REVENUE MOBILIZATION AND RESPONSIVENESS OF PHILIPPINE INCOME TAXES: IMPLICATIONS FOR FISCAL POLICY

By Benjamin E. Diokno*

One basic hypothesis in development finance is that the share of direct taxes, which includes taxes on personal and corporate incomes, increases as development proceeds. During the period 1961-1973, the share of income taxes to total taxes in the Philippines has grown in accordance with this basic hypothesis. A dramatic downturn, however, occurred in the late 1970s. One of the objectives of this study is to examine this phenomenon.

The other specific objectives of the paper are: (a) to evaluate the resource mobilization potential of the corporate and personal income taxes, and (b) to measure and analyze the responsiveness of the individual and corporate income taxes to changes in incomes.

On the basis of the results of our study, the following conclusions and implications for policy appear warranted. First, the observed decline in fiscal importance of both personal and corporate taxes relative to total revenues suggests that the tax structure that has emerged in recent years has been relatively more regressive. Regrettably, the potential for tapping both personal and corporate income taxes to increase revenue yield and improve the progressivity of the tax structure is quite limited for a number of reasons: (a) tax avoidance and evasion of individual taxpayers appears to be on the rise; (b) the personal income tax base has severely narrowed in recent years; and (c) there appears to be a shift of capital from the formal, corporate sector to the informal, unincorporated sector, a phenomenon fully predicted by conventional general equilibrium theory of corporate tax incidence. To increase the revenue yield of personal income taxes, policymakers should look into three areas: higher tax consciousness, improved tax administration, and broader tax base.

Second, both the personal and corporate income taxes have turned revenue inelastic over the years, but for different reasons: the former, for the decrease in its rate elasticity; the latter, for the fall in its base elasticity.

Third, government policy may have to share the blame for the erosion of the corporate tax base. While the corporate dual tax rate system has been maintained since 1959, several tax measures were enacted which effectively reduced the tax rates of certain types of corporations. In addition, the corporate tax base may have been substantially eroded as a result of numerous investment incentives measures during the period under review.

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1. Introduction

Of major concern to Philippine policymakers and economic ners is the steady decline of tax revenue to GNP ratio between 8 and 1982. And while the ratio improved slightly to 12 per ; in 1983, Philippine tax effort continues to lag behind its AN neighbors like Malaysia, Thailand and Indonesia. Ironically, as between 1978 and 1984 that the share of personal and corpo- income taxes to total tax revenues steadily declined. The un- takeable conclusion is that the Philippine tax structure has not y failed to provide adequately the expenditure requirements of rowing economy but, in addition, the tax structure that has rged in recent years has been relatively more regressive.

As Hinrich (1970) observed, direct taxation occupies the central ition in the tax structure as the country develops mainly due to eased monetarization of the economy. The hypothesis is that share of direct taxes (which includes taxes on personal and porate incomes) to total taxes increases as development proceeds. ing the period 1961-1973, the share of income taxes to total es in the Philippines proceeded in accordance with this basic othesis. A dramatic downturn, however, occurred in the late '0s. One of the objectives of this study is to examine this pheno- non.

The other specific objectives of this paper are: (a) to evaluate resource mobilization potential of the corporate and personal ome taxes, and (b) to measure and analyze the responsiveness the individual and corporate income taxes to changes in incomes.

While the focus of the study is on the potential revenue yield both corporate and personal income taxes, the choice of the taxes eals our interest in the formulation of policies designed to im- ve the overall progressivity of the Philippine tax structure. Per- al income taxation, through the appropriate use of exemptions l progressive rates, is by far the most important contributor to gressive taxation in the overall tax structure. The choice of the porate income tax (CIT) is also appropriate if we accept the nventional wisdom that CIT is effectively a tax on capital.[1]

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[1] See, for example, Harberger (1962), McClure (1975) and Mieszkowski 67).

2. An Overview of the Philippine Income
Tax System

2.1. *Evidence from LDCs*

Evidences from comparative fiscal studies of developing countries and IMF data on income taxes as a per cent of gross national product and as a per cent of total taxes enable us to compare the Philippines with other developing countries for several years (Table 1). These data suggest that since the mid-1950s, the role of income taxes within the Philippines has been fairly constant both in terms of relative importance in the tax structure and relative to total economic activity.

When compared with other Asian countries, the relative (to total taxes) importance of income taxes in the Philippine for the periods 1966-68 and 1972-76 was slightly higher than the regional average; however, in more recent years (1978-82), it was considerably lower. Moreover, compared to its ASEAN neighbors, the Philippine income tax performance appeared to lag behind Indonesia, Malaysia and Thailand where income taxes as a per cent of total taxes has been increasing over the years.

Again, compared with other Asian countries, the relative (to GNP) income tax burden in the Philippines for the period 1966-68 to 1979-82 has been consistently lower than the regional average. In terms of rank ordering, the Philippines is exceeded by six countries — Indonesia, Malaysia, Singapore, Korea, Sri Lanka and Thailand.

2.2 *Philippine Experience*

In terms of revenue yield, from the early 1960s to the late 1970s, CIT has consistently exceeded personal income tax, except for 1967 and 1972. During the last five years, however, personal income taxes have been, on the average, the more important source of direct taxes.

It should be emphasized, however, that both personal and corporate income taxes have not measured up to the stylized fact that as the country develops, and the monetized sector of the economy expands, the share of direct taxes to total taxes should increase. Such behavior was evident until the early 1970s when income taxes as a per cent of total taxes have been increasing. Since the late 1970s, however, the share of personal income taxes has consistently

	As a Per Cent of Total Taxes						
	1953-1955[a]	1966-1968[a]	1972-1976[b]	1979-1982[g]	1966-1968[a]	1972-1976[b]	1979-1982[g]
Philippines	21.1	23.8	24.8	24.3	2.3	2.51	2.6
Afghanistan	—	—	15.2	—	—	0.86	—
Bangladesh	—	—	9.8	15.7[h]	—	0.57	1.1[h]
Burma	8.8	7.3	36.1	5.0	11.0	2.73	0.5
China	25.1	19.8	14.4	21.8	2.3	2.87	2.4
India	36.1	28.8	18.0	76.9	2.2	2.50	16.8
Indonesia	—	—	66.8	—	—	10.85	—
Iraq	—	—	86.1	—[h]	—	32.28	—[h]
Jordan	—	33.8	9.6	14.9	4.0	1.86	2.3
Korea	28.6	—	28.5	27.1	—	3.87	4.3[j]
Malaysia	—	—	30.0	41.8[i]	4.4	6.75	9.9[j]
Nepal	—	3.8	6.0	7.5	0.12	0.32	0.5
Pakistan	18.1	15.7	13.6	15.4[j]	1.3	1.55	1.8[j]
Singapore	—	—	—	47.7	3.8	—	9.1
Sri Lanka	25.8	20.7	17.0	15.2	3.2	3.06	2.8
Syrian Arab Republic	—	—	22.1	25.2[i]	—	6.74	2.5[i]
Thailand	8.4	13.6	17.0	21.4	1.7	2.37	2.7
Turkey	28.2	32.5	43.3	55.5[i]	4.6	7.01	10.0[i]
Vietnam	—	—	—	—	1.0	—	—
Yemen Arab Republic	—	—	5.6	10.2	—	0.43	1.6
Asia[c]	21.5[k]	18.6[l]	23.6[m]	29.9[n]	3.1	3.7	5.3[n]

Other Asian LDCs[d]	21.6[e]	17.9	23.5[f]	30.5	3.2	3.8	5.6
All LDCs	22.4	24.0[e]	26.6[f]			4.77[f]	

— means zero or insignificant amount; information not available.

[a]Compiled from Raja J. Chelliah, "Trends in Taxation in Developing Countries," *IMF Staff Papers*, 18, Nov. 2 (July 1971), 254-331.

[b]Compiled from Alan Tait et. al. "International Comparison of Taxation for Selected Developing Countries," *IMF Staff Papers*, 26, No. 1 (March 1979), 123-56.

[c]Includes China, India, Indonesia, Korea, Malaysia, Nepal, Pakistan, Philippines, Singapore, Sri Lanka, Thailand, Vietnam.

[d]Excludes Philippines.

[e]Consists of 30 countries.

[f]Consists of 63 developing countries.

[g]Computed by author using the following data sources: (a) GNP-IMF *International Financial Statistics*, 1984 and Asian Development Bank, *Key Indicators of Developing Member Countries of ADB*, 1985; (b) tax data — IMF, *International Financial Statistics*; (c) tax data for the Philippines-National Economic and Development Authority, *Philippine Statistical Yearbook*, 1984.

[h]1979 only.

[i]Up to 1981 only.

[j]Up to 1980 only.

[k]Excludes Malaysia, Nepal, Singapore, and Vietnam due to unavailability of data.

[l]Excludes Malaysia, Singapore, and Vietnam due to unavailability of data.

[m]Excludes Singapore and Vietnam due to unavailability of data.

1 — Percentage Shares of Personal and Corporate Income
Taxes to Total Taxes, 1961-1984

$$\frac{CIT + PIT}{TT}$$

$$\frac{CIT}{TT}$$

$$\frac{PIT}{TT}$$

Year

63   65   67   69   71   73   75   77   79   81   83
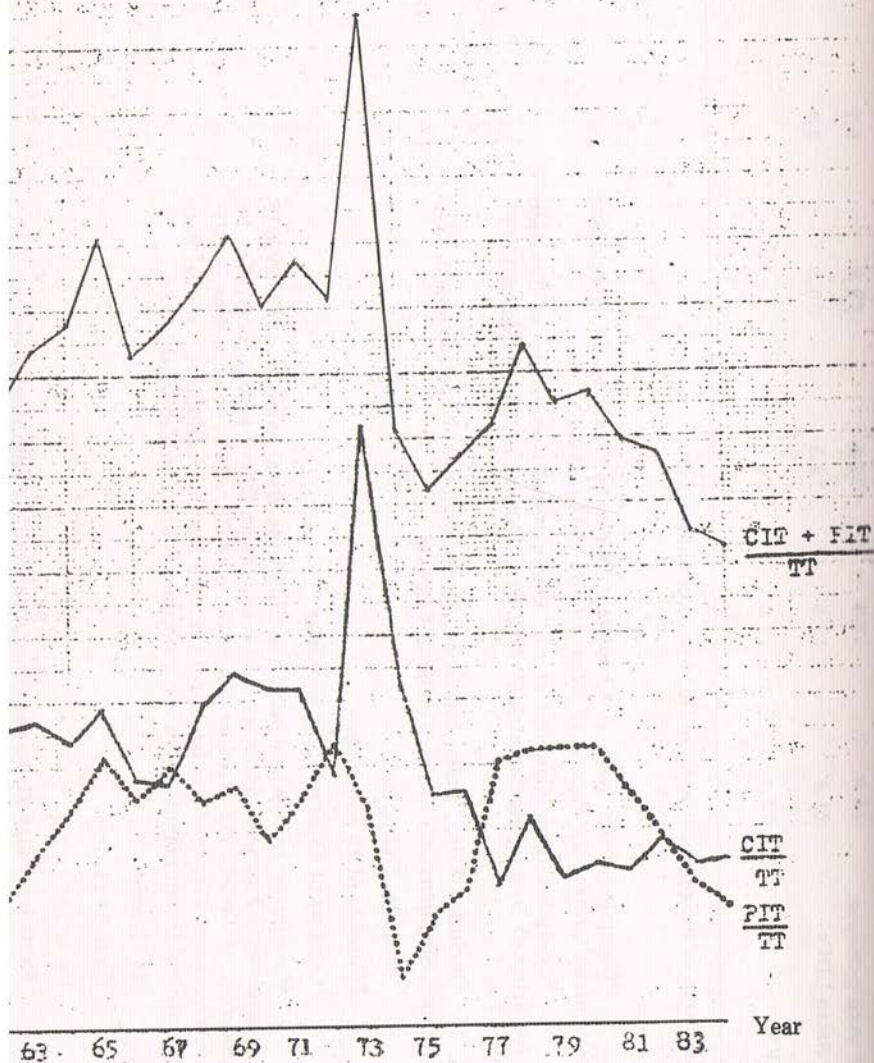
declined while the share of corporate taxes while fairly constant has settled at a substantially lower level (Figure 1).

As shown earlier, the Philippines goes against the general trend established by its other ASEAN neighbor countries. And, again, it could be argued that the decline in importance of income taxes relative to total taxes has added to the overall regressivity of the Philippine tax system.

2.2.1. Distribution of Income Tax Base

For tax policy purposes, it matters where the bulk of the tax yield comes from. The distribution of the income tax base for two periods where data are available (1974 and 1978) is given in Table 2. For 1974 and 1978, the bulk of the returns and taxable income is located in the two lowest income range. In 1974, the 86.2 per cent of returns with lowest income yielded only 15.8 per cent of the tax revenue. For 1978, the comparable figure is 83.7 per cent of returns yielding only 7.4 per cent of the revenue.

In 1974, the bulk of the tax revenue originated from the in-between range (P30,000-P200,000) while the richest group (P1,000,000 and over) contributed only 9.1 per cent of the revenue. In 1978, the contribution of the middle range taxpayers declined in importance, with the richest group (P1,000,000 and over) contributing a sizable chunk (61.1 per cent) of total tax revenue.

The available data suggest that there has been a discernible narrowing of the income tax base. In 1978, the income tax system has relied more on the very rich for the bulk of its revenue. While it looks good on equity grounds, the narrower base suffers on revenue mobilization grounds because the revenue which may be tapped from the very rich taxpayers is limited since they are not numerous enough.

This pattern of behavior has remained until 1981 where taxpayers belonging to the first income tax brackets (below P20,000 and the P20,001 to P80,000) while representing 95.17 per cent of total taxpayers accounted for only 28.54 per cent of total taxes due. On the other hand, the richest group (P1,000,000 and over) representing 0.12 per cent of total taxpayers paid 43.95 per cent of total tax revenues. A dramatic shift occurred in 1982 where the contribution of the lowest two income groups to total tax revenues increased to 43.03 per cent while that of the highest income group declined to 8.80. One may be tempted to attribute this change to the

TABLE 2   Distribution of Income and Tax...

Gross Income Bracket	1974				1978			
	Number of Returns (1,000)	Gross Income (PM)	Taxable Income (PM)	Tax (PM)	Number of Returns (1,000)	Gross Income (PM)	Taxable Income (PM)	Tax (PM)
Less than and equal to P 10,001	599.3	3291.6	926.6	35.8	816.5	4933.5	1453.6	57.3
10,001 - 20,000	189.7	1589.6	946.1	63.6	359.6	4933.2	1797.0	120.8
20,001 - 30,000	50.1	1215.1	474.3	49.3	95.8	2324.0	919.0	94.3
30,001 - 50,000	34.6	1323.1	476.6	68.7	65.7	2501.7	906.2	126.5
50,001 - 100,000	23.5	1628.1	487.3	100.1	41.0	2817.0	852.5	169.4
100,001 - 200,000	10.3	1430.7	349.4	102.6	16.2	2232.9	523.0	144.8
200,001 - 300,000	3.0	731.2	142.8	51.0	4.5	1105.2	214.2	75.9
300,001 - 500,000	2.2	849.0	127.1	50.0	3.2	1220.9	199.3	82.7
500,001 - 1,000,000	1.4	967.2	108.7	48.4	1.9	1268.4	139.3	62.4
P1,000,000 and over	.7	1516.0	105.5	57.2	.9	3947.5	2128.0	1470.3
TOTAL	915.1	15541.8	4144.5	626.7	1405.4	27284.5	9132.3	2404.4

As a Per Cent of Total

Gross Income Bracket	1974				1978			
Less than and Equal to P	Number of Returns (1,000)	Gross Income (PM)	Taxable Income (PM)	Tax (PM)	Number of Returns (1,000)	Gross Income (PM)	Taxable Income (PM)	Tax (PM)
10,001	65.5	21.2	22.4	5.7	58.1	18.1	15.9	2.4
10,001 - 20,000	20.7	16.7	22.8	10.1	25.6	18.1	19.7	5.0
20,001 - 30,000	5.5	7.8	11.4	7.9	6.8	8.5	10.1	3.9
30,001 - 50,000	3.8	8.5	11.5	11.0	4.7	9.2	9.9	5.3
50,001 - 100,000	2.6	10.5	11.8	16.0	2.9	10.3	9.3	7.0
100,001 - 200,000	1.1	9.2	8.4	16.4	1.2	8.2	5.7	6.0
200,001 - 300,000	0.3	4.7	3.4	8.1	0.3	4.1	2.3	3.2
300,001 - 500,000	0.2	5.5	3.1	8.0	0.2	4.5	2.2	3.4
500,001 - 1,000,000	0.2	6.2	2.6	7.7	0.1	4.6	1.5	2.6
P1,000,000 and over	0.1	9.7	2.5	9.1	0.06	14.5	23.3	61.1
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source of basic data: BIR Statistics on Taxable Returns for 1974 and 1978.

adoption of the modified income taxation in 1982. However, in the absence of time-series data due to the novelty of the new tax system, one cannot conclude that such pattern of behavior will hold in the years to come. [2]

2.2.2 Measures of Responsiveness of Income Taxes

One criterion by which to judge the desirability of a given tax is its elasticity with respect to changes in GNP. A tax that is elastic to growth in GNP is said to be a promising revenue source for development finance.

Past estimates of the responsiveness of income taxes to changes in GNP in the Philippines are shown in Table 3. Strictly speaking, since the estimates are based on the tax series which are not cleaned off discretionary changes, the estimated coefficients are buoyancy values of the relevant taxes. [3] In all cases, except Llanto's (1983)

Table 3 — Estimates of Responsiveness of Incomes Taxes, Selected Studies

Sources	Year	Estimates		Remarks
Sicat (1971)	1954-1969	Income	1.25	Buoyancy estimate using COA data
	1955-1970	Income	1.45	Buoyancy estimate using BIR data
Sinay (1974)	1961-1972	Personal	1.01	Buoyancy estimates
		Corporate	1:31	
IMF (1975)	1960-1972	Personal	1.0	Buoyancy estimates
		Corporate	1.3	
Llanto (1983)	1966-1981	Personal	1.30	Buoyancy estimates
		Corporate	0.76	

Source: Various studies cited.

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[2] I am grateful to Dr. Rosario M. Manasan for bringing to my attention the existence of the 1981 and 1982 data contained in an unpublished BIR study entitled: "An Evaluation of the Gross Income Tax," 1984.

[3] Tax buoyancy measures the total response of tax yields to changes in income inclusive of revenue increases brought about by discretionary changes such as reforms in the tax rates, tax base, and significant administrative improvements. Tax elasticity, on the other hand, measures the automatic response of the tax yields to income changes net of revenue increases brought about by discretionary factors.

timate for corporate income, the buoyancy estimates exceeded ity. The implication is that income taxes in the Philippines have en effective automatic stabilizers: the revenue yield of the relevant come tax aggregate increases as GNP increases and decreases as onomic activity slows down. [4]

Again, except for Llanto (1983), the above estimates were done fore the observed downturn of the shares of personal and corpo- te income taxes to total taxes. A cursory examination of the avail- le data suggests that buoyancy measures in the earlier years may longer hold and, therefore, reestimation may be necessary. A new ethodology is proposed in the next section while results are pre- nted and analyzed in Section 4.

3. Methodology and Data Sources

1 Methodology

Using time-series data from 1961-1984, we propose to estimate le revenue elasticity of both personal income tax and corporate in- ome tax during two distinct periods: 1961-1977 and 1978-84. As ill be shown later, it is highly inappropriate to look at income taxes a homogenous aggregate. From the available evidence, the tax erformance of personal income tax during the period under review eparted markedly from its corporate counterpart.

Why is there a need to disaggregate the data for both personal ncome and corporate income taxes? For one, as shown by the avail- ble data, during the period 1978-84, the shares of both personal ncome and corporate income to total taxes were on the decline, in harp contrast to the earlier period (1961-1977) when their shares vere on the upswing. A related reason is that major tax reforms took ffect during the second period under review.

During the two periods, income tax base, rate and total elastici- ies were computed separately. It may be noted that simply using a lummy variable — 1 during the periods where major tax reforms ook effect and 0 otherwise — does not help us in testing the hypo- hesis that the estimated elasticities in the two regressions (one for

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[4] Another justification for an income elasticity of the tax equal to unity or ligher is if it is assumed that the demand for essential public services grows oughly in proportion to income. An income elasticity of unity, as a policy bjective, simply means that it is desirable that yields from a tax source at least keep pace with demands for public services.

the pre-tax reform period and the other after the tax reform period) are identical; it helps only concerning the intercept.[5]

The estimated regression equations are shown in Tables 6 and 7. All the regression equations are estimated by ordinary least squares method.

3.2 Data Sources

Data for the personal income and corporate tax receipts, tax bases, and GNP were obtained from the National Income Accounts Statistics of the National Economic and Development Authority (NEDA). Personal income, used as tax base for personal income tax, is computed from the National Income Accounts using the following scheme:

Gross National Product

Less: Capital consumption allowance
           Indirect taxes less subsidies
           Corporate savings
           Social Security contributions
Add: Government transfers to persons
             Social security benefits
             Other current transfers from Government
           Current transfers from the rest of the world
Equals: Personal Income

The figures for 1981 are advanced estimates by NEDA as of December 1983 while the figures for 1982-84 are advanced estimates as of December 1984.

4. Results and Analysis

The estimated base, rate and total revenue elasticities are shown in Table 4. The base elasticity which measures the ratio of the annual

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[5] The dummy variable approach can, of course, handle the question of whether the estimated elasticities in the two periods are equal by using the following specification:

$$\ln TR = B_0 + B_1 \ln TB + B_2 D + B_3 (D^* \ln TB) + \in$$

where:
TR : tax revenues
TB : tax base
D   : 0 for pre-tax reform period and
      1 for after-tax reform period.

Table 4 — Elasticity of Personal and Corporate Taxes and Personal and Corporate Tax Bases

Year	Base Elasticity	Rate Elasticity	Total Revenue Elasticity
1962-1984			
Personal Income Tax [a]	0.93	1.09	1.01
Corporate Income Tax	1.14	0.80	0.91
1962-1977			
Personal Income Tax	0.91	1.18	1.07
Corporate Income Tax [b]	1.07	1.01	1.08
1978-1984			
Personal Income Tax	0.89	0.45	0.40
Corporate Income Tax	0.47	1.33	0.62

Note: The rate elasticity is the percentage change in the ratio of annual percentage change in tax revenues (personal or corporate tax revenues) to the annual percentage change in the tax bases (personal income and corporate income). The base elasticity is the ratio of the annual percentage change in the tax base to change in GNP. Total revenue elasticity is the product of the rate and base elasticities.

[a] 1961-1984 data.
[b] 1961-1977 data.

percentage change of income tax base (personal income in the case of personal income tax and corporate income in the case of corporate income tax) to changes in GNP, averages about 0.93 over the 1962-1984 period in the case of personal income tax. In the case of corporate income tax, the base elasticity averaged about 1.14 over the 1962-1984 period. In other words, personal income grew only 80 percent as rapidly as GNP; on the other hand, corporate income outgrew GNP during the period. In the estimated rate elasticity, the situation is reversed. The rate elasticity, which measures the ratio of the percentage change in income tax revenues to the percentage change in income tax base, averaged 1.09 for personal income tax and 0.80 for corporate income tax. That is, while income tax revenues, discretionary factors included, grew 9 per cent faster than personal income, corporate income tax receipts grew only 80 per cent as rapidly as corporate income.

Both personal income tax and corporate income tax have, over the years, become revenue inelastic. What explains this pattern of behavior? In the case of personal income tax, there has been a slight decrease in base elasticity accompanied by a dramatic decline in rate elasticity.

During the period 1978-1984, income tax revenues grew only 45 per cent as rapidly as personal income. In contrast, rate elasticity was estimated at 1.18 over the period 1962-1977. During the period 1972-1977, personal income (26.6%) tax has outgrown personal income (22.0%) while during the period 1978-84, the observed growth rate has been reversed with personal income (21.6%) out-growing personal income tax (9.6%). What is even more interesting is that during the period 1961-1971, personal income tax revenues grew almost twice as rapidly as personal income (Table 5).

Since the wide array of tax measures passed during the period 1978-1984 were revenue-raising with few exceptions — for example, P.D. 323 (An Act Granting Exceptions for Single and Married Non-Resident Filipinos) and P.D. 439 (An Act Providing Tax Holidays for Overseas Filipinos) — the most plausible explanation for the dramatic drop in the rate elasticity is the increasing tax avoidance and evasion of Filipino taxpayers.[6]

The observed revenue inelasticity of the corporate income tax is due to the significant drop in its base elasticity. While in earlier years, corporate income has, on the average, outgrown GNP, over the years 1978-84, corporate income grew only 47 per cent as rapidly as GNP. On the other hand, rate elasticity has grown from 1.01 over the years 1962-1977 to 1.33 in later years. This means that corporate tax receipts have grown 33 per cent faster than corporate income during this period (Table 5).

Table 5 – Average Growth Rates of Income Taxes
and Tax Bases
(In per cent)

	Personal Income Tax	Personal Income	Corporate Income Tax	Corporate Income
1961-1971	22.2	12.1	14.6	15.5
1972-1977	26.6	22.0	34.8	35.3
1978-1984	9.6	21.6	14.7	9.1

Source: Computed by author.

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[6] Llanto (1980) attributed the narrow coverage of the tax in terms of taxable filers to the exclusive availment of itemized deductions and the possibility of collusion between taxpayers and revenue personnel in tax avoidance and tax evasion schemes.

On the basis of the above results, we can state the following:
:, the low base elasticity can be attributed partly to the erosion
1e tax base due to the enactment of special laws exempting from
payment of income tax some specified institutions. In addition,
ral tax decrees were passed which effectively lowered the tax
s applicable to certain corporations. Second, the increase in
elasticity can be attributed to the improvement in the corporate
collection efficiency since the dual rate structure of 25 per cent
the first ₱100,000 net taxable income and 35 per cent for the
t taxable income in excess of ₱100,000 has been unchanged
ng the period under review. Third, assuming that collection effi-
cy has, in fact, improved, and given that the tax rate has re-
ned unchanged, it could be argued that the base erosion can be
ibutable to a shift of capital from the corporate sector to the
1corporated sector, or what may be termed the subterranean
1omy. This pattern of behavior is, of course, consistent with
lictions based on general equilibrium analysis of the incidence
he corporate income tax.

The results of the statistical test for the revenue elasticities of
personal income tax (Table 6) and the corporate income tax

Table 6 — Personal Income Tax and Personal
Income Regression Results

| | Regression Equations | | |
	1962-1984	1962-1977	1978-1984
Personal Income Tax			
Constant	−4.93	−5.86	2.95
	(11.89)	(9.60)	(2.08)
Personal Income	1.09	1.18	0.44
	(28.09)	(20.16)	(3.82)
$\bar{R}^2$	.974	.964	.693
s.e.	.181	.149	095
SSE	28.198	9.39	.176
Personal Income			
Constant	.343	.599	.893
	(2.40)	(2.78)	(0.75)
GNP	.936	.911	.894
	(74.12)	(45.50)	(9.49)
$\bar{R}^2$	.996	.993	.937
s.e.	.064	.056	0.83
SSE	22.947	6.47	.659

tes: (a) Figures in parentheses under the regression coefficients are t-values.
(b) The estimated slope coefficients are all significantly different from
zero at the 1% level.

(Table 7) lead us to the following conclusion: that the set of base and rate elasticities in the regression using 1962-1977 data and the regression using 1978-84 data are not the same. This conclusion holds for both personal income tax and corporate income tax. The personal income tax is characterized by a deterioration in its rate elasticity, while the corporate income tax is characterized by an improvement in its rate elasticity accompanied by a decline in its base elasticity. It should be noted that all estimated elasticity coefficients are significantly different from zero at the 1% level.

Table 7 — Corporate Income Tax and Corporate Income Regression Results

		Regression Equations	
	1962-1984	1962-1977	1978-1984
(1) Corporate Income Tax			
Constant	.591	−1.012	−4.74
	(1.62)	(2.02)	(1.50)
Corporate Income	.798	1.02	1.33
	(18.20)	(15.38)	(4.13)
$\bar{R}^2$	.938	.940	.728
s.e.	.258	.202	.154
SSE	23.542	10.271	.520
(2) Corporate Income			
Constant	4.658	−4.004	3.821
	(10.25)	(6.24)	(2.63)
GNP	1.139	1.07	.472
	(28.43)	(17.98)	(4.11)
$\bar{R}^2$	.973	.955	.725
s.e	.205	.202	.102
SSE	34.75	10.27	.227

Notes: (a) Figures in parenthesis under the regression coefficients are t-values.
   (b) The estimated slope coefficients are all significantly different from zero at 1 % level.

5. Conclusions and Implications for Policy

On the basis of the above results, the following conclusions and implications for policy appear warranted.

(1) The observed decline in fiscal importance of both personal and corporate income taxes relative to total tax revenues suggests the unwanted consequence that the tax structure that has emerged in recent years has been relatively more regressive. Fiscal planners, it

ars, are caught in a bind. To increase revenue yield, and to im-
e the progressivity of the tax structure, they could tap both
onal and corporate income taxes only in a very limited way. I
suggest three plausible reasons: first, tax avoidance and evasion
idividual taxpayers appears to be on the rise; second, the per-
l income tax base has severely narrowed in recent years; and,
l, as a consequence of improved tax collection machinery, there
ears to be a shift of capital from the corporate to the unincor-
ted sector, a phenomenon fully predicted by conventional
ral equilibrium theory of corporate tax incidence. To increase
revenue yield of personal income taxes, policymakers should look
three areas: higher tax consciousness, improved tax administra-
, and broader tax base.

(2) Both personal and corporate income taxes have grown reve-
inelastic over the years, but for different reasons: the former,
the decline in its rate elasticity; the latter, for the fall in its base
ticity. One implication for policy is that it appears highly in-
ropriate to look at personal and corporate income taxes as one
ogenous aggregate.

(3) Government policy may have to share the blame for the
sion of the corporate tax base. While the corporate dual tax rate
em has been maintained since 1959, several tax measures were
cted which effectively reduced the tax rates of certain types of
porations. In addition, the corporate tax base may have been
stantially eroded as a result of numerous investment incentive
isures during the period under review.

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