes to consumption-based ones.

However, tax reform toward this goal has not been an easy process. Table 3 reviews the chronological developments of tax reform toward the introduction of the Consumption Tax (the Japanese VAT) in December, 1988. On the way toward introducing the VAT, the struggles of three Prime Ministers were necessary.

Prime Minister Ohhira proposed "the general consumption tax", but it never became a law. The first disapproval in Diet was in December, 1978. Prime Minister Nakasone proposed his version of the VAT (called "the sales taxes"), but it again did not come into being and was finally withdrawn in January, 1987.

The trial by Prime Minister Takeshita finally reached the approval of the two houses in December, 1988. This time the VAT was called "the consumption tax". Names had been changed, but the VAT had been the target of successive prime ministers and the Ministry of Finance.

# III. Characteristics of the Japanese VAT

## 3.1 Major aspects of the Japanese VAT

We are now at the position of inquiring the nature of the Japanese VAT, and the purpose of this section is to discuss some characteristics of Japanese VAT. One of its most straightforward characteristics is that invoices are not mandatory, and firms may use a deduction method. In this method the value added that each firm generates may be calculated by subtracting costs (including capital investment) from sales. Since the VAT is levied on this value, just like the corporate income tax, invoices are not required. Calculating total taxes on sales and subtracting the taxes already paid in the preceding transactions (using invoices) should yield the same revenues as in the deduction method. However, this may not apply when the VAT rates differ from one good to another. We will study some mechanics of the VAT as a basic tool to analyze the characteristics of the Japanese VAT.

The second characteristic of the Japanese VAT is that special treatments have been applied to small and medium-size firms so that they are not excluded from production systems. These measures, in fact, have caused various problems: unnecessary subsidies to these firms and the de-facto subsidies to those firms that procure intermediate goods from small and medium-size firms.

The third fact which deserves further examination is the equity issue. The VAT is a tax

on consumption, and by its nature it is proportional to consumption. In Japan the VAT rates are basically single with some exceptions like publicly provided medical services and the tuition and entrance fees of schools from elementary to high schools. However, tax rates on most goods are the same, including foods. While the single rate VAT is a favourite of economists concerned with efficiency and the simplicity of tax administration, the public has not been happy with this. Editorials of major newspapers, too, have been extending special concerns to this aspect of the VAT in Japan. How regressive is the VAT in Japan? We will show some statistics on this problem.

In what follows we will first review elements of the VAT. Following this, the equivalence of the deduction method and the invoice method will be examined. A claim here is that if the VAT rates are single and tax compliance is not bad, the deduction method is as good as its contender and that administratively it is simpler than the invoice method. With this introductory background of the VAT we will examine the above mentioned characteristics; methods for exempting taxes of small and medium-size firms are presented and their effects on the chains of transactions will be shown through numerical examples. We will conclude that tax exemptions have been applied to such an extent that they may hinder Japanese small enterprises in raising their efficiency in production. As for the equity problems, our claim here is that they matter indeed and that some measures must be taken to mitigate adverse effects of the VAT on poor people. However, whether they should take the form of multiple rates with the rates set lower for "necessities" is another question. The expenditure side can play as much

FIGURE 1. THE MACHANICS OF THE VAT: INVOICE- AND DEDUCTION-METHODS

						Invoice- Method	Γ	Deduction- Method
1st Stage	30					30	30:	1000×0.03
2st Stage	30	1000	30			60-30	30:	1000×0.03
3rd Stage	30	1000	30	1000	30	90-60	30:	1000×0.03
				Total Colle		90		90

an important role as the revenue side.

#### 3.2. Elements of the VAT

We stay on an example to show rudimentary facts of the VAT for studying the Japanese VAT. An attention will be paid to a three-stage production process in which the first one just produces a good without intermediate goods. That is, the first stage consists just of the value added, be it wages or profits. The value added here is set equal to 1000 yen. The second stage uses the good produced in the first stage as its sole intermediary good and yields the value added amounting to 1000 yen. The third stage is a production for final demand and relies on the good produced by its preceding stage. It yields again the value added equal to 1000 yen.

Now, the rate of the VAT is set equal to three percent, i.e., the current Japanese VAT rate. The two VAT methods are considered. The way how the invoice method works is given in Figure 1. It taxes  $30 (= 1000 \times 0.03)$  yen at the first state. At the second stage,  $60 (= 2000 \times 0.03)$  yen is taxed with the deduction of the 30 yen that has been collected at the foregoing stage. The last stage is levied  $90 = (3000 \times 0.03)$  yen as a VAT with the reimbursement of 60 yen collected in the two preceding stages. Thus, after all 90 (= 30 + 60 - 30 + 90 - 60) yen will be collected by the Tax Bureau (Ministry of Finance). Invoices play an instrumental role in this method in transferring the taxes paid at a certain stage to the succeeding one.

The deduction method does not use invoices; instead it directly seeks to calculate the value added at each stage of production. Mechanics is given in the far right column of Figure 1. In this example, the amount of the sales of the first stage is 1000 yen without any intermediaries. Hence, 1000 - 0 yen is the tax base here and the 3% is applied to it, yielding the same revenue as in the invoice method. At the second stage, the sales minus costs (of intermediaries) is equal to 2000-1000 yen and on which the VAT is levied. Again, the same revenue is collected here as in the above. The third stage is a mere repetition of the two stages we have seen and the value added here will contribute 30 yen as a VAT. The total amount of the tax collected of the three stages sums up to 90(=30+30+30) yen.

We introduce multiple tax rates into this example to see how the two methods comply with them. We will let the tax rates of the first through third stages under the invoice method  $t_a, t_b$  and  $t_c$  respectively. And the corresponding rates under the deduction method  $\tau_a, \tau_b$  and  $\tau_c$  respectively. The invoice method will collect taxes according to:

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1000t_a + (2000t_b - 1000t_a) + (3000t_c - 2000t_b)
= 3000t_c
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This implies that the VAT is applied only to the final stage of production, i.e. only final demand is taxed by the invoice method.

While multiple rates are (at the conceptual level) not distortionary in the invoice method, this does not apply to the other method of the VAT. Tax revenue may be calculated as:

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1000\tau_a + (2000 - 1000)\tau_b + (3000 - 2000)\tau_c
= 3000\tau_c + 2000(\tau_b - \tau_c) + 1000(\tau_a - \tau_b)
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This becomes identical with the taxation on the final demand if and only if  $\tau_a = \tau_b = \tau_c$ . That is,

only a single rate VAT can be a tax on consumption (eliminating taxes in the intermediary stages).

This is a first lesson we have derived in this introductory discussion of the VAT. That is, the invoice method and the deduction methods are identical under the single rate system. Whereas the invoice method can get rid of accumulation of taxes in production processes, the deduction method does not. In an administrative point of view the deduction method is simpler, indeed much simpler for the countries like Japan which have relied on income-based taxes. Corporate-income tax returns can be readily used for the VAT returns.

Tax compliance and evasion problems are the same in the deduction-method VAT as in the corporate-income tax. Invoice method may reveal more information about the costs of production than the deduction method since firms benefit from getting as much credits as possible by presenting invoices to tax offices. Hence, in a single rate VAT the difference of the two methods boils down to tax compliance.

In this respect Japanese firms may not be model cases in an international standard, but with regard to the large, say publicly listed a thousand or so firms, tax compliance seems not to be a problem. However, for smaller enterprises, the invoice method is better; and because of this they continue to complain the difficulties of keeping books in this method. Thus, changing Japanese VAT from the non-invoice, deduction-type method to the invoice method is a relevant agenda for tax reform, but it seems to me that a single rate system has been able to avoid potentially hazardous distortions of the VAT.

## IV. Special concessions for small and medium-size firms

#### 4.1 An Overview

Thus, the first characteristic of the Japanese VAT is that it is the non-invoice system. While this itself seems to be enough to allure small and medium-size firms to accept the VAT, they have not. They demanded more concessions for their "vulnerable" businesses. On the other hand, they are uneasy with the invoice method, for it may let their business accounts become more transparent. They are also afraid of an outcome of the VAT that they may be eliminated from the webs of complicated production and distribution systems. Put in simpler words, inefficient businesses may not be able to pass the VAT to their customers. Although the VAT is not distortionary in production, and competitive firms will be able to shift the VAT to the next stage of production, small firms have asserted very vocally that the VAT will destroy the weakest parts of production and distribution.

Confronted with the serious budget deficits, the government (or the Ministry of Finance as its agent) has been desperate in installing a strong revenue raising machine. And the outcome of the compromise between small businesses and the government is the huge doses of special treatments for small businesses. Here are the list of them:

- (1) The ceiling of the tax exempted turnover has been set very high, i.e., 30 million yen (about a third of a million US dollars).
- (2) The firms whose turnover size is bigger than 30 million yen and yet smaller than 500

million (now 400 million) yen may appeal to the Simplified Form. The form allows concessionary tax rates to those firms.

- (3) Moreover, tax rates of firms whose turnover size is less than 60 million (now 50 million) yen are set lower than the ordinary rate, 3%.
- (4) Tax-exempted firms may shift 3% surcharge on to their sales prices and collect it at their pockets. They may even not be punished by law to demand it from customers as a consumption tax (the Japanese VAT).
- (5) The firms that purchase intermediaries goods from tax-exempted firms may treat them as if they were from non-tax-exempted firms. Therefore, they may deduct the purchases from tax-exempted firms fully from their sales.

## 4.2 The effects of the VAT exemptions

The concessions of the VAT are so straightforward that various abnormalities have occurred. Before discussing them it would be relevant to see how liberally the tax exemptions have been granted. Table 4 shows the numbers of firms that are VAT-exempted and non-exempted. The total numbers of firms are about six million in 1991, of which as much as 63% are tax-exempted. More than half of Japanese firms have been allowed not to pay the VAT. It is amazing that this much of tax concession has been necessary to introduce the VAT.

We turn to the effects of the VAT exemptions. For this purpose we go back to the Figure 1 which illustrates three-stage production process. Suppose the third stage is kept from being taxed. If markets are competitive, the VAT of the preceding two stages will be added to the price of the third stage and it will be 3060 yen. That is, the VAT of 60 yen will be simply shifted to consumers.

TABLE 4. VAT EXEMPTED AND NON-EXEMPTED FIRMS BY THE SIZE OF TURNOVER: 1991

Types of firms	Number of firms (thousand)	Proportion to total firms (%)	
Tax-exempted firms	3,830		
Non-exemped firms			
by turnover size			
less than 30 mill. yen	260	4.3	
30 to 40 mill. yen	220	3.6	
40 to 50 mill. yen	210	3.5	
50 to 100 mill. yen	580	9.5	
100 to 200 mill. yen	400	6.6	
200 to 300 mill. yen	170	2.8	
300 to 400 mill. yen	90	1.5	
400 or above mill. yen	320	5.3	
Non-exempted firms: total	2,250	37.0	
Total firms	6,080	100.0	

Sourse: Tax Advisory Commission, Prime Minister's Office.

No losses or no gains to the third-stage firm. However, the Japanese VAT will scatter a windfall gains to the firm. It can altogether charge 90 yen to its costs and sell the good for 3090 yen. Of the 90 yen put on top of its costs, 60 yen is the tax shifted forward from preceding producers, hence this is a cost to the firm. But, the last 30 yen on its value added is passed to consumers, and this additional charge does not contribute to the treasury. This is an additional tax-free gift to the producer from the VAT. The problem arises from allowing the firm to charge additional "tax" and from letting it keep the gain as its profits. This is quite unreasonable, but all the more it illustrates how small businesses are influential in tax policy in Japan.

The Simplified Form of the VAT is more or less of the same nature. Continuing the above example, we here assume that the third-stage producer is making use of the Simplified Form. It then can slush its tax due, say from 90 to 80 yen. Of the tax paid 60 yen is now deductible, since the firm is paying the VAT. Although it pays only 20 yen as the net tax on its own value added, it is allowed to shift fully 90 yen to its consumers. Hence, like tax-exempted firms, the firms eligible for the Simplified Form can achieve additional gains from this rule, i.e., 10(=90-80) yen in this example.

So far we have dealt with the tax-exempted final stage producer. We can trace the effects of tax-exempted middle stage producer, say the second in our example. What will happen when it is exempted from the VAT? It will shift the preceding tax from the first stage producer to the third stage producer, making its tax inclusive price 2030 yen. The final-stage firm can no longer deduct the taxes paid at preceding stages, and its VAT liability amounts to  $90(=3000 \times 0.03)$  yen. Notice that 30 yen has been taxed at the first stage and that it is not deductible anywhere. Thus, 120 yen is the total tax in this case, and consumers will have to pay 3120 yen for the final product.

This illustration shows that the existence of tax-exempted firms in the midst of production linkage will end up with double (multiple, to be more correct) taxation. It is therefore understandable that small firms which have been asserting tax concessions are also conscious of their negative side. A more straightforward way for getting rid of the VAT cascading is to treat the purchase of tax-exempted good as the taxable one. In our example, while the second stage producer is tax-exempted, their products are deemed to have been taxed. They sell their product for 2030 yen, but this good is considered to be taxed. Thus, instead of 2030 yen, the after-tax price of the good is 2060 yen. The rest is the same as in the case of fully taxed producers; total tax amounts to 90 yen of which both the first stage VAT of 30 yen and the second stage notional VAT of 30 yen is deductible. What, however, is decisively different from the text-book case is that the second stage VAT has never been collected. Instead, it will either be collected by the producer of the final stage, or it could partly be taken away by the second stage producer.

Thus, the VAT turns out to be a gift for the third stage producer. As in the case of tax-exempted final stage producer, consumers lose and pay for the windfall gains of producers. This is the outcome of the compromise between the government that wants a revenue raising machine and the firms that claim the vested interest as their own.

## 4.3 Equity aspects of the Japanese VAT

Since the VAT is proportional to consumption, it is almost by definition more burdensome

TABLE 5. TAX BURDEN BY INCOME CLASSES: 1991
PROPORTIONS OF INDIRECT AND DIRECT TAXES TO TOTAL INCOME: %

Iocome classes	Total	Total	Indirect Taxes					
	income	consumption	VAT	Gasoline	Liquor	Tobacco	Automobile	
CLASS1	100	79.12	1.85	0.51	0.42	0.29	0.18	
CLASS2	100	72.42	1.74	0.48	0.39	0.23	0.17	
CLASS3	100	68.68	1.68	0.43	0.39	0.21	0.16	
CLASS4	100	67.17	1.67	0.42	0.35	0.14	0.17	
CLASS5	100	65.22	1.60	0.34	0.35	0.13	0.16	
CLASS6	100	63.23	1.59	0.30	0.29	0.12	0.14	
CLASS7	100	62.80	1.59	0.31	0.28	0.10	0.14	
CLASS8	100	62.03	1.59	0.28	0.24	0.07	0.14	
CLASS9	100	59.26	1.45	0.26	0.24	0.06	0.11	
CLASS10	100	54.58	1.41	0.24	0.19	0.05	0.11	

Iocome classes	Indirect tax total	Direct Taxes			Direct tax total	Total tax burden	
		National	Local	Property			
		income tax	income tax	tax			
CLASS1	3.25	1.78	0.83	0.58	3.19	6.44	
CLASS2	3.01	2.43	1.20	0.64	4.26	7.27	
CLASS3	2.87	3.09	1.45	0.69	5.23	8.10	
CLASS4	2.75	3.32	1.75	0.75	5.82	8.57	
CLASS5	2.58	3.58	2.03	0.76	6.37	8.95	
CLASS6	2.44	4.20	2.43	0.86	7.49	9.93	
CLASS7	2.41	4.67	2.77	0.85	8.29	10.70	
CLASS8	2.32	5.39	3.13	0.94	9.46	11.78	
CLASS9	2.12	6.28	3.58	0.95	10.81	12.93	
CLASS10	2.00	8.87	4.88	0.95	14.70	16.71	

Note: Income is classified by the ten pertentile. And the classes are in an ascending order from the class 1 to the class 10.

Source: Calclulated by the author, using a table prepared by the Tax Advisory Commission.

to the poor than to the rich. Although the rate of the VAT in Japan is 3%, this basic nature of it does not change. Table 5 depicts the tax burden by income class: income is classified by the ten percentile and ordered from the lowest, class1, to the highest, class10.

We can notice from the table that even the VAT of 3% causes regressive burden on households. The proportion of the VAT liabilities to income ranges from 1.85% of the lowest income group to 1.41% of the highest income. A similar exercise has been tried in Table 6 where tax burden has been divided by consumption instead of income.

Here the VAT is almost proportional. This is exactly what we expected, and this has basically been a reason for regressive effects of the VAT in Table5. The average propensity to consume is higher for the poor than the rich, and tax burden is proportional to consumption. Therefore, proportionally the poor pay more of the VAT from their income than the rich. This

TABLE 6. TAX BURDEN BY INCOME CLASS: 1991
PROPORTIONS OF INDIRECT AND DIRECT TAXES TO TOTAL CONSUMPTION: %

Iocome classes	Total	Indirect Taxes							
	consumption	VAT	Gasoline	Liquor	Tobacco	Automobiles	Indirect tax total		
CLASS1	100	2.34	0.65	0.53	0.37	0.23	4.11		
CLASS2	100	2.41	0.66	0.54	0.32	0.23	4.15		
CLASS3	100	2.44	0.63	0.57	0.30	0.24	4.18		
CLASS4	100	2.48	0.62	0.52	0.21	0.26	4.10		
CLASS5	100	2.45	0.52	0.54	0.21	0.24	3.96		
CLASS6	100	2.51	0.48	0.46	0.19	0.23	3.86		
CLASS7	100	2.53	0.49	0.45	0.15	0.22	3.84		
CLASS8	100	2.57	0.45	0.39	0.11	0.23	3.74		
CLASS9	100	2.45	0.44	0.40	0.10	0.19	3.58		
CLASS10	100	2.59	0.44	0.36	0.10	0.19	3.67		

		Direct Taxes		Direct tax	Total tax burden
	National income tax	Local income tax	Property tax	total	
CLASS1	2.24	1.05	0.73	4.03	8.14
CLASS2	3.35	1.65	0.88	5.88	10.04
CLASS3	4.50	2.11	1.00	7.61	11.79
CLASS4	4.95	2.60	1.12	8.66	12.76
CLASS5	5.49	3.12	1.16	9.77	13.72
CLASS6	6.65	3.85	1.35	11.85	15.71
CLASS7	7.44	4.41	1.36	13.20	17.04
CLASS8	8.69	5.04	1.51	15.21	8.99
CLASS9	10.59	6.05	1.60	18.24	21.82
CLASS10	16.24	8.94	1.75	26.94	30.61

Note: Income is classified by ten pertentile. And the classes are in an ascending order from the class 1 to the class 10.

Source: Calclulated by the author, using a table prpared by the Tax Advisory Commission.

is an inevitable consequence of the VAT, and the tables support this.

A claim relevant here is that although some measure must be taken to cope with regressivity of the VAT, this does not necessarily imply multiple rates of the VAT. We have already examined the pros and cons of it. If the purpose of introducing a multiple-rate VAT is to mitigate its regressivity, we can achieve it in a less wasteful manner by improving benefits or public expenditures. Raising certain deductions for personal income tax and/or granting tax credits for basic consumption are the policies that must be presented before considering a multiple-rate VAT.

## V. Conclusions

We have examined the VAT in Japan. A message we have tried to bring is that pro-growth and pro-big business oriented policies are not the building blocks of Japanese tax policies. Instead, except for the very early phase of economic growth, small businesses have been "big" players in Japan, both in political and economic fields.

The VAT in Japan is typical of the outcome of political compromises between the government and small-businesses. Granting voluntary surcharges on the part of the VAT-exempted firms and providing subsidies to the "bigger" firms procuring goods from small businesses (thus supporting small businesses) seem to be too much of compromises. Consumers have been continuously lost in this political battle of tax reforms.

The Japanese economy has been under heavy pressures from both inside and outside. More efficient distribution systems and more competitive prices are important goals toward which it has to turn. The government seems to have put the first priority of tax policies in being equipped with big tax machines. However, our assertion in this paper is that the revenue-beats-everything approach toward tax reform could turn out to be very costly one for the economy now seriously struggling for more efficient internal allocations.

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