BUOYANCY AND ELASTICITY OF REVENUE

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I. INTRODUCTION

Revenue is an essential component of development to effectively meet the increasing demand for public services and infrastructure expansion. The role of revenues in the overall development program is to finance the operational and development needs of the public sector. Obtained through the tax system, these revenues affect the growth of almost every aspect of the national economy; and as such, the desirable level and structure of taxation must, therefore, be viewed from the perspective of the objective of development policy.

It is basically within the above-mentioned framework that the government has implemented measures to increase collections. Since September 1972 up to the present, there have been over 100 reforms and changes within the Philippine tax system, having been effected through Presidential action. As a result, there has been an increase in the ratio of taxes to GNP from 10.7 percent in 1970 to an estimated 13.3 percent in 1980.

The paper seeks to determine the responsiveness of the implemented tax reforms through the measurement of the buoyancy and elasticity of revenues. Both measures are, likewise, indicative of tax performance and, as such, the whole spectrum of revenues provides the means of shedding some light on the effects of these new tax measures. A five-year period, starting with 1977, is considered appropriate in view of the inconsistency of the data in prior years.

II. CONCEPT

A. Aggregate Buoyancy and Aggregate Elasticity

The need to measure the tax structure in relation to its revenue-generating capabilities can be seen in the light of increasing the flow of revenues to the government in terms of expanding income (as represented by gross national product). As such, two measures to monitor the government's revenue-generating capabilities have been formulated, namely: aggregate buoyancy and aggregate elasticity.

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Aggregate buoyancy is the ratio of the growth rate of actual revenues vis-à-vis the growth rate of gross national product (GNP). It is the "capacity of our tax structure to increase the flow of income to the exchequer including the increase due to enhancement of rates and enlargement of the base."[1]   Basically, the aggregate buoyancy of revenues tends to monitor the responsiveness of the amount of revenues generated by the government with respect to GNP hence, evaluating the overall tax effort.

On the other hand, aggregate elasticity is the ratio of the growth rate of revenues net of discretionary changes (i.e., tax reforms) vis-à-vis the growth rate of GNP. It measures the responsiveness of the revenue system. This responsiveness refers to the built-in flexibility of the tax structure. Therefore, in order to derive the aggregate elasticity figure of the revenue system, care must be taken to eliminate as much as possible the effects of increases (or decreases) due to the new reforms imposed (or the abolition of certain reforms), changes in the tax rates, and the modification or expansion of the tax base. Thus, the basic difference between the two measures of revenue is that aggregate buoyancy takes into account the effects of the various new tax reforms while aggregate elasticity nets out the discretionary effects of these reforms.

B. Rate Elasticity and Rate Buoyancy

The methodologies for calculating both rate elasticity and rate buoyancy are obtained from the methodolgy of an NTRC staff paper on income elasticities.[2]   Rate elasticity is defined as the change in tax yields net of new tax measures vis-à-vis the tax base. This measure shows the progressiveness of the tax structure vis-à-vis improvements in tax administration prior to the tax reforms. On the other hand, rate buoyancy is the change in the total tax yields inclusive of the nex tax measures vis-à-vis the tax base. The measure gauges the responsiveness of actual tax revenues including the effects of periodic changes in the tax structure, as evidenced by the implementation of various tax reforms.

This study utilizes both measures in assessing the responsiveness of the actual revenues to the tax base and in showing the progressiveness of the tax structure due to improvements in tax administration.

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1. Indian Tax Structure and Economic Development by G. S. Sahota.

.2. "The Income Elasticities of the Individuals and Corporate Income Taxes of the Philippines" by R. Alfiler (December, 1975).

Data on taxes on international trade and transaction are used to illustrate in this study the concepts of rate elasticity and rate buoyancy.

To facilitate the example to be given, the various revenue generating instruments of taxes on international trade and transaction are, first, defined. The various tax instruments of international trade and transaction are classified into: import taxes, import duties and export duties. Import taxes are compensating and advance sales taxes, excises, and other miscellaneous levies imposed on imported products. Import duties are levied to protect the local production of import substitutes and discourage needless importation, thereby saving vital foreign exchange, while export duties are imposed to discourage the exportation of raw materials in favor of processed commodities.

III. SOURCES OF DATA

Revenue data for the National Government are taken from the Ministry of the Budget (CY 1976-80). The GNP figures, in turn, are taken from the National Accounts Staff of NEDA. On the other hand, the estimates of new tax measures are obtained from the Tax Statistics Staff of the National Tax Research Center (NTRC).

The basic data of export and import levels used in computing for rate elasticity and rate buoyancy are taken from the Foreign Trade Statistics of the National Census and Statistics Office (NCSO).

IV. LIMITATIONS OF DATA

1. The elasticity of figures is available only starting 1977 because the basic data for the previous years still cannot be reconciled. Actual figures of revenues for 1969 to 1975 are in fiscal years while the estimates of the revenue effect generated from the new tax measures are in calendar years (1972-80).
2. The revenue effect generated from the new tax measures are estimated only for the national government level.
3. Only the rate elasticity and rate buoyancy of the components of taxes on international trade and transactions are computed because the tax base of the other components of tax revenues (income tax, taxes on domestic goods and services, property taxes and other taxes) are not available.

4. Substantial work has been done to explain the erratic behavior of property taxes, and it has been initially concluded that there are differences in the way it has been computed. For a further discussion on property taxes, see Annex A and the subsequent tables.

V. METHODOLOGY

A. Aggregate Buoyancy and Aggregate Elasticity

Aggregate buoyancy figures are obtained by utilizing the actual revenues collected for the year. On the other hand, estimates on the yields of new tax measures are utilized as the discretionary effect in calculating aggregate elasticity. These estimates are deducted from the actual revenues received by the government to obtain aggregate elasticity. (See Annex B.)

These changes in the yields due to changes in tax rates or in the tax base are accounted for in two years. In other words, increases in the yield due to increases in the tax rates or extension of the base are subtracted from the actual figures of two years, whereas decreases in the yield due to a reduction in the tax rates or contraction of the base are added to the actual count in two years. After two years, these changes in the tax rates and the bases become part of the overall tax structure.

If both measures indicate a coefficient greater than one, it simply means that the relative increase in tax revenues exceeds the relative increase in current GNP. The converse is true if the coefficient derived from these measures is less than one.

The following formulas are used in computing aggregate buoyancy and aggregate elasticity figures:

$$\text{AGGREGATE BUOYANCY (B)} = \frac{GR\ REV}{GR\ GNP}$$

$$\text{AGGREGATE ELASTICITY (E)} = \frac{GR\ REV\ NET}{GR\ GNP}$$

where:

$GR\ REV$ = growth rate of revenues
$GR\ REV\ NET$ = growth rate of revenues net of the yields from new tax measures

$GR\ GNP$ = growth rate of gross national product (GNP) at current prices

B. Rate Elasticity and Rate Buoyancy: External Sector

Rate elasticity is the ratio of the growth rate of tax yields net of new tax measures to the growth rate of the tax base while rate buoyancy is the ratio of the growth rate of tax yields (including yields from new tax measures) to the growth rate of the tax base.

To compute for the rate elasticity and rate buoyancy of import and export duties, the following formulas are used:

$$RE_I = \frac{GRNIDT}{GRIM} \qquad RE_E = \frac{GRNED}{GREX}$$

$$RB_I = \frac{GRIDT}{GRIM} \qquad RB_E = \frac{GRED}{GREX}$$

where:

RE_I = the rate of elasticity of import duties/taxes
RB_I = the rate buoyancy of import duties/taxes
RE_E = the rate elasticity of export duties
RB_E = the rate buoyancy of export duties
$GRNIDT$ = the growth rate of import duties/taxes, net of new tax measures
$GRNED$ = the growth rate of export duties, net of new tax measures
$GRIDT$ = the growth rate of actual import duties/taxes
$GRED$ = the growth rate of actual export duties
$GRIM$ = the growth rate of import level
$GREX$ = the growth rate of export level

Dutiable imports and exports would have been ideal as a tax base in computing for rate elasticity and rate buoyancy. However, the levels of dutiable imports and exports to be used, as tax bases, were not available for the years 1976 and 1980. As such, export and import levels were used as substitutes. A correlation coefficient of 0.96 exists between export level and dutiable exports, and of 0.97 between import level and dutiable imports.

VI. ANALYSIS OF DATA

A. Aggregate Buoyancy and Aggregate Elasticity

The data on aggregate buoyancy and aggregate elasticity were

analyzed on a yearly basis.

1977

The national government generated a total of ₱18,740 million in revenues — a growth of 14 percent from 1976. Of the total tax revenues, income taxes registered a 28 percent growth and composed 28 percent of the total, while taxes on domestic goods and services increased by 13 percent and accounted for 30 percent of the tax revenues generated. Moreover, taxes on international trade and transactions grew by 3 percent and composed 37 percent of the total tax revenues generated during the year as depressed world market conditions contributed to the sluggish performance over the previous year which was offset somewhat by the continued progress in the promotion of nontraditional and other exports.

An aggregate buoyancy figure of 0.87 was registered for the year as tax revenues grew by 15 percent and accounted for 90 percent of the total revenues generated. A total of ₱1,177.1 million worth of taxes was generated due to the various tax reforms implemented during the year. Tax reform on domestic goods and services accounted for 70 percent of total reforms implemented while tax reforms on international trade and transactions made up 17 percent of the total tax reforms. The aggregate elasticity figure was 0.74.

1978

The aggregate buoyancy figure increased to 1.81 as the total revenues generated by the national government amounted to ₱23,970 million — a growth of approximately 28 percent. Both tax and non-tax revenues increased by about 26 percent and 50 percent, respectively, while taxes on international trade grew by 36 percent as a result of the increase in import taxes.

This coincided with a deceleration in the total goods and services produced (current GNP) during the period as the export sector suffered under unfavorable world market conditions while adverse weather conditions affected crop production. A total of ₱1,497.1 million of taxes on tax reforms enforced during the year was generated. Tax reforms on domestic goods and services composed 78 percent of the total tax reforms implemented, and accounted for the slight improvement in the aggregate buoyancy figures. Moreover, the aggregate elasticity figure increased to 1.81.

1979

The increasing trend in both aggregate elasticity and aggregate buoyancy did not last. Total revenues generated by the national government during the year amounted to ₱29,980 million — an increase of 25 percent, while current gross national product grew by 23 percent over 1978. Tax revenues expanded by 27 percent as income taxes and taxes on domestic goods and services accelerated from 16 percent in 1978 and 19 percent in 1979 to 31 percent in 1978 and 33 percent in 1979, respectively.

The aggregate buoyancy figure decreased to 1.11 which may be attributed to a slow growth in taxes on international trade and transactions from 36 percent in 1978 to 28 percent in 1979. The taxes generated by the various tax reforms implemented within the year amounted to only ₱1,192.6 million. An aggregate elasticity of 1.24 was registered for the year.

1980

The declining trend in both aggregate elasticity and aggregate buoyancy measures, as seen from the previous year, continued. In spite of an increase of 14 percent or an additional ₱4,624 million in total revenues, the aggregate buoyancy of total revenues further declined to 0.73 for the year even as the taxes generated by the various tax reforms implemented during the year amounted to ₱2,517.9 — an increase of more than 100 percent from the various tax reforms implemented in 1979. More than 84 percent of this amount was accounted for by the various tax reforms affecting domestic goods and services. However, a majority of the existing taxes declined in growth, in spite of an increase of 15 percent in tax revenues while current gross national product decelerated to 21.1 percent compared to the previous year's 22.6 percent. The deceleration was attributed to a decline in the growth rate of taxes on international trade and transactions as a result of a dampened international market. Correspondingly, an aggregate elasticity of 0.54 was registered for the year, a decrease of 0.70 points.

B. Rate Elasticity and Rate Buoyancy: External Sector

For the import sector, both the rate elasticity and rate buoyancy exhibited the same trend. Performance-wise, a progressive tax struc-

ture vis-à-vis improvements in tax administration was evidenced in 1978 as indicated by a rate elasticity and rate buoyancy of 2.35 and 2.15, respectively. This was attributed to an increase in the import duties/tax from ₱5,631 million in 1977 to ₱8,068 million in 1978, or a 43.28 percent increase. On the other hand, the other years did not exhibit a favorable performance as evidenced by a deceleration of 26 percent for 1979 and 10 percent for 1980.

As for the export sector, both rate elasticity and rate buoyancy showed the same trend. A responsive tax structure due to improvements in the tax administration came about in 1979 as both complementary measures indicated coefficients of 1.31 and 1.68, respectively. This favorable situation largely materialized as the world market prices of copper concentrates, sugar, and coconut oil improved. Moreover, the vigorous performance in 1979 exhibited by the export sector reflected the continuing expansion and increasing share of nontraditional exports, particularly electronic equipment and wearing apparel. However, a relatively sluggish performance was recorded for the other years as evidenced by a dwindling export duty level.

VII. RECOMMENDATIONS

This paper suggests a further study on the rate elasticity and buoyancy of the other components of tax revenues: income taxes, taxes on domestic goods and services, property tax, and other taxes.

TABLE 1
AGGREGATE ELASTICITY AND AGGREGATE BUOYANCY OF REVENUES, NATIONAL GOVERNMENT LEVEL, CY 1977-80

	Buoyancy				Elasticity			
	1977	1978	1979	1980	1977	1978	1979	1980
NATIONAL GOVERNMENT								
Total revenues	0.87	1.81	1.11	0.73	0.74	1.81	1.24	0.54
Tax revenues	0.92	1.65	1.20	0.73	0.79	1.64	1.36	0.52
Income taxes	1.74	1.06	0.82	1.03	1.43	0.96	1.07	0.87
Property taxes	(1.56)	(0.73)	0.96	(1.22)	(1.81)	(0.73)	0.96	(1.24)
Taxes on domestic goods and services	0.82	2.04	1.44	1.00	0.62	1.88	1.77	0.54
Taxes on international trade and transactions	0.20	2.36	1.24	0.36	0.20	2.58	1.27	0.34
Other taxes	8.13	(3.05)	1.79	0.59	7.99	(3.05)	1.54	(0.25)
Nontax revenues	0.43	3.22	0.41	0.75	0.43	3.22	0.41	0.75

TABLE 2
NATIONAL GOVERNMENT REVENUES, CY 1976-80
(In million pesos; obligation basis)
As of August 31, 1981

	1976 Level	1977 Level	Growth rate	1978 Level	Growth rate	1979 Level	Growth rate	1980 Level	Growth rate
NATIONAL GOVERNMENT									
Total revenues	16,415	18,740	14.16	23,970	27.91	29,980	25.07	34,604	15.42
Tax revenues	14,685	16,890	15.01	21,200	25.52	26,953	27.14	31,100	15.39
Income taxes[1]	3,705	4,756	28.37	5,534	16.36	6,564	18.61	7,988	21.69
Property taxes	154	115	(25.32)	102	(11.30)	124	21.57	92	(25.80)
Taxes on domestic goods and services	4,500	5,102	13.38	6,704	31.40	8,885	32.53	10,756	21.06
Taxes on international trade	6,030	6,230	3.32	8,496	36.37	10,869	27.93	11,689	7.54
Other taxes	296	687	132.09	364	(47.02)	511	40.38	575	12.52
Nontax revenues	1,730	1,850	6.94	2,770	49.73	3,027	9.28	3,504	15.76

Source of basic data: Ministry of the Budget.
1. Property transfers, or sometimes referred to as tax on commercial papers, are included under income taxes.

TABLE 3
NEW TAX MEASURES, CY 1976-1980
(In million pesos; obligation basis)

	1976	1977	1978	1979	1980
TAX REVENUES	753.9	1,177.1	1,497.1	1,192.6	2,517.9
INCOME TAXES	(20.5)	166.0	261.8	14.4	231.5
Corporate	(19.3)	117.7	164.5	—	(49.4)
Individual	(1.2)	48.3	97.3	14.4	280.9
PROPERTY TAXES	(9.0)	—	—	—	0.4
Transfer and estate	(8.2)	—	—	—	0.4
Real property	(0.8)	—	—	—	—
TAXES ON DOMESTIC GOODS AND SERVICES	601.9	813.4	1,173.0	1,147.5	2,132.2
License and business	1.0	2.6	385.2	879.1	1,036.9
Specific	600.9	810.8	787.8	268.4	1,095.3
TAXES ON INTERNATIONAL TRADE AND TRANSACTIONS	184.4	197.7	62.3	10.5	43.2
Import duties/taxes	184.4	197.7	62.3	(44.5)	(124.6)
Export duties	—	—	—	55.0	167.8
OTHER TAXES	(2.9)	—	—	20.2	110.6
Others	(2.9)	—	—	20.2	110.6

Note: A new tax measure on real property was initiated in 1978 (PD 1446) and made effective up to 1979. However, no data have yet been made available for this particular tax measure (see Annex B).

TABLE 4
RATE ELASTICITY AND BUOYANCY OF TAXES ON INTERNATIONAL TRADE AND TRANSACTIONS
CY 1977-80

	Elasticity				Buoyancy			
	1977	1978	1979	1980	1977	1978	1979	1980
Import duties/taxes	0.41	2.35	0.92	0.42	0.43	2.15	0.87	0.40
Export duties	0.25	(3.56)	1.31	(1.72)	0.25	(3.56)	1.68	(1.02)

TABLE 5
TAXES ON INTERNATIONAL TRADE AND TRANSACTIONS, LEVELS AND GROWTH RATE
CY 1976-80

	1976	1977		1978		1979		1980	
	Level	Level	G.R.	Level	G.R.	Level	G.R.	Level	G.R.
Taxes on international trade and transactions	6,030	6,230	3.32	8,496	36.53	10,869	27.78	11,689[1]	7.54
Import duties/taxes	5,462	5,631	3.09	8,068	43.28	10,191	26.31	11,216	10.06
Export duties	568	599	5.46	4.28	(28.55)	678	58.41	473	(30.24)

1. Includes another component of taxes on international trade and transactions ("others") which amounted to 189.

TABLE 6
NEW TAX MEASURES ON TAXES ON INTERNATIONAL TRADE
AND TRANSACTIONS
CY 1976-80

	1976	1977	1978	1979	1980
Taxes on international trade and transactions	184.4	197.7	62.3	10.5	43.2
Import duties/taxes	184.4	197.7	62.3	(44.5)	(124.6)
Export duties	—	—	—	55.0	167.8

Annex A
PROPERTY TAXES

Property taxes are composed of transfers and estate taxes as well as real property tax. Transfers and estate taxes are taxes imposed on the sale, donation, barter or any other mode of transferring ownership or title of real propertly, while real property taxes are those imposed on properties and any improvements made thereof except taxes on the transfer of ownership or title of real property. It could be noted in Table A.1 that transfers and estate taxes as well as taxes on money market transactions exhibit an increasing trend (with the exception of 1980, because of a slump in the money market), while taxes on real property show an erratic and decreasing trend.

Further examination of the various tables will show that the real property tax component of property taxes, as collected by the ministry of Education and Culture (MEC). In computing for the particular fund, one percent of the total special education fund. Table A.3 shows that the total assessed value of real property is increasing; and, as such, it will be noted that the SEF data of both the National Tax Research Center (NTRC) and the Special Education Fund Division of MEC also show an increasing trend. Both agencies obtain their data from the Bureau of Treasury (Table A.2).

However, the slight discrepancy between the NTRC and MEC data on the SEF may be explained by the fact that, in computing for the SEF, the former considered only some of the components making up the SEF. Moreover, the slight decrease registered in 1977 for the MEC's SEF data was due to the granting of a descending rate of discount of real property taxes on lands in 1974 (PD 391) and in 1975 (PD675) as well as the reclassification of some municipalities from a higher to a lower category.

Recapping what has been previously discussed, it will be worth noting the following points. First of all, the total assessed value of real property and the SEF data of both the NTRC and MEC show increases. Second, the MOB's data on real property are derived from the MEC. And lastly, the MOB's data on real property taxes are on an obligation basis.

TABLE A.1
PROPERTY TAXES
(In million pesos)

	1976	1977	1978	1979	1980
Property taxes	154	115	102	124	92
Transfers and estate	28	37	42	51	42
Real property taxes	126	78	60	73	50
Taxes on money market transactions	235	343	468	462	

Source of Basic Data: Ministry of the Budget.

TABLE A.2
REAL PROPERTY TAXES, BY DIFFERENT GOVERNMENT AGENCIES,
CY, 1976-80
(In million pesos)

Agencies	1976	1977	1978	1979	1980
Ministry of the Budget	126	78	60	73	50
National Tax Research Center	76.3	78.3	85.0	117.2	n.a.
Ministry of Education and Culture	84.1	78.3	89.8	117.4	120.3

TABLE A.3
BASIC REAL PROPERTY TAXES
(In thousand pesos)

		1976	1977	1978	1979	1980
1.	Taxable assessed value of real property	47,851,688	50,334,511	53,275,914	71,565,016	100,470,578
2.	Estimated collections	616,953	592,009	617,112	932,401	1,133,766
3.	Actual collections	311,812	325,523	301,749	533,546	697,839

Source of Basic Data: Ministry of Finance.

TABLE A.4
NATIONAL GOVERNMENT REVENUES, OBLIGATION BASIS, 1976-80
(In million pesos)
As of August 31, 1981

Particulars	1976	1977	1978	1979	1980
TAX REVENUES	14,685	16,890	21,200	26,953	31,100
BUREAU OF INTERNAL REVENUE	8,335	10,383	11,836	14,471	17,687
Income taxes	3,705	4,521	5,191	6,096	7,526
Proper	3,705	4,521	5,191	6,096	7,078
Oil inventory tax	—	—	—	—	—
License and business taxes	1,464	1,487	1,816	2,809	3,851
Proper	1,316	1,598	2,041	3,068	3,824
Mining tax	51	48	34	76	124
Franchise tax	69	48	56	103	165
Revenue from public forest	28	28	28	30	83
Less:					
Tax on commercial papers (Bureau of the Treasury)	—	(235)	(343)	(468)	(462)
Excise taxes	2,842	3,416	4,080	4,577	5,233
Proper	2,515	3,030	3,614	4,073	4,740
Banks	233	274	320	343	517
Amusements	30	30	38	49	45
Insurance	32	46	73	73	110

Particulars	1976	1977	1978	1979	1980
Energy taxes (BP 36)	—	—	—	—	—
Energy taxes (LTC)	32	36	35	35	52
Other taxes	324	959	749	989	1,077
Tax on commercial papers	—	235	343	468	462
Estate and donors	28	37	42	51	42
Documentary stamp taxes	241	307	351	408	615
Residence taxes	2	10	5	5	8
Amnesty taxes	29	7	—	—	—
Others	18	360	—	47	27
Fines and forfeitures	6	3	8	10	16
BUREAU OF CUSTOMS	6,030	6,230	8,292	10,658	11,410
Import duties	4,263	4,228	5,408	6,407	7,399
Proper	4,263	4,228	5,139	5,032	5,651
Payment compliance certificates	—	—	269	1,375	1,748
Import taxes	1,199	1,403	2,456	3,573	3,538
Export taxes	568	599	428	678	473
OTHER AGENCIES	320	277	1,072	1,824	2,003
General fund	320	277	280	324	302
Ministry of Education and Culture	126	78	60	73	50
Bureau of Fisheries and Aquatic Resources	1	1	1	1	1

Bureau of Forest Development	4	3	3	3	3
Philippine Navy	—	—	—	3	3
Bureau of Tourism Services	1	1	1	2	2
Bureau of Land Transportation	188	194	212	223	227
Bureau of Plant Industry	—	—	—	10	—
National Telecommunications Commission	—	—	3	4	8
Board of Investments	—	—	—	3	6
Bureau of Immigration and Deportation	—	—	—	1	1
Bureau of Land Transportation	—	—	—	1	1
Special Fund	—	—	792	1,500	1,701
Ministry of Energy	—	—	552	1,223	1,330
Others	—	—	240	277	371
Philippine Sugar Commission	—	—	33	64	73
Philippine Coconut Authority	—	—	3	2	3
Philippine Ports Authority	—	—	105	105	98
Philippine Tourism Authority	—	—	99	106	181
Ministry of Public Works	—	—	—	—	16
NONTAX REVENUES	1,730	1,850	2,770	3,027	3,504
	16,415	18,740	23,970	29,980	34,604

Source of Basic Data: Ministry of the Budget.

ANNEX B
NEW TAX MEASURES WITH NO FIGURES
(CY 1976-80)

Year	Classification	P.D./B.P.	Cause
1976	I. Income Tax		
	A. Corporation	745	n.r.
	II. Other Taxes		
	A. Amnesty	631	—
	III. Unclassified		
	A. Change FY to CY	777	n.r.
	B. Credit policy for coconut industry	755	less than ₱50,000
	C. Creating NHA	757	less than ₱50,000
1977	I. Income Tax		
	A. Individual	1117	n.r.
	B. Corporation	1116	n.a.
		1158 a	—
		1158 b,c,d,e	n.a.
	II. Taxes on Domestic Goals and Services		
	A. Specific	1119	n.r.
	B. License and business	1114	n.a.
	III. Unclassified		
	A. Exemptions and extension of exemptions from payment of taxes		
	1. Energy Development Board	1068	n.a.
	2. Export Development Corporation of the Philippines	1074	n.a.

3. International Center for Living Aquatic Resources Management	1105	n.a.
4. Asia Foundation, Inc.	1127	n.a.
5. American Korasian Foundation	1129	n.a.
6. Southeast Asia Regional Center Graduate Study and Research Agriculture	1171	n.a.
7. Manila Seedling Bank Foundations, Inc.	1197	n.a.
B. Others		
1. Local tax code	1118	n.r.
2. Incentives for investment in agricultural ventures	1159	n.a.
3. Revision of national internal revenue allotments to local government	1231	n.r.
4. Tax privileges granted to Orient Airlines Association	1253	n.a.
5. Penalties	1254	n.r.
6. Reduction of custom duties	1258	n.a.

1978[a]

I. Income Tax

   A. Individual — 1354 — n.a.

II. Property Tax

   A. Real property tax — 1446 — n.a.

III. Taxes on Domestic Goods and Services

   A. License and business

	1299 1	n.a.
	1456 2 & 5	n.r.
	1456 3, 4 & 6	n.a.

   B. Specific

	1359	n.r.
	1393	n.a.
	1469	n.a.

Year		Classification	P.D./B.P.	Cause
	IV.	Taxes on International Trade and Transactions		
		A. Import taxes	1362	n.a.
	V.	Unclassified		
		A. Exemption		
		1. Philippine Convention Bureau	1448	n.a.
		2. Northern Pangasinan State		
		College of Agriculture	1494	n.a
		3. Section 15 of R.A. No. 5186	1584	n.a
		B. Authorization	1356	n.r.
		C. Deduction	1353	n.a
1979[b]	I.	Income Tax		
		A. Individual	41	—
1980	I.	Other Taxes		
		A. Amnesty	1740	—
	II.	Unclassified		
		A. Amendments		
		1. Charitable and other Institutions	45	n.a
		2. NIRC	1705	n.e
		3. NIRC — Banking Industry	1738	n.e

Annex B (continued)

MEANINGS OF SYMBOLS USED:

n.a. — not available.
n.r. — not revenue effect.
n.e. — not estimable.
— — no effect for the year.

a.   Includes that of 1977 except PD 1158a.
b.   Includes that of 1978.

SOME OF THE NEW TAX MEASURES ISSUED FROM
1977 TO 1980

1977
Income tax — individual
PD 1156   Imposing a 15 percent tax on interest on time and savings deposits, excluding savings up to ₱5,000.
     1157   Raising the tax on winnings on Jai-alai and horse racing from 5 to 10 percent by amending Section 268 of the NIRC.

Property tax
PD 1154   Amending certain sections of the NIRC so as to impose a 35 per-cent final tax on the interest derived from every commercial paper issued in the primary market.

Taxes on domestic goods and services
PD 1155   Increasing the specific tax on alcoholic beverages by 10 percent and that on fermented liquors by 25 percent, thereby amending Sections 133 and 134 of the NIRC.

1978
Taxes on domestic goods and services
E.O. 507   Imposing an additional 10 percent sales tax on imported air condi-tioning units, components and parts.

Taxes in international trade and transactions
PD 1395   Amending further PD 1352, imposing 5 percent customs duty and/ or 5 percent internal revenue tax in lieu of the duty tax free im-portation privilege.
PD 1485   Granting exemption to NGA on all its cereal importation including equipments necessary for its operations as provided for under Sec-tion 16 of PD 4.

1979
Taxes on international trade and transcations
E.O. 558   Reimposition of export duty on logs.

Other taxes
B.P. 36   Imposing an Energy Tax on Electric Power Consumption.

1980
Taxes on domestic goods and services
PD 1615   Amending Section 199 of the NIRC by imposing a 22 percent ad
               valorem tax on locally produced crude oil.
PD 1672   Increasing the specific tax rates for premium and regular gasoline,
               avturbo and solvents for ₱1.00, ₱0.91, ₱0.55 and ₱0.57 per liter,
               respectively, and for LPG and asphalt, to ₱0.14 and ₱0.08 per kg.,
               respectively.

Other taxes
               Increasing the royalty tax on metallic and nonmetallic minerals.

FORMULAS:

$$BUOYANCY\ (B) = \frac{GR\ REV}{GR\ GNP}$$

$$ELASTICITY\ (E) = \frac{GR\ REV\ NET}{GR\ GNP}$$

where:

$GR\ REV$ = growth rate of actual revenues
$GR\ REV\ NET$ = growth rate of revenues net of the yields
              from new tax measures
$GR\ GNP$ = growth rate of current gross national product (GNP)

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