

RECENT FISCAL PERFORMANCE AND PERSPECTIVES:
MAJOR RECIPIENTS OF A.I.D.

Jacob Meerman
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CONTENTS

	<u>Page</u>
List of Tables	ii
Summary and Conclusions	iv
Introduction	1
I. Macroeconomic Performance	3
II. Fiscal Perspectives	16
Appendix	A1

LIST OF TABLES

<u>Number</u>		<u>Page</u>
<u>PART I</u>		
1.	Revenue and Expenditure Ratios (1965-1968)	4
2.	Ten Countries, Savings Ratios (1966-1968)	6
3.	Development Resources, 1966-1968 Average, by Domestic and Foreign Source	8
<u>PART II</u>		
4.	Colombia, Plan Vallejo and Merchandise Exports 1965-1969	28
5.	Ghana, Export Taxes as Percent of Central Government Current Revenue 1954-1963	34
6.	Ghana, Cocoa Production and Export Receipts 1964/65- 1968/69	35
7.	Ghana, Taxes on Exports of Cocoa as a Percentage of Central Government Current Revenues, 1961-1969	36
<u>APPENDIX</u>		
A1.	Bolivia, Central Government Fiscal Data as a Percentage of GNP, 1965-1969	
A2.	Bolivia, Data for Deriving Fiscal Performance Indicators	
A3.	Chile, Central Government Fiscal Data as a Percentage of GNP, 1965-1969	
A4.	Chile, Data for Deriving Fiscal Performance Indicators	
A5.	Colombia, Central Government Fiscal Data as a Percentage of GNP, 1965-1969	
A6.	Colombia, Data for Deriving Fiscal Performance Indicators	
A7.	India, Consolidated Government Fiscal Data as a Percentage of GNP, 1965-1969	
A8.	India, Data for Deriving Fiscal Performance Indicators	
A9.	Indonesia, Central Government Fiscal Data as a Percentage of GNP, 1965-1969	
A10.	Indonesia, Data for Deriving Fiscal Performance Indicators	

<u>Table</u>	<u>APPENDIX (Cont.)</u>	<u>Page</u>
A-11.	South Korea, Central Government Fiscal Data as a Percentage of GNP, 1965-1969	
A-12.	South Korea, Data for Deriving Fiscal Performance Indicators	
A-13.	Morocco, Central Government Fiscal Data as a Percentage of GNP, 1965-1969	
A-14.	Morocco, Data for Deriving Fiscal Performance Indicators	
A-15.	Pakistan, Consolidated Government Data as a Percentage of GNP, 1965-1969	
A-16.	Pakistan, Data for Deriving Fiscal Performance Indicators	
A-17.	Turkey, Consolidated Government Data as a Percentage of GNP, 1965-1969	
A-18.	Turkey, Data for Deriving Fiscal Performance Indicators	
A-19.	Ghana, Central Government Data as a Percentage of GNP, 1965-1969	
A-20.	Ghana, Data for Deriving Fiscal Performance Indicators	
A-21.	Tunisia, Central Government Data as a Percentage of GNP, 1965-1969	
A-22.	Tunisia, Data for Deriving Fiscal Performance Indicators	
A-23.	Selected Developing Countries: Structure of Total Tax Revenues, 1953-55(I), 1966-68(II)	
A-24.	Selected Developing Countries: Changes in Individual and Total Tax Ratios, 1953-55 and 1966-68	
A-25.	Selected Developing Countries: Ratios of Taxes to Gross National Product, Marginal Tax Rates, and Income Elasticities of Total Tax Revenue, 1953-1955 and 1966-68	
A-26.	Selected Developing Countries: Income Elasticity of Major Taxes, 1953-55 and 1966-68	
A-27.	Comparative Ranking: Basic Sample, Tax to GNP Ratios Against Domestic Revenues to GNP Ratios, 1966-68	

SUMMARY AND CONCLUSIONS

Introduction

This is a discussion of the public finances of nine current and three recent major A.I.D. recipients. A principal theme is that donor concern with increasing public revenues, while generally warranted in the past, has resulted in insufficient attention to other aspects of public finance; e.g., quality of expenditure, the equity problem (equitable distribution of income), efficiency of public enterprise, fiscal side-effects. In the 1970s, in one form or another, it is likely that these will become major issues. The Study draws attention to them in a country context. In the Study itself, Part I is a more developed and expanded version of the material used in the Administrator's Review of Development Performance, 1970. Part II is entirely new material.

I. Macroeconomic Performance

Public Revenue

Examining the most recent data available (1965-1968) for the nine major A.I.D. recipients plus Bolivia, Chile and Tunisia yields the following:

For 1966-68, domestic revenue as a percentage of GNP varies widely, although it is generally higher in countries with higher per capita incomes. Among the higher income countries, Brazil, Chile, Tunisia, Morocco, and Turkey have the highest revenues ratios (17% to 31% of GNP). The revenue ratios of the poorest countries (Indonesia, India, Pakistan, and Bolivia) range between 6% and 15% of GNP. Only Colombia has a low ratio (9%) and relatively high per capita income. The largest revenue increases are confined to the high domestic revenue countries plus Indonesia and Korea. These six countries collected as revenue over 30% of the increase in GNP between 1965-66 and 1967-68. Indonesia with the lowest average revenue ratio (6.3%) has the highest marginal ratio (53%).

Four countries failed to increase their revenue ratios during 1965-1968. Ghana's marginal revenue is negative. India, Pakistan, and Bolivia have marginal revenue ratios under 10%. These countries have been short on public (and private) resources for executing development programs. The apparent deterioration in their fiscal situation promises to compound an already basic problem. The relatively minute quantity of public resources which they channel into development has been and probably will continue to be a serious constraint on growth.

Public Saving

Comprehensive data on public saving are available for seven out of the 12 countries. Excluding Pakistan, public saving ranges from 3.5% to 6% of GNP, and accounts for 25% to 35% of national saving. Public saving is particularly low in Pakistan, equal to only 1.5% of GNP. Brazil leads in public saving (6% of GNP) but is last in private saving (8% of GNP). Colombia, which taxes and spends most lightly, has top ranking in private saving (12%) and manages a creditable ranking in public saving (5%) but at the expense of current account development expenditures.

Policy Implications

Countries with low average and marginal revenue ratios (Bolivia, India, Ghana and Pakistan) need a revenue structure whose automatic response to growth of GNP is a more than proportional increase in taxes; e.g., Korea and Chile. In Pakistan, increasing GNP has brought a less than proportionate increase in taxes so that continuous "tinkering" has been necessary merely to maintain the current ratio to GNP. Although highly sensitive politically, this problem requires increased attention. In those lagging countries where the political decision has been taken, technical assistance for tax administration and basic tax reform are desirable. This need is particularly pressing to the extent that donor resources, e.g., sector lending, are used to compensate for shortages of local revenues which theoretically could be collected given a better "will" and/or better management.

The correlation between domestic revenues and public saving has not been strong among developing countries. Some insist that more attention be devoted to the use of the additional resources resulting from increased revenues. In some countries "squandering" such resources has clearly been a serious issue. In this context, it is worth repeating that much current expenditure has very important development effects and some of it is a sine qua non for any kind of development whatsoever, e.g., general administration.

For many countries public revenues are still relatively scarce, and the traditional emphasis on their increase is needed. Given the substantial improvement in revenue collection of the last decade, it is likely that an equally important issue is what is done with the resources. This involves coming to grips more than hitherto with issues such as the efficiency of public enterprises, the maintenance of infrastructure, government staffing and payroll policies. Perhaps the question of the quality of public expenditure should become a basic issue in the 1970s. Little development results when channeling resources through the public sector means exchanging one form of consumption for another.

II. Fiscal Perspectives

Equitable Income Distribution

Donors have traditionally focused on the need to increase public revenues and public investment as near sine qua non's for growth. Recently "GNP has been dethroned" as new problems (population, unemployment) have impinged with increasing urgency. Increased awareness of the complexity of the development process is forcing a focus on policy issues other than resource mobilization.

Of primary importance is equitable participation in the fruits of development. In Pakistan more equal distribution of income has generally been seen as competitive with growth of GNP. Increase in the latter, with all the concomitant change implied, was the primary articulated policy of Pakistan's Government.

Pursuing this policy, Pakistan had respectable growth in the 1960s. However, social conflict has so increased that today equity, as concerns both interpersonal income distribution and the lagging growth of the East Wing, is seen as a major if not the major political "problem."

It is not at all clear that inherent conflict between growth and equity as presumed by Pakistan's decision makers is necessary. Numerous public expenditures can foster both growth and equity; e.g., education, birth control, farm to market roads, extension service. Given the numerous competing uses for Pakistan's public resources there should be little problem in defining public expenditures of great productivity both as concerns growth and equity.

On the taxation side, given wise use of public resources, the net effect of progressive taxation in nearly any situation could be enhanced growth rather than the opposite.

Brazil is of interest here. Brazil has substantial disparities in regional and personal distribution of income. However, it has followed a policy of large transfers of income both from the better off to the poor and through regional transfers from the wealthy to the poorest states, particularly in the Northeast. Through these policies Brazil has perhaps avoided Pakistan's deteriorating situation. At the same time growth has been rapid; e.g., in 1968/69 Brazil grew far more rapidly than Pakistan.

Fiscal Side Effects

Development practitioners have also neglected the very serious indirect effects of numerous fiscal measures. As noted, through the 1960s, maximization of GNP has been the goal. As means thereto maximization of investment

became a subsidiary objective of overwhelming importance. A wide variety of investment incentives were provided such as investment tax credits, and easy access to duty-free imported capital goods. In many cases the resulting unduly capital intensive technology which poor countries have adopted has increased dependence on foreign trade in replacing the imported capital. Further, in some small degree the problem of employment becomes slowly overwhelming because investment incentives have made capital less expensive and hence more attractive than it would be in a world of rational relative prices. The Study discusses this with respect to Colombia. The problem arises in Colombia (and elsewhere) because of failure to heed a basic tax principle: Do not confuse proximate goals with basic objectives. Intermediate and final goals may not be consistent. Colombia is interested in growth and full employment. The means taken to maximize growth were investment incentives. These maximized investments, promoted growth, and had a perverse effect on employment. In accordance with the principle, if output is to be maximized, then select the relevant growth industries and subsidize them directly rather than their investment. Colombia does directly subsidize non-traditional exports, some 12 percent by value, and with good results. If one's basic goal is to maximize employment, serious thought should be given to subsidizing it directly. If regional development is desired in Colombia and if concomitant with this one wishes to maximize employment in slow growing regions, then clearly decreasing the cost of capital relative to labor (investment incentives) is ill advised. All of this is directly relevant to A.I.D.'s proposed urban-regional sector loan for Colombia which may explicitly support investment incentives; e.g., subsidized rates of interest in slowly growing regions.

Fiscal side effects are also important in countries relying to a large degree on export taxation. In Ghana over a third of government revenues result from cocoa produced by numerous small holders. The tax appears to be very regressive with cocoa producers bearing perhaps more than three times their proper share of taxes as measured by their percentage contribution to GNP. Given the volatility in cocoa prices and output, this revenue source itself will fluctuate excessively, making impossible the steady growth in public resources which is extremely desirable from the growth standpoint.

Public Sector Efficiency

In the Study, Turkey and India are briefly examined from the perspective of public enterprise contribution to growth. In both cases the circumstantial evidence available suggests that public enterprise in these two countries contributes less than it might, i.e., is far from the feasible

degree of efficiency. In Turkey in 1967 the State Economic Enterprises (SEE) received transfers from the central government of 17 percent of taxes, or nearly 3 percent of GNP. Probably if the SEE were self-financing and/or paid taxes more resources would be available for growth.

In India the rate of returns to capital invested in public enterprises has consistently undershot 4 percent. Steel, engineering, chemicals, petroleum and minerals account for major public enterprises. In most countries these are profitable activities. Enhancing their profitability in India would permit greater public saving.

Gauging the efficiency of public enterprise is a complicated undertaking. Moreover, governments pursue numerous goals through developing public enterprises. It would be rash indeed to evaluate that development solely on a criterion of savings foregone. On the other hand, where public enterprise appears inefficient, then the cost to the economy in terms of decreased saving, poor quality investment, and lessened growth should be considered explicitly. Information in effect permitting a nation to calculate the costs of ideological preference, dispersal of private political/economic power, enhanced income distribution and so on, would probably lead it, in some instances, to reconsider policy with respect to the public/private dichotomy, or to greater pressure toward more efficient public sector performance.

In the coming decade this problem should continue to receive substantial attention. If for no other reason, modern public sectors are now larger than some years ago, and the question of their efficient operation is more important.

J. Meerman
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RECENT FISCAL PERFORMANCE AND PERSPECTIVES
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Introduction

The following studies development aspects of public finance. The rationale for the study lies with public finance as the major tool of governments for inducing growth. Donor interest in this tool is clear. In part, foreign aid substitutes for domestic resources. Hence, more adequate public finance reduces the need for aid, and elimination of the need for aid is seen as the end-goal of the aid process.

The orientation is the country and to lesser extent other reports of the IMF, World Bank and AID. This material emphasizes public resource mobilization, with less importance ascribed to effective use of resources. Even less attention is given to fiscal "side-effects." Fiscal activity cannot be divorced from activity in the rest of the economy. Taxes and subsidies, e.g., investment incentives, affect the distribution and kinds of production. Expenditures are perforce directed to one sector or another be it agriculture, education or diplomacy. Donors have hitherto given short shrift to these problems in dealing with public finance per se, although they have come in for some attention in sector programming.

However, the overwhelming interest in resource mobilization characteristic of the 1960's, is giving way. Developing countries have increased their

taxes to GNP ratios very substantially. Of course blissful "self-sustaining growth" has rarely been the consequence.^{1/} This fact combined with thinking, better data, and more experience, as well as, changes elsewhere in development theory, e.g., the problem of employment, and the "dethroning of GNP," will probably fuel a striking out in "new directions" of public finance. The Study aims to aid this by discussing some of the likely new directions.

Part I is a macroeconomic analysis of recent fiscal performance in twelve countries. It also includes policy recommendations. Part II, Fiscal Perspectives, discusses possible major issues for the 1970's. A statistical appendix for each AID recipient concludes the Study. In Part II the approach is eclectic since neither time, nor data permitted a more comprehensive survey. It seeks to discuss important problems of the recipients, which^{are}/common to a large number of developing countries; e.g., income disparity in Pakistan, state enterprise in Turkey. In most donor documents a major focus is financing the immediate budget. Analysis commonly deals with means of covering the deficit; e.g., increase taxes, bank borrowing. I ignore this issue as one already fully attended to.

^{1/} For 27 developing countries selected on the basis of data availability, the arithmetic average income elasticity of total taxes was 1.4 for 1953-55 through 1966-68. An average weighted by population would have been far higher (India's elasticity is 2.4). Rajah Challiah, Trends in Taxation in Developing Countries, (mimeo), IMF, October, 1970, p. 10.

Part I Macroeconomic Performance

The following compares recent fiscal and savings performance of major
nine
AID recipients, current and three recent, (Chile, Bolivia and Tunisia).
In Table 1, the ratio of domestic revenues to GNP, 1966-1968, has a
five-fold range, from 6.3 percent for Indonesia to 31.4 percent for
Brazil.^{1/} Marginal performance is more varied. The marginal domestic
revenue rate varied from Ghana's negative 39 to Indonesia 53 percent.
Brazil, Chile, Tunisia, Morocco and Turkey all had above average ratios
of domestic revenues to GNP. Each of these countries had marginal domestic
revenues very high relative to both their own average rates and to the
marginal rates of other countries. In other words, in the sample those
countries which already had the outstanding "track record" on public
resource mobilization continued to draw away from other countries because
high
of/marginal rates. From the normative perspective, note that these
countries had relatively high GNP per capita implying greater monetization
and greater surplus above the subsistence level. Hence, they have a far
larger tax base than the poorer countries. Under such circumstances, a
given tax-GNP ratio implies less effort than achievement of the same ratio

^{1/} Brazil data for 1968 only.

Domestic revenues usually exceed taxes by a small amount. In addition to taxes, they include items such as profits of public enterprise transferred to the government, revenues from sale of assets (forests, buildings). Interest and loans paid to the government, rent on government owned housing. Most of the literature concerned with government revenue mobilization has focused on "tax effort" or "tax burden", rather than domestic revenues which appear to be a more appropriate variable. In cases where the two concepts widely deviate, this focus can be very misleading. In Chile domestic revenues exceed taxes by about one half. Moreover, in recent years domestic revenues have increased considerably more rapidly than GNP, while the tax to GNP ratio has decreased. In other words, Chile's marginal tax rate is low, while its marginal domestic revenue is very high.

Table -1

REVENUE AND EXPENDITURE RATIOS (1965-1968) ^{1/}

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	<u>GNP growth</u>	<u>1966-1968 GNP per capita</u>	<u>dom. revs to GNP</u>	<u>marginal dom. rev. to GNP</u>	<u>current expend. to GNP</u>	<u>total expend. to GNP</u>	<u>dom. revs to total expend.</u>
Korea	.110 1	173 9	.130 9	.321 5	.067 9-10	.174 8	.741 7
Turkey	.072 2	333 2	.174 5	.306 6	.091 8	.200 6	.869 2
Morocco	.065 3-4	191 7	.187 4	.353 4	.146 4	.236 4	.792 6
Pakistan	.065 3-4	117 10	.133 8	.056 10	.067 9-10	.185 7	.718 9
Brazil	.057 5	320 3	.314 ^{2/} 1	na	.191 ^{2/} 2	.327 ^{2/} 2	.864 3
Bolivia	.049 6	176 8	.108 10	.097 8	.097 7	.168 10	.643 12
Colombia	.047 7	287 4	.091 11	.191 7	.047 12	.109 11	.837 4
India	.046 8	83 12	.153 6	.068 9	.108 6	.206 5	.739 8
Chile	.031 9	602 1	.247 2	.409 3	.156 3	.272 3	.910 1
Indonesia	.030 10	94 11	.063 12	.533 1	.060 11	.097 12	.645 11
Tunisia	.011 11	220 6	.240 3	.458 2	.193 1	.334 1	.717 10
Ghana	.010 12	242 5	.137 7	-.386 11	.115 5	.169 9	.815 5

Sources: AID Country Data Sheets, Central and Consolidated Government Finances, AID Form 1074 submissions, IBRD Country Reports

Table .1 Notes

1/ Definitions of Column Headings:

- (1) Compound average rate of growth of GNP for average of 1965-1966 against average of 1967-1968.
- (2) GNP per capita, in 1968 dollars, average of 1966 through 1968.
- (3) The ratio of domestic revenue to GNP, average of 1966 through 1968. The definition of domestic revenues is that of AID Form 1074.
- (4) Marginal domestic revenues: the increment in domestic revenues (average of 1967-1968 minus average of 1965-1966) divided by the increment in GNP (average of 1967-1968 minus average of 1965-1966).
- (5) The ratio of central (general) government current expenditures less defense expenditures to GNP, average of 1966 through 1968. Expenditure definitions are those of AID Form 1074.
- (6) The ratio of total expenditure to GNP, average of 1966 through 1968. Expenditure definitions are those of AID Form 1074.
- (7) The ratio of domestic revenues to total expenditure. Definitions of domestic revenue and total expenditure are those of AID Form 1074.

The fiscal data are for consolidated public sectors in India, Pakistan, Brazil, Korea and Turkey. The remaining countries include primarily central government accounts. In these countries local and provincial self-generated revenues are minute relative to the central government, so that the resulting bias is small. Social insurance accounts are excluded for all countries. Government enterprises are included net of their operating expenditures/receipts.

2/ 1968

TABLE 2

TEN COUNTRIES, SAVINGS RATIOS 1966-1968 ^{1/}

	(1) public savings to GNP	(2) private savings to GNP	(3) foreign financing to GNP	(4) national savings to GNP	(5) national savings to invest	(6) public savings to public investment
Korea	.041 4	.090 4	.095 2	.131 4	.581 8	.801 2
Turkey	na	na	.012 ^{2/} 8-9	na	na	na
Morocco	.035 6	.092 3	.017 7	.127 5	.886 3	.415 5
Pakistan	.015 7	.087 6	.046 3	.101 9	.688 7	.185 7
Brazil	.059 1	.077 7	.012 8-9	.136 3	.922 2	.733 3
Colombia ^{3/}	.048 3	.119 1	.030 4-5	.167 2	.852 4-5	1.027 1
India	na ^{4/}	na ^{4/}	.030 4-5	.112 8	.789 6	na ^{5/}
Chile ^{5/}	.056 2	.116 2	.011 10	.172 1	.939 1	.727 4
Tunisia	.037 5	.089 5	.119 1	.126 6	.520 9	.209 6
Ghana	na	na	.021 6	.119 7	.852 4-5	na

Sources: AID Country Data Sheets, Central and Consolidated Government Finances, AID Form 1074 submissions, CFS submissions, IBRD Country Reports

Table -2 Notes

1/ Definitions of Column Headings:

- (1) The ratio of gross public savings to GNP, average of 1966 through 1968.
- (2) The ratio of private savings to GNP, average of 1966 through 1968.
- (3) The ratio of foreign financing (balance of payments, current account deficit including net factor payments) to GNP, average of 1966 through 1968.
- (4) The ratio of gross national savings to GNP, average of 1966 through 1968.
- (5) The ratio of gross national savings to gross investment, average of 1966 through 1968.
- (6) The ratio of public savings to public investment, average of 1966 through 1968.

2/ 1966-1967 average.

3/ 1966-1967 average.

4/ According to IBRD World Tables, all national saving took place in the private sector. The CFS for FY 1971 asserts that breakdown between private and public sector savings is not available.

5/ 1965-1966 average.

Table 3

DEVELOPMENT RESOURCES, 1966-1968 AVERAGE, BY DOMESTIC AND FOREIGN SOURCE

	(1)	(2)	(3)	(4)	(5)	(6)
	current expenditure -defense to GNP	gross nat'l savings to GNP	(1)+(2) Lewis Indicator	foreign capital to GNP	(3)+(4)	(4)/(5)
Korea	.067 9-10	.131 5	.198 9	.095	.293	.324
Turkey ^{1/}	.091 7	.150 3	.241 5	.012	.253	.047
Morocco	.146 , 4	.127 6	.273 4	.017	.290	.059
Pakistan	.067 9-10	.101 10	.168 10	.046	.214	.215
Brazil ^{2/}	.191 2	.136 4	.327 2	.012	.339	.035
Bolivia ^{3/}	.097 8	.069 11	.166 11			
Colombia ^{4/}	.047 11	.167 2	.214 8	.030	.244	.123
India	.108 6	.112 9	.220 7	.030	.250	.120
Chile ^{3/}	.156 3	.172 1	.328 1	.011	.339	.032
Tunisia	.193 1	.126 7	.319 3	.119	.438	.272
Ghana	.115 5	.119 8	.234 6	.021	.255	.082

1/1965-67 average2/19683/1965-66 average4/1966-67 average

Source: Same as Table 2, plus U.N. Yearbook of National Accounts Statistics, 1968.

by a poor country.^{1/}

Good performance can also be interpreted as a low or average ratio of domestic revenues to GNP but increasing because of relatively high marginal revenue collections. Indonesia and Korea fall unequivocally into this category with marginal rates of 53 and 32 percent respectively. Colombia is less so. Although its marginal rate is double its average rate, its rank by marginal rate is seventh among eleven countries.

(See Table 1.)

In the sample, Bolivia, India, Ghana and Pakistan have low average ratios and even lower marginal ratios. All four of these countries have been short on public resources for executing development programs. This apparent deterioration in their fiscal situation promises to compound an already basic problem. It is obvious that the traditional exhortations and prescriptions to raise taxes, be it through tax reform and/or improved administration, are very much in order for them and perhaps for the previous group with low ratios but higher marginal rates. With respect to the low average revenue, low marginal revenue group it is probably warranted to assert that the relative minute quantity of public resources being channeled into development has been and will continue to be a serious long run constraint on growth. In these countries improved tax administration probably will not suffice. Tax reform will be necessary.

Concretely, this problem translates into developing a revenue structure

^{1/} See Lotz and Morss. "Measuring 'Tax Effort' in Developing Countries," IMF Staff Papers, Volume XV, (1967), pp. 478-99.

highly responsive to growth. In many countries this is the case; e.g., in the U.S.A. with its heavy reliance on progressive income taxes increasing national income brings more than a proportional increase in GNP. In many others, e.g., Pakistan, this elasticity is less than one. Increased national income brings less than a proportionate increase in taxes, so that continued "tinkering", such as changes in rates and enforcement procedures are necessary merely to maintain the current ratio.

This is not the place to discuss which taxes should be developed or increased in such an effort. Nevertheless, the unimportance of local and provincial taxation suggests that more concern with them is warranted. On grounds of equity and efficiency a shift to local tax sources may be desirable. The lack of visible links between tax payment and expenditures at the local level probably reduces the conscientiousness of both officials and citizenry with unfortunate consequences on revenue collections and the usefulness of expenditures. AID's revenue improvement teams typically consist of IRS personnel who generally specialize in central government taxation, so that this trend to tax centralization receives additional impetus. This may not be optimal.

Clearly, the traditional concern with increased public resource mobilization should persist. Effective technical assistance for tax administration and even tax reform is very desirable. This need is particularly pressing where AID resources, in a sense, substitute for local resources - as in sector/program lending - which theoretically could be locally generated

given a better "will" and better management. A few of the countries in our sample, i.e., Brazil, Tunisia and Chile, already have domestic revenue ratios larger than many developing countries. In the Lotz-Morss Study, (footnote page) Switzerland, Finland and Japan had taxes to GNP ratios of 21 percent or less which is less than Brazil (30 percent), Tunisia (24 percent) and Chile (25 percent). In these countries and in others where the tax system is very elastic with respect to revenues, public resource mobilization is probably not a pressing issue. However, improving public resource utilization may be an important question.

Development requires active government participation, e.g., infrastructure, education, agricultural research and extension, which in turn requires more public disbursement than in a traditional subsistence economy.

W. Arthur Lewis suggested that self-sustaining growth requires countries to increase to about 30 percent the ratio to GDP of domestic resources mobilized for development, the latter being defined as gross investment less foreign capital-flow together with current government expenditure less defense expenditure and welfare transfers.^{1/} Table 3 includes a Lewis Indicator for data-available countries of the sample. For the three years, 1966-1968, Brazil, Chile, and Tunisia exceeded the 30 percent target. Only Korea and Pakistan collected less than 20 percent. Weighing the countries by their population, the average value of the indicator is 23 percent. Adding foreign capital inflow to the Lewis Indicator (Column (5)) for a crude measure of total development expenditure gives only

^{1/}"Richard T. Ely Lecture, A Review of Economic Development", American Economic Review, May, 1965, p. 3.

Pakistan a total significantly less than 25 percent.^{1/} Rigorously, it is difficult to ascribe meaning to the Lewis Indicator inter alia because it focuses on only part of the factors entering into the growth-process and thus can offer no information on the effectiveness of development expenditures corresponding to the resources mobilized. In regressing the GNP growth rate on the Lewis Indicator for the 11 countries in the sample, coefficient of determination was 0.147, which reduced to 0.052 when corrected for degrees of freedom. The relation between Lewis Indicator and growth is neither tight, nor simple.

Table 2 indicates the minor role, macroeconomically viewed, of foreign aid donors in providing resources for development. In the table the median ratio of gross national savings to gross national investment (Column 5) is 85 percent; foreign capital (current account deficit) provides the remainder. In terms of the Lewis Indicator (Table 3), the median value for the nine countries shows foreign capital providing 12 percent of total "development resources".^{2/}

Resource Utilization

Country reports of the World Bank and International Monetary Fund contain super-abundant exhortations to increase revenues. Discussion of the use

^{1/}Were data available, Bolivia would probably also be less than 25 percent.

^{2/}Customarily, net foreign capital inflow is measured as a percentage of gross investment. Logic suggests a comparison using net domestic investment, which considerably increases foreign capital's contribution. In a recent World Bank Study, 40 percent of Colombia's gross investment was ascribed to capital depreciation. Applying the same percentage increases foreign capital's share of Colombia's investment from 15 (gross) to 25 (net) percent.

of such revenues is less frequent. Good revenue-performance can be nullified by using increased resources for non-development purposes, e.g., wars, personal enrichment, employing large numbers of unemployables, and ill-considered investments in the symbols of progress. Countries with a low domestic revenue to GNP ratio could compensate by using their resources with superior effectiveness. Hence, there is likelihood of different rankings of effort from those which evolve on considering public resource mobilization. Efforts to devise a comprehensive measure of effectiveness of public expenditures have been unsuccessful. On a cross-country basis, little is known about comparative efficiency of public expenditure.

Partial measures have developed. Among the most common is the ratio of gross public savings to GNP. The indicator misleads since it ignores the quality of the associated investment. More importantly, it almost implies that current expenditures are non-developmental; e.g., education, agricultural extension, family planning. However, to the extent that public saving is taken seriously as a measure of fiscal performance (and many people do) it can illustrate the point about poor resource mobilization being compensated by good resource utilization and vice versa. Listed below are the rankings of the seven countries with data on gross public savings (1 = highest ratio):

	<u>rank, public savings/GNP</u>	<u>rank, domestic revenues/GNP</u>
Brazil	1	1
Chile	2	2
Colombia	3	7
Korea	4	6
Tunisia	5	3
Morocco	6	4
Pakistan	7	5

Source: Table 1.

The table shows some correlation between resource mobilization and public savings. However, Colombia which ranks last in domestic revenue mobilization is in the top half of the public savings distribution. One can contend that Colombia taxes lightly but uses what is collected effectively. Similarly with Korea.

To reiterate, focusing on public savings gives a distorted view. With a high rate of public (and private) saving and low tax burden, Colombia has the lowest ratio of current expenditures less defense to GNP of the entire sample. With a "medium" per capita income level this is very surprising. According to the Musgrave Commission, which developed a program of tax reform for Colombia, one consequence is a serious shortage of primary education; so much so, that its expansion, with the reoccurring expense involved, would be among the best uses of resources, public or private, open to Colombia. Such expansion obviously involves increasing Colombia's tax burden.

The poor correlation between domestic revenues and public saving suggests that increasing taxation, has not been, a very successful mode of increasing domestic savings and investment (whatever effects it has had on other development expenditure). This is the emphatic position of Stanley Please, a World Bank economist:^{1/}

The gloomy record of inadequate budget surpluses, despite increased tax performance over the years, suggests that those who argued for a development strategy based on increased compulsory savings, underestimated and, more frequently, ignored the effect that the increase in taxation might have on public consumption. In these circumstances there is a danger that those who recommend increased taxation in the interests of economic growth may be looking at a mirage.

Even if this viewpoint is warranted, it leaves much to be desired since, as noted, much current expenditure has very important developmental effects and some of it is a sine qua non, for any kind of development whatsoever, e.g., general administration. Some countries now divide their public expenditures into developmental and other expenditures.^{2/} The division is somewhat arbitrary. In a global macroeconomic sense the problem of good use of public sector resources may not have a solution. On an individual country basis, presumably, solutions persistently sought should be forthcoming.

In conclusion, for many countries public revenues are still relatively scarce, and emphasis on their increase is needed. However, in these and

^{1/} Stanley Please, "Saving Through Taxation -- Reality or Mirage?", Finance and Development, IV, No. 1, March, 1967.

^{2/} India's public accounts divide into capital and current. Current in turn divide into development and non-development. The main items of the latter are defense, interest on the public debt, police, general administration and charges for tax collection.

a fortiori in others, it is likely that an equally important issue is what is done with the resources. Judicious use of planning, research and administrative talent requires giving this matter more attention than in the past. Concretely, this would involve coming more to "grips" than hitherto with issues such as subsidies to producers and consumers, the price of output of public enterprise, the maintenance of infrastructure government payroll and staffing policies. Little development results when channeling resources through the public sector merely means exchanging one form of consumption for another.

Part II Fiscal Perspectives

Background

Thought about economic development takes the form of successive approximations. In the Sixties, maximization of GNP, widely regarded as the symbol of economic growth, was probably the primary goal of articulated national economic policy in most developing countries. Supporting this monolithic approach, economists designed models where growth of GNP was the end product. Inevitably, their engine of growth is capital formation, investment. The models have grown sophisticated. But the hard core notion remains that investment is the most necessary element and its maximization the best way to go about promoting GNP growth.

In turn, this led to concern with increasing saving. In public finance - among foreign aid donors at least - it caused a near obsession with increasing tax collections in the belief that this would lead to increased

public saving, or at least development expenditure, generally. A good deal of donor supported activity had augmentation of taxation as its goal. (Since World War II, tax reform teams have visited over six dozen developing countries.) Probably the bulk of U.S. technical assistance in public finance had and has as purpose increasing resources available to the public sector of developing countries.

However, with more experience (new problems) and more knowledge both theorizing and practice have become more complicated. To put it symbolically, and in vivid exaggeration, GNP has been dethroned. Today, its single-minded pushing and pampering begins to appear excessive. In the words of Robert McNamara:^{1/}

In....planning the programs and measuring the progress of development in seventies, we must look to more than gross measures of economic growth. What we require are relevant "development indicators" that go beyond the measure of growth in total output and provide practical yardsticks of change in the other economic, social and moral dimensions of the modernizing process. To limit our attention to expanding GNP....can only lead to greater political, social and economic disequilibrium.

It is quite likely that in the 1970's the problems of the developing countries will involve more than hitherto some of the more traditional concerns of public finance.

Equity-Pakistan

Among these equity (^{measured} increased by income distribution) is looming. A traditional major preoccupation among classical and neoclassical economists,

^{1/} From an address to the Columbia University Conference on International Economic Development, New York, February 20, 1970.

it is now a basic political issue in many developing countries, and rapidly becoming one in others. In general terms, the equity problem is simply the abstract economists' interpretation of what some term the social problem, or the demand for social justice, or an aspect of Mr. McNamara's "greater political, social and economic disequilibrium." It is the stuff of which weak, factious governments, class antagonism and revolutions are made. Given the way humans operate, and their corresponding history - pick any time or any era - the amazing thing is that "equity" has not thus far received more attention in the theory and in the practice of economic development. Probably more than anything else, it is this factor which has dethroned GNP.

This is well illustrated in the case of Pakistan, which used fiscal policy to pursue economic development (growth of GNP) as the first good in a considered and conscious decision. A statement in the Third Plan reflects this perspective: "what is basic to Islamic Socialism is the creation of equal opportunities for all rather than equal distribution of wealth." In the process social conflict has so increased that today the issues of equity and regional disparity require fiscal concern as extensive as growth. They are a major if not the major political "problem".

To illustrate, the country achieved a respectable growth rate in the 1960's. However, most of the benefits of economic progress went to large farmers and industrialists. Incentives and subsidies to these two groups were generous and seen as inducements to increase saving and investment. Most of the benefits from the modest social programs were enjoyed by the emerging

middle class, the military, civil service, and other white collar workers. High cost public housing, medium and higher level education and urban health facilities were of little value to the poor majority.

The incidence of taxation and the distribution of expenditures further concentrated income among the well-to-do. On the taxation side much of this was deliberate, in the belief that toleration of initial growth in income inequality would result in high levels of savings and investment. Because of this policy, Pakistan has largely esewed direct taxes. (In recent years income taxes have accounted for a slightly decreasing share of total taxes, namely, about one-sixth. This is far below the average for developing countries.^{1/}) Pakistan developed a tax structure of very low revenue elasticity, requiring periodic ~~sizeable~~ efforts to raise taxes through substantial administrative inputs and other devices: The 1969/70 ratio would have been 6.7 percent, given no change in rates or improvement in administration, compared to 8.7 percent in 1964/65.^{2/} The static tax to GNP ratio, since 1965, of about 9 percent, compares with the norm of other countries at a comparable stage of development of about 15 percent.^{3/} Pakistan's heavy defense burden intensifies the shortage of development resources. On both equity and growth grounds, more progressive direct taxation, with the valuable side-effects of increased revenue elasticity, is probably needed.

This state of affairs came about partially because Pakistan decision-makers assumed inherent sharp conflict between economic growth and social

^{1/}In Rajah Challiah, op. cit., p. 21, income taxes accounted for 24 percent of total taxes, on average, in a 50 developing country sample for 1964-68.

^{2/}IBRD, SA-15, Volume I, June 26, 1970, p. 18.

^{3/}This material is discussed below.

justice. One unexpected result has been the serious social conflict which pushed the government into a fairly bold initiative in 1969. However, no firm comprehensive program has yet emerged. This is not surprising considering how profound a policy shift is involved.

The argument that growth and equity were necessarily competitive, although professionally acceptable has always struck me as weak, particularly as concerns expenditure. Any public expenditure necessarily affects income distribution or equity. To maximize ~~growth and equity~~ ^{them}, one could execute that subset of possible expenditures which is highly "meritorious" as concerns both growth and equity. I presume that these two characteristics (development-productivity and income-distribution) exhibit no negative correlation. Hence, in Pakistan whereas elsewhere public resources are scarce and competing uses many, there should be no great problem in defining the required subset. This would include expenditures on public health, birth control, farm to market roads, provision of modern inputs and technology to small farmers (extension service). It could also include policies to maximize output which rather than subsidizing capital formation (tariff-rebates, investment incentives) would subsidize labor. To wit: Pakistan's educational system provides a weak base for growth. With the limited endowment of natural resources the country will become increasingly dependent upon the skills and other educational achievements of its population.

On the taxation side, there is no a priori certainty as to the effect of progressive taxation on private savings. It is not clear that there is

a systematic trend in proportion of income saved by size of income,^{1/} which is independent of the institutional framework. Even if, in a given country, proportion saved is positively correlated with income size, the net effect of progressive taxation on total development expenditure can be very positive. There may be substantial coincidence in growth and equity objectives.

Regional Disparity-Pakistan

A second aspect of the social problem again with profound implications for fiscal policy, is regional disparity in income. Per capita income in the "West Wing" far exceeds that of the East. After three Five-Year Plans, this disparity has increased substantially. Whereas, today, some refer to West Pakistan as semi-industrial with a spectacular breakthrough in agricultural production, economic growth in East Pakistan has so far barely exceeded, if it has not remained below, the increase in population so that living standards there have virtually not improved and may well have deteriorated.

This state of affairs can be regarded as due to the combination of a West Pakistan's substantial development advantages over the East and a policy of concentrating on nationwide development. At a higher stage of development at independence, e.g, larger markets, more skilled manpower, better infrastructure, West Pakistan attracted the bulk of new capital formation. Geographical separation prevented transmission of external economies from West to East Wing. The very government policies designed to foster overall industrial growth had as a by-product, discrimination against the East: Financial institutions located in the West aiding

^{1/}Milton Friedman, "Consumption Function

Western enterprises; credit policies favored the well established large enterprises of the West. Tariff protection mainly aided Western industry.

Since 1969, however, regional disparity has come to the foreground and now dominates the political scene. Whereas, in the one country approach, regional statistics did not exist, currently some such data are available. Limited regional fiscal incentives have been introduced to direct private investment into the backward areas of Pakistan. Thus far, their main effect has been some decentralization around the major cities of West Pakistan. During the Third Five Year Plan, 1965-70, there were substantial shortfalls in public development outlays. Nevertheless, while in West Pakistan they very nearly stagnated, they almost doubled in the East Wing.

Nevertheless, the "social problem" of disparate interpersonal and inter-regional income distribution promises to ^{be} very pressing in Pakistan in the years ahead. A likely consequence of this recent and urgent concern with equity is considerably increased public sector expenditure, e.g., for Pakistan fiscal year 1970/71 (coincident with U.S. FY 1971) proposed expenditures are to be some 20 percent higher than in 1969/70. Given such ambitious expenditure levels, and the very low level of taxation, Pakistan appears destined to a basic tax reform if these goals are to be met.

Equity- Brazil

In Brazil the equity issue has been handled differently, and with apparently different results. In recent years subsidies and transfers to consumers

by all public entities were as follows (percentage of GDP, 1967):^{1/}

	<u>tax revenues</u>	<u>tax revenues net of subsidies and transfers to consumers</u>	<u>subsidy and transfer</u>
federal	9.0	6.0	3.0
social security	4.6	0.4	4.2
autonomous entities	3.8	3.6	0.2
state	9.0	6.5	2.5
municipalities	<u>0.9</u>	<u>0.7</u>	<u>0.2</u>
total	27.2	17.2	10.1

Hence, 37 percent of public expenditures took the form of one or another consumer transfer payment. In 1967, federal current transfers to consumers equalled 18 percent of Federal Government budgetary expenditures distributed as follows (percentage distribution):^{2/}

inactive list	46.06
pensions	11.69
family salary	10.51
health assistance, family allowances, food, funeral assistance	00.90
study awards	01.07
grants in aid	14.24
public debt	12.12
ordinary and extraordinary subventions	<u>03.40</u>
total	100.00

A reasonable conclusion is that Brazil's fiscal mechanism uses transfer payments in significant degree to redistribute income more equitably. The validity of the above statement requires inter alia that tax-collections not

^{1/} IMF, SM/69/48, Table 15, April 10, 1969, p. 20.

^{2/} Ibid., Table 50, p. 95. Social security taxes are excluded.

be too regressive. The Fund Report on Brazil of April 10, 1969, states:^{1/}

The relatively high ratio of taxes to GDP in Brazil focuses increased attention on the incidence of the tax burden. One analysis based on a 1961-1963 survey of family income and expenditures suggests that the overall tax burden of all levels of government is progressive through the middle-income levels, to an income level about eight times the minimum wage, but regressive thereafter, declining as a percentage of income in the higher brackets. This is attributed in part to evasion of the progressive income tax.

To reduce such evasion, the Government began an enforcement campaign in 1968. As the Fund Report states:^{2/}

This included an operation in which teams of up to ten agents descend upon a business street, from both ends and work toward the middle checking on whether each business' books are up to date, and examining receipts, the withholding of taxes, assets in evidence, the names of officers and directors as possible personal income tax candidates, and any obvious evidence of nontax payment or fraud.

....search for possible additional taxpayers was carried out by groups of agents in each region examining such sources as car registries, social club and professional association membership lists, and telephone book listings of professions. Summonses to nonfilers requesting a declaration of income...carried the penalty of ex officio tax assessments on presumptive income in case of noncompliance. Some 600,000 summonses were dispatched and produced 160,000 additional income tax declarations, an increment equivalent to one third the total number of personal declarations, in 1967.

Personal income tax returns increased from 12.2 percent to total federal taxes in 1967 to 15.5 percent in 1968.

^{1/}Ibid., p. 21.

^{2/}Ibid., p. 29.

In addition to redistribution of income through tax collection and personal transfers, not to mention actual expenditures, Brazil redistributes substantial revenues through the State and Municipal Participation Fund. As of 1969, 12 percent of federal income and excise taxes, forming the bulk of federal revenues, were earmarked for equal division between states and the municipalities, with at least one-half of the proceeds to be devoted to capital expenditures.^{1/} The distribution among states, and to a lesser degree municipalities varies directly with population and inversely with per capita income. The result has been a substantial flow of unrequited resources from rich to poor states:^{2/}

The Participation Fund provided (1968) more than 25 percent of total receipts of states in the poorer areas of the northeast and the Amazon basin but less than 10 percent of total receipts in the wealthier areas in the south central region of the country. At the extremes Participation Fund transfers represented more than 50 percent of total receipts of the states of Maranhão and Piauí in the northeast and less than 1 percent of total receipts of São Paulo and Guanabara.

Through the policies described above and in spite of an economically desperate situation in the Northeast, perhaps Brazil has avoided Pakistan's deteriorating situation. Comparison of these two countries suggests that measures to redistribute income in developing countries can increase political stability. On the other hand, the presumed causality may be mere coincidence. One clear non-coincidence emerges. In Pakistan equitable income distribution was considered competitive with growth. In 1968/69, Brazil has grown rapidly, far more rapidly than Pakistan.^{3/}

^{1/}IBRD, WH-195a, Volume II, Annex 1, 12/19/69, p. 4.

^{2/}IMF, *op. cit.*, p. 32.

^{3/}With a smaller proportion of GNP originating in agriculture, it was also easier for Brazil to grow ~~more rapidly~~.

At any rate, in the 1970's in a world of "rising expectations" the equity problem promises to command increasing attention in many countries related as it is to the very fundamental issues of the organization of economic life and of the distribution of both political and economic power.

Fiscal Incentives-Colombia

In the documents providing the principal background material for this study, namely, reports of the IMF, the World Bank and AID, there is marked concern with both tax-collection and the disposition of public current revenues.^{1/}

In donor reports, at least, the effects of various fiscal devices such as tax-forgiveness for investment and export promotion, direct and indirect taxation and their effect on sectoral output and employment, receive short shrift. Whatever the reasons for this situation - be it captivation with saving/investment as the basic dynamic elements in the growth process, lack of analysis and other information concerning incentive effects of fiscal policy - it is unfortunate. There is increasing donor realization of the overwhelming importance of the institutional and legal framework in which foreign trade takes place. By analogy, more concern with the fiscal aspects of the general framework of domestic economic activity is in order. In this context, the material in the World Bank's new report on Colombia analyzing various fiscal instruments designed to promote nontraditional exports is welcomed.

^{1/}The World Bank's Annual Report, 1970, states: "...growth of non-development current expenditures is a worrying aspect of the overall fiscal problem of developing countries. This worry finds expression in almost every country economic report of the World Bank". (p. 55)

With coffee as the traditional major export (68 percent of total exports, 1967-69), Colombia suffers the disadvantages of a mono-export economy. To diversify and increase exports, there have been various fiscal incentives for "minor exports" (exports other than coffee, rawhides, and petroleum). In the early 1960's, a highly regressive export tax was removed and export incentives were offered: Firms could deduct 40 percent of their receipts from minor exports from the taxable income of their total expenditures. The scheme, unfortunately, subsidized firms according to profitability. Profitable firms occasionally exported at a loss, while unprofitable firms were hardly affected by the subsidy program in their export decision. Nevertheless, it is generally believed that this tax exemption mechanism was largely responsible for the substantial increase of industrial exports in the mid-1960's.

In 1967, Colombia introduced the famous CAT's (Certificados de Abono Tributario). These negotiable tax credit certificates are issued to exporters in a value of 15 percent of their minor exports. Maturing a year after issue date, they amount to about a 12 percent subsidy on minor exports. (They are sold at 15 - 20 percent discount.) Again, their effect is believed substantial; e.g, minor exports increased 33 percent in 1969.

Started in 1959, Plan Vallejo is still a widely used incentive mechanism. Assuming an approved "export contract" a manufacturer can import all inputs for production of exportable goods, free of tariffs, and prior deposits and is also exempted from licensing requirements. Statistical data suggest that Plan Vallejo has been effective. In 1969, Plan exports, most of which

are manufactures, net of their import content (see Table 1) equalled \$⁴⁸61 million or ⁷11 percent of total merchandise exports. Their average annual growth rate for 1965-1969 was 24 percent. In more general terms, while "gross" Plan Vallejo exports (^{Table 4}Column (1)) have more than doubled in the last five years, associated imports have not risen commensurately and "net" exports have increased more rapidly.

Table 4

COLOMBIA, PLAN VALLEJO AND MERCHANDISE EXPORTS 1965-1969^{1/}
(thousands US dollars)

	(1)	(2)	(3)	(4)	(5)	(6)
	Plan		(1)-(2) net			
	Plan Vallejo exports	Plan Vallejo imports	Plan Vallejo exports	(2) as a percentage of (1)	total merchandise exports	(1)-(2) as a percent of (5)
1965	26,147	9,829	16,318	38	443,409	4
1966	45,906	12,055	33,851	26	438,902	8
1967	40,786	17,012	23,774	42	431,588	6
1968	51,954	17,742	34,212	34	507,963	7
1969	61,478	13,653	47,825	22	560,855	7

^{1/}All data on registration basis

Source: Columns (1) and (2), Jose Teigeiro, Promotion of Non-Traditional Exports in Colombia, unpublished document, 1970; Column (5): IBRD, WH-200, Volume II, Appendix, Table 3.4, 8/4/70.

These two export incentive mechanisms can be used to illustrate certain basic notions of fiscal incentive design. In the words of Charles McClure:^{1/}

^{1/}Charles McClure, Jr., "Colombian Tax Incentives", September, 1969, p. 2, (mimeo).

....in designing tax incentives ultimate purposes (must) be kept firmly in mind. In particular it is important that proximate goals not be confused with basic objectives. Undue efforts to achieve intermediate aims may prove inefficient (or even detrimental) means of achieving the more fundamental objectives of public policy, since the intermediate and final goals may not always be fully consistent.

Here, these basic objectives would be maximization of domestic value added of minor exports. The CAT, although not quite an ideal mechanism, as it applies to total value of exports appears superior to Plan Vallejo. The latter encourages imports at the same time that it offers an incentive for exports. Indeed, Plan Vallejo can be regarded as part of an incentive system for encouraging imports because of its "orientation of production for export towards goods with high import components, and substitution of imported for domestic inputs in any given export industry."^{1/} Assuming, what is likely in Colombia, namely, the possibility of economically substituting domestic for imported inputs, one would assume that CAT's would be the preferable policy.

This statement must be qualified. In Colombia, in the past, stringent import restrictions have apparently operated to prevent firms from procuring various inputs badly needed in the production process. Under such circumstances, to the extent that such imported inputs have no domestic substitutes, Plan Vallejo could be more successful than the CAT mechanism in promoting exports.^{2/}

^{1/} Ibid., p. 6, Fn. 9.

^{2/} Antonio Urdinola and Richard Mallon, "Policies to Promote Colombian Exports of Manufactures," paper at the Sorrento Conference of the Development Advisory Service of Harvard University, September, 1967.

A further conclusion - obvious but often ignored - is the inevitability of a wide variety of "side effects" of any fiscal mechanism. It is useful to design tax and other incentives which operate primarily on those variables which it is desired to affect directly. However, an even more general approach is needed. A fiscal mechanism may achieve articulated basic objectives at the cost of frustrating equally important policies which have not entered into the calculus. This is the case for those policies which overwhelmingly focus on the need for channeling more resources into saving, while ignoring the question of the kind of investment which results, as well as, the effects on distribution of income. - A very relevant illustration of this problem, for Colombia and other countries, involves the widespread tax and foreign trade incentives to increase investment. As unemployment becomes ever more alarming in Colombia (and elsewhere)^{1/} there is increasing awareness of the unexpected negative effects of various investment incentives.

Well worn mechanisms such as accelerated depreciation allowances, investment credits against tax liabilities, exemption of capital goods imports from duty, all reduce the cost of using capital relative to labor. To the extent that factor proportions in the production process are variable, a result of such incentives is increased capital intensity of output. These mechanisms do not promote full employment. In Colombia all of the fiscal incentives mentioned above are currently in use: Enterprises producing for solely "basic industries" usually receive 100 percent exemption from income and

^{1/}Unemployment is currently, and promises to continue as, the "hottest" issue in development economics: The International Labor Organization is scheduling a small conference in January, 1971 on the fiscal aspects of unemployment. The May, 1971 World Conference of the Society for International Development has taken as its theme, "Development Targets for the 70's, Jobs and Justice."

excess profits taxes. Firms can use up to 5 percent of their otherwise taxable income for investment in industries contributing substantially to economic development (usually defined as import substitution).

As an alternative, Charles McClure suggests that CAT's should be designed to promote output of industries in need of development and basic to Colombia's growth:^{1/}

....by being tied to production instead of to profits the CAT would not offer any incentive to the substitution of capital for labor, as the present incentives (and direct government investment) are likely to do. This is particularly important for a country such as Colombia with its high level of unemployment (and concomitantly low opportunity cost of labor) and deficiency of foreign exchange. It would be highly undesirable to encourage substitution of scarce capital with its extremely high opportunity costs for abundant labor. The CAT would not do so. Moreover, it is possible to make more accurate estimates of revenue losses than under the present system. The CAT's would be issued in easily determinable amounts, whereas, there is no way to estimate the loss of revenue resulting from the present system of exemptions.

In Colombia the lack of employment opportunities in many rural areas plus the overwhelming migration to the cities, and particularly to the largest cities is a critical problem. This has led to a concern in Colombia's Government with regional development and with means to slow migration to the largest cities. It is a principal focus of a proposed Regional/Urban Development Loan now being formulated and of which USAID/Colombia is expected to be the foreign financier.

Mr. McClure's position as concerns fiscal incentives in such a program is clear: Regional development tax incentives which decrease the cost of

^{1/}Ibid., p. 20.

capital relative to labor, e.g., tax credits against investment in slow growing regions, are ill advised. "Any tax incentives which are offered should be tied to value added in the region and should take a form similar to the CAT currently being used to stimulate minor exports."^{1/}

~~He~~
~~Mrs. McClure~~ goes one step further and suggests:^{2/}

As an alternative to giving CAT's for value added it might be thought preferable to give them solely for the labor content of regional production. This arrangement would have the advantage of subsidizing the use of precisely the factor whose private cost exceeds its social costs, relative to capital, the private cost of which may presently be below its social cost. It would encourage the type of labor-intensive production appropriate to the regions in question.

On cursory consideration this idea has much appeal. The basic problem in Colombia (and elsewhere) is unemployment. The latter is exacerbated by structural rigidities, e.g., minimum wages which substantially exceed what market forces would produce. Under such circumstances, "subsidizing" employment can be viewed as a shadow price maneuver making labor prices more rational. The crux of the matter, again, is the question of variable versus fixed proportions. In long run perspective factor proportions are probably very variable and the proposal appears worth serious consideration.

The tendency to be indiscriminating in favoring investment is also reflected in actions in the public sector. A high level of public savings (current account surplus) and low current expenditure is not necessarily ideal. Pakistan's ratio of current account surplus to current expenditures is very high but concomitant with this has been poor utilization of invested capacity.

^{1/} Ibid., p. 25.

^{2/} Ibid., p. 26.

Moreover, addition to capacity has been at the expense of operation and maintenance of completed projects; e.g., irrigation and forestry have suffered from a neglect of maintenance; adequate teachers have been in very short supply.

In Pakistan's private sector the effect of tax holidays and rebates, reinforced by the import regime has been to encourage additions to fixed capacity which particularly in West Pakistan have often proved of limited usefulness when existing capacity had to be operated substantially below capacity because of shortage in imported inputs.

Fiscal Side Effects - Ghana

Where primary exports are the major source of foreign exchange and a major source of public revenue, their fiscal side-effects on growth, equity and employment will be very important. Nevertheless, donor reports have given little attention to their optimal taxation. This^{is} reflected in the case of Ghana which is unusual in heavy taxation of its principal export cocoa, accounting for about two-thirds of the value of all exports, and 10 percent of GDP. Of the nine countries listed in Table 5 below, Ghana's average export taxation over 1954-1963, as a percent of central government current revenues, was by far the highest. In a table listing inter alia export taxes (plus marketing board surplus where applicable) as a percent of total tax revenue for a single year (1962/63/64) the highest ratio of the 33 countries listed was that of Uganda (41 percent) followed by Malaya (25 percent). Ghana ranked eighteenth with 6 percent.^{1/} However, the year selected for the table was that of Ghana's lowest ratio in the preceding

^{1/}Discrepancy with data in Table 5 below, largely due to inclusion of marketing board deficit. For detail see source of Table 5, below.

10 years. As noted, Ghana's average for the period, 1954-1963, was 38 percent. Compared with the 33 country table where the highest ratio on a single year basis was Uganda's 41 percent, Ghana's 10 year average appears very high indeed.

Table 3

EXPORT TAXES AS PERCENT OF CENTRAL GOVERNMENT CURRENT REVENUE
1954-1963

	<u>1954</u>	<u>1955</u>	<u>1956</u>	<u>1957</u>	<u>1958</u>	<u>1959</u>	<u>1960</u>	<u>1961</u>	<u>1962</u>	<u>1963</u>	<u>Average</u>
Ceylon	27	35	28	28	28	27	26	22	19	19	25.9
Ecuador	6	5	6	6	6	6	7	7	8	7	6.4
El Salvador	28	30	26	29	21	16	15	14	12	13	20.4
Ghana ^{*/}	44	64	44	32	43	42	42	34	18	15	37.8
Indonesia	7	7	3	1	1	1	3	--	--	--	3.3
Malaya	25	29	30	24	21	29	30	22	40	32	28.2
Nigeria ^{*/}	27	21	17	16	19	17	12	10	9	--	16.4
Thailand	13	18	25	24	20	19	18	18	15	13	18.3
Uganda ^{*/}	33	31	24	30	24	25	19	12	8	11	21.7

^{*/} Excludes marketing board surplus or deficit.

Source: Richard Goode, George E. Lent, P.D. Ojha, "Role of Export Taxes in Developing Countries," IMF Staff Papers, November, 1966, p. 462.

The budget for the fiscal year 1969/70 (ends June 30) projected receipts from export and other duties on cocoa and cocoa products at 37 percent of total current revenues.^{1/} Such extreme fiscal dependence is disturbing.

^{1/} Derived from IMF, SM/70/17, Part II, 1/19/70, p. 22. Taxation is on a sliding scale basis; e.g., at a price of 240 new cedis per ton, fob, the export tax is 8 percent; at 520, the tax is 34 percent.

Exchange earnings from cocoa are volatile. In the 10 years ending September, 1969, export receipts per ton fluctuated from a low in 1964/65 to a high in 1968/69, 232 percent of the low. (See Table 4.) From 1966/67 to 1968/69, receipts per ton increased about three quarters. Cocoa output also fluctuates substantially. All of this implies the large swings in national income and foreign exchange receipts, characteristic of the "mono-exporting" economy. Given Ghana's tax regimen, they react directly rather than in derived fashion, on a public sector so dependent on cocoa export proceeds.

Table 4

GHANA, COCOA PRODUCTION AND EXPORT RECEIPTS
1964/65 - 1968/69

<u>crop years</u>	<u>1964/65</u>	<u>1965/66</u>	<u>1966/67</u>	<u>1967/68</u>	<u>1968/69</u> ^{1/}
Ghanian cocoa production (1,000 long tons)	572	409	375	415	334
export receipts, beans (million new cedis)	137	102	120	197	186
export receipts, beans per ton ^{2/} (new cedis)	240	249	320	474	557

^{1/} Estimate.

^{2/} Total exports receipts, divided by total production.

Source: IMF, op. cit., Part II, p. 9.

If Ghana could, in part, sterilize the tax receipts, from the current cocoa boom as a fiscal surplus, it would be somewhat insulated from price swings of the international cocoa market. Under such circumstances, taxation could be counter-cyclical and stabilizing for both producers and the economy. But

this is not the case. In spite of very substantial increase in cocoa taxes since 1964/65, the country ran a current account deficit in 1968 and 1969. Under such circumstances, steady growth in public resource mobilization, which is extremely desirable from the growth standpoint, is nearly unattainable. The expected downward trend in cocoa prices for the next few years suggests that even some of the most basic recurrent outlays, e.g., for education, health, administration will be cut because of change in cocoa price and/or output. To avoid this, heroic switching from cocoa to other sources of taxation would be necessary to offset a depressed cocoa market (as well as, switching back to cocoa taxation as cocoa entered a more prosperous stage).

Extreme fiscal dependence on cocoa was not the case during 1962-67. In 1965, cocoa export duties accounted for 7 percent of current revenues, as opposed to 31 percent in 1969.^{1/} (See Table 7 below.) Prior to the devaluation in 1967, differences between export and farm prices were in part retained by the Cocoa Marketing Board (CMB) from which the Government borrowed. Following devaluation in 1967, the Government directly taxed the local currency earnings increased by the devaluation and the rising price of cocoa. In this manner the Government partly compensated for the dramatic tax cuts carried out after the fall of Nkrumah.

Table 7

TAXES ON EXPORTS OF COCOA AS A PERCENTAGE
OF CENTRAL GOVERNMENT CURRENT REVENUES, GHANA 1961-1969

1961	1962	1963	1964	1965	1966	1967	1968	1969
18	16	17	12	7	7	14	23	31

Source: IBRD data, unpublished.

^{1/} Excludes other taxes on cocoa and cocoa products.

An important question is the effect on income distribution of the tax relief of 1966 and succeeding years and the concomitant rise of cocoa taxation. The latter is produced by tens of thousands of small (and a few large) holders. It is possible that today Ghana's income distribution is less equitable than five years ago: Cocoa production accounts for about 10 percent of national income and well over 30 percent of taxation. Then on a sector basis, Ghana's myriad small cocoa producers account for nearly four times their "fair" share of taxes.

It is also noteworthy that the Government declares its desire to increase cocoa production at the same time that it is taxed so heavily.

Ghana's Government is aware of the undesirability of such extreme direct dependence on cocoa for general fiscal revenues. Recent changes in taxation move away from such dependence. But the problem will persist for some time. It is likely that a similar side-effects problem faces many other countries, particularly where world demand for the exports in question is clearly price elastic.

Efficiency of Public Enterprise

Donors' concern with the efficient public enterprise has been substantial. In the sample, two countries, Turkey and India, received detailed attention on this score. Donor exhortation to the Turks to improve public enterprise performance appears traditional. In donor reports one finds quotes such as the following:

Among the major factors inhibiting more rapid and more solidly based economic advance are....a general inclination

to favor public over private sector economic activities even though the State Economic Enterprises (SEEs) have proven demonstrably inefficient

Weakness in finance, organization, accounting, management and skills, a rapid turnover of personnel and political interference in investment and price policies, and personnel administration have all been listed as major problems of the SEE by various government commissions.... (Turkish law) provides that the prices of certain basic goods are determined by the state and that losses so incurred be reimbursed to the enterprises from the budget. Power, coal, cement, iron and steel, fertilizer, copper, sulphate for agricultural uses, merchandise transport are considered basic goods, whereas sugar and cereal prices are controlled for social reasons.... In many instances.... it would appear that the basic difficulty of assuring efficiency is to be found in the isolation from international competition behind high protection.

Many (SEE) have operated at a loss and as a group the enterprises have not been able to finance a significant proportion of their investment outlays from their own savings.

In the following, I restrict the discussion of how public enterprise affects savings.

Insofar as a government restricts current expenditures and saves, investment occurs. In this context, public sector enterprise can be important. In the extreme case, a country with a large public sector which in addition to not paying taxes is unable to replace depreciated plant and equipment with its own resources, will have both diminished public revenues and increased claims upon them. Moreover, in such a situation, although the government transfer to the public enterprise is part of gross investment, the transfer can be misleading. Presumably, the same enterprise subject to market discipline (the possibility of bankruptcy as the result of

inefficiency) would need no transfers from the government whatsoever, meeting its needs for capital to a greater extent from self-financing, and finding the rest on private market.

Some notion of the magnitudes involved in Turkey can be derived by analyzing data from a recent IMF document.^{1/} In 1967, total financing needs of the SEE were (millions of Turkish liras):

inventory investment	815
fixed investment	2,907
debt repayment	<u>1,232</u>
total	4,954

Resources available:

short term funds (cash, short term borrowing, etc)	820
profits after taxes	376
depreciation	<u>918</u>
total	2,114

Public resources transferred to SEE:

state investment bank	(2,077)
counterpart. and foreign project financing	(150)
general budget transfer	(613)

Accepting the data at face value and netting out tax payments^{of} the SEE of TL 280 million leaves net transfers of public resources to them of TL 2,560

^{1/} IMF Report, SM/69/78, Part II, p. 60.

million. Taxes in 1967 were TL 14,930 million. Hence, these transfers came to 17 percent of taxes, and were 2.7 percent of GNP. It is tempting to speculate as to the consequences of either removing pricing controls and converting the SEE to private enterprises or, while assuming public ownership, presume that they are fully subject to market forces and free of parliamentary or executive guidance. Presumably, under such circumstances tax payments would increase while there need be no transfers of public resources to them. In the limiting case, perhaps something like a fifth of tax revenues would be "released" for reallocation - hopefully in development expenditures.

The effects of such metamorphosis of public enterprise on aggregate saving and investment are difficult to anticipate. Unknown remain the extent of self-financing, versus competition for loanable funds in the private marketplace. To the extent that the former predominates, aggregate savings and investment would increase. If real interest rates respond to increased demand for funds (from former SEE now financing investment in private markets) and savings respond positively to interest rates, an increase in aggregate private savings will occur. Also relevant is the disposition of government's newly released resources. The SEE have a poor record on debt repayment to both Central Bank (often guaranteed by the Treasury) and the publicly financed State Investment Bank. Moreover, their loans are at subsidized interest rates. As a public enterprise, it is usually difficult to go bankrupt. All of these considerations suggest a positive effect on aggregate savings. Private firms usually suffer severer penalties for poor investment decisions than their public cousins; e.g., they pay higher interest rates, typically repay debt, and can suffer bankruptcy. These factors indicate that

the quality of investment of the converted enterprises would improve, assuming that they receive no more subsidization (tariffs, interest rates, etc.) than the average private firm.

This is quite speculative. The hard fact is that 17 percent of taxes in Turkey in 1967 - in this respect a typical year - took the form of transfers to the public sector. It appears desirable to subject such firms to market pressures and let the private sector in effect finance them. This would release public resources elsewhere for development expenditure and suggests ipso facto that aggregate saving and investment would increase. The desirability of such an approach is reinforced, on accepting the widespread assertions that on average public enterprise in Turkey as currently managed and organized is very inefficient, quite independent of legislated pricing policies resulting in sale of output at a loss.^{1/}

The Turkish Government does not propose radical innovations with respect to the SEE, ^{although} ~~in fact~~, the Second Plan envisages a prominent role for the SEE as generators of savings. In comparing the projected growth of various kinds of public revenue, the SEE are expected to generate public revenues at an annual growth rate of 19.3 percent from 1967 through 1972, which would bring them far closer to self-financing of their total investment than hitherto has been the case.^{2/}

In India, data for recent years measuring the profitability of 28 selected

^{1/}If there is, in the nature of things, a strong tendency for the community to require that public enterprise sell at a loss or at average cost, the result of course is fewer resources saved by such firms and diminished aggregate investment.

^{2/}IBRD, ~~ibid.~~, p. 25. The Economy of Turkey, EMA-4a 7/13/67, p. 25.

public concerns^{1/} yields the following (values in billions of current rupees):

	<u>1967/68</u>	<u>1968/69</u>	<u>1969/70</u>
gross profit ^{*/}	.504	.808	.972
capital employed	20.180	24.761	29.968
rate of return	2.5%	3.3%	3.2%
gross profit at presumed 12% rate of return	2.422	2.971	3.596

^{*/} Excess of income over expenditure after depreciation but before tax and interest on loan.

If we assume, based on knowledge of rates of return to capital in other developing countries,^{2/} an average return to capital before taxes of 12 percent, for the two years 1967/68 - 1968/69, this would imply average increased returns or "savings" of 2.041 billion rupees per year.

Related to averaged GNP the increased returns would be minute, 0.61 percent. However, such increased returns transferred to the states and central government would have more than doubled their current account surplus, namely, an increase of 114 percent.

In terms of development resources foregone, then, the performance of India's public sector is important. More "conventional" rates of returns would permit the sector to come closer than hitherto in meeting its own

^{1/} Railroads and many others not included. The IMF Report stated, "in 1967/68, the latest year for which data are available, the return on capital in 67 enterprises had been only 2.2 percent, and had in fact declined from 3.8 percent in 1963/64." (p. 7) The IMF does not include data on capital employed, precluding the calculations in the text using IBRD data.

^{2/} See for example Harberger, Arnold C., "On Estimating the Rate of Return to Capital in Colombia," 1968, manuscript.

financing needs. Public sector industrial activity is largely in heavy industry. Steel, engineering, chemicals, petroleum and mines and minerals constituted 87 percent of all public sector industrial investment in 1969.^{1/} In most countries these are profitable activities.

The need to increase returns to public capital is seen as more pressing on considering India's strategy for development. Public sector investment in industry and mining has absorbed about one third of all manufacturing investment in recent years, and is projected at a substantial rate for the Fourth Plan (1969/70 - 1973/74). Moreover, the Fourth Plan projects well over a third of total private saving being borrowed to finance public investment.^{2/}

This cursory examination suggests that India could better mobilize and use investment resources by putting greater emphasis on private investment where presumably the average rate of return is higher. This would permit substantially greater taxation per rupee invested or/and far more self-financing of investment. The argument here implies the position that public sector enterprise is somehow "doomed" to gross inefficiency. It is tempting to view this in terms of certain "structural characteristics" such that because of pervasive political forces, efficiency considerations will general^{ly} out ^{of} ~~of~~ ~~apparently~~ ^{apparently} important but competitive political goals and inefficient public enterprise appears inevitable. However, in India, even if low returns to public enterprise persist "structural characteristics" are probably such that the obvious alternative of emphasizing private

^{1/}IBRD, op. cit., p. 59.

^{2/}IBRD, op. cit., p. 107.

sector growth is simply precluded. In any case, the Fourth Plan envisages a gross profit rate for public enterprise far higher than that hitherto realized. The Government appears serious in its desire to have economy and efficiency prevail. According to one source:

The Indian authorities said that in evaluating the performance of public sector enterprises, the high capital costs, long gestation periods, and complex technologies applied to the production of relatively unfamiliar items which characterized these enterprises, ought not to be overlooked. Also, these enterprises were usually established on green field sites, necessitating the provision of residential quarters and other essential amenities for employees. Nevertheless, the authorities recognized that there was considerable scope for improving the profitability of these enterprises. They mentioned a number of measures that were being taken or considered to achieve a fuller utilization of capacity by product diversification and export promotion especially in the engineering industries, and bringing about improvements in managerial and operational efficiency, in part, by greater delegation of powers. It was recognized that the total value of inventories held by public enterprises was excessive and steps were being taken, therefore, to improve inventory controls.

The discussion has proceeded strictly from the perspective of resource mobilization. This does violence to the facts, which are that governments pursue numerous goals through developing public enterprises. It would be rash indeed to evaluate that development solely on a criterion of savings foregone.

On the other hand, where public enterprise appears inefficient, then the cost to the economy in terms of decreased saving, poor quality investment, and lessened growth should be considered explicitly. Information in effect permitting a nation to calculate the costs of ideological preference, dispersal of private political/economic power, enhanced income distribution and so on, would probably lead, in some instances, to reconsider economic

policy with respect to the public/private dichotomy, or to greater pressure toward more efficient public sector performance.

In the coming decade this problem should continue to receive substantial attention. If for no other reason, modern public sectors are now larger than some years ago, so that the question of their efficient operation is more important.

Table A1

BOLIVIA, CENTRAL GOVERNMENT FISCAL DATA AS A PERCENTAGE
OF GNP, 1965-1969

	<u>1965</u>	<u>1966</u>	<u>1967</u>	<u>1968</u> ^{1/}
domestic revenue	10.64	10.97	11.11	10.40
taxes	9.19	9.85	9.88	9.19
income taxes	1.29	1.54	1.57	1.47
customs	4.77	5.07	4.73	3.95
others	3.13	3.24	3.58	3.77
total expenditures	14.35	17.13	16.77	16.60
of which defense	2.45	2.21	2.10	2.10
of which other current	9.00	9.40	10.08	9.55
of which capital	2.90	5.52	4.59	4.95
deficit	3.71	6.16	5.66	6.20
foreign grants and loans (net)	3.23	4.88	4.00	4.44
domestic borrowing (net)	.48	1.28	1.66	1.76
central bank borrowing	---	---	---	---
other	---	---	---	---
current account surplus	-.81	-.64	-1.07	-1.24

^{1/}budget basis

Table A 2

BOLIVIA, DATA FOR DERIVING FISCAL PERFORMANCE INDICATORS
(values in millions of 1968 dollars)

	<u>1965</u>	<u>1966</u>	<u>1967</u>	<u>1968</u>	<u>1969</u>
GNP growth rate (%)	5.6	7.1	3.2	6.7 ^{1/}	4.7
GNP (Y)	683	731	754	804	
per capita GNP	165	172	174	181	
$Y_t - Y_{t-65}$	---	48	71	121	
cumulative increase in GNP	---	48	119	240	
taxes (T)	63	72	74	74	
$T_t - T_{t-65}$	---	9	11	11	
cumulative increases in taxes	---	9	20	31	
current account surplus (CAS)	-5.5	-4.7	-3.8	-10.0	
$CAS_t - CAS_{t-65}$	---	.8	1.7	-4.5	
cumulative increases in CAS	---	.8	2.5	-.2	

^{1/}USAID/Bolivia, Estadísticas Economicas, No 10, 1969, p.15; gives 5.9 percent.

Table A 3

CHILE, CENTRAL GOVERNMENT FISCAL DATA AS A PERCENTAGE
OF GNP, 1965-1969

	<u>1965</u>	<u>1966</u>	<u>1967</u>	<u>1968</u>	<u>1969</u> ^{1/}
domestic revenue	22.40	24.78	23.94	25.42	26.57
taxes	17.72	19.92	18.91	16.79	17.95
incomes taxes	5.94	7.24	7.44	5.30	5.05
customs	2.44	3.23	2.09	2.30	2.45
others	9.34	9.45	9.38	9.19	10.45
total expenditures	26.92	27.26	25.14	29.26	30.66
of which defense	2.13	2.32	2.10	2.23	2.25
of which other current	16.11	16.28	15.03	15.55	16.20
of which capital	8.68	8.66	8.01	11.48	12.21
deficit	4.52	2.48	1.20	3.84	4.09
foreign grants and loans (net)	3.05	1.90	.24	1.75	2.74
domestic borrowing (net)	1.47	.58	.96	2.09	1.35
central bank borrowing	---	---	---	---	---
other	---	---	---	---	---
current account surplus	4.16	6.17	6.81	7.64	8.12

^{1/}Budget basis.

Table A 4

CHILE, DATA FOR DERIVING FISCAL PERFORMANCE INDICATORS
(values in millions of 1968 dollars)

	<u>1965</u>	<u>1966</u>	<u>1967</u>	<u>1968</u>	<u>1969</u>
GNP growth rate (%)	4.6	6.1	2.0	3.0	3.6
GNP (Y)	5024	5328	5432	5593	5793
per capita GNP	---	600	600	606	625
$Y_t - Y_{t-65}$	---	304	408	569	769
cumulative increase in GNP	---	304	712	1281	2050
taxes (T)	890	1061	1027	939	1040
$T_t - T_{t-65}$	---	171	137	49	150
cumulative increase in taxes	---	171	308	357	507
current account surplus (CAS)	209	329	370	427	470
$CAS_t - CAS_{t-65}$	---	120	161	218	261
cumulative increase in CAS	---	120	281	499	760

Table A 5

COLOMBIA, CENTRAL GOVERNMENT FISCAL DATA AS A PERCENTAGE
OF GNP, 1965-1969

	<u>1965</u>	<u>1966</u>	<u>1967</u>	<u>1968</u>	<u>1969</u> ^{1/}
domestic revenue	7.42	8.92	8.95	9.37	9.18
taxes	6.50	8.17	8.58	8.67	7.33
income taxes	3.50	3.17	3.46	3.67	3.65
customs	1.13	2.63	1.34	1.99	1.89
others	1.87	2.37	3.78	3.01	1.79
total expenditures	9.07	10.05	10.53	12.11	10.94
of which defense	1.68	1.65	1.41	1.72	1.59
of which other current	4.05	4.66	4.45	4.92	4.36
of which capital	3.34	3.74	4.67	5.47	4.99
deficit	1.65	1.13	1.58	2.74	1.76
foreign grants and loans (net)	.36	1.35	1.12	2.94	---
domestic borrowing (net)	1.29	-.22	.46	-.20	---
central bank borrowing	---	---	---	---	---
other	---	---	---	---	---
current account surplus	1.69	2.61	3.09	2.74	3.22

1/ Estimate

Table A 6

COLOMBIA, DATA FOR DERIVING FISCAL PERFORMANCE INDICATORS
(values in millions of 1968 dollars)

	<u>1965</u>	<u>1966</u>	<u>1967</u>	<u>1968</u>	<u>1969</u>
GNP growth rate (%)	3.6	5.4	4.1	5.5	6.6
GNP (Y)	4998	5266	5483	5784	6166
per capita GNP	---	283	286	292	301
$Y_t - Y_{t-65}$	---	268	485	786	1168
cumulative increase in GNP	---	268	753	1539	2707
taxes (T)	325	430	470	501	452
$T_t - T_{t-65}$	---	105	145	176	127
cumulative increase in taxes	---	105	250	426	553
current account surplus (CAS)	84	147	169	158	199
$CAS_t - CAS_{t-65}$	---	63	85	74	115
cumulative increase in CAS	---	63	148	222	337

Table A 7

INDIA, CONSOLIDATED GOVERNMENT FISCAL DATA AS A PERCENTAGE
OF GNP, 1965-1969 ^{1/}

	<u>1965</u>	<u>1966</u>	<u>1967</u>	<u>1968</u> ^{2/}	<u>1969</u> ^{3/}
domestic revenue	15.90	15.71	14.81	15.22	14.07
taxes	13.33	13.22	12.01	12.40	11.67
incomes taxes	---	---	---	---	---
customs	---	---	---	---	---
others	---	---	---	---	---
total expenditures	22.76	21.70	19.72	20.50	19.48
of which defense	4.09	3.84	3.56	3.69	3.47
of which other current	10.99	10.84	10.65	11.02	10.98
of which capital	7.69	7.02	5.51	5.79	5.03
deficit	6.86	5.99	4.91	5.28	5.41
foreign grants (net)	.28	.38	.04	.19	.10
foreign borrowing	2.37	3.29	2.18	1.92	1.86
domestic borrowing (net)	4.61	2.32	2.69	3.17	3.45
central bank borrowing	---	---	---	---	---
other	---	---	---	---	---
current account surplus	.83	1.04	.59	.51	-.38

^{1/} Fiscal year begins April 1

^{2/} Budget basis. In 1968-69, the budget basis estimate apparently was low on central government central revenues by more than 7%. This is not reflected in AID data sheets for consolidated central and state government finances.

^{3/} Budget basis.

Table A 8

INDIA, DATA FOR DERIVING FISCAL PERFORMANCE INDICATORS
(values in millions of 1968 dollars)

	<u>1965</u>	<u>1966</u>	<u>1967</u>	<u>1968</u>	<u>1969</u>
GNP growth rate (%)	-4.0	1.0	8.0	3.0	7.0
GNP (Y)	39800	39990	43080	44320	47230
per capita GNP	81	80	84	84	87
$Y_t - Y_{t-65}$	---	190	3280	4520	7430
cumulative increase in GNP	---	190	3470	7990	15420
taxes (T)	5305	5287	5174	5496	5512
$T_t - T_{t-65}$	---	-18	-131	191	207
cumulative increase in taxes	---	-18	-149	42	249
current account surplus (CAS)	330	416	254	226	-179
$CAS_t - CAS_{t-65}$	---	86	-76	-104	-509
cumulative increase in CAS	---	86	10	-94	-603

Table A 9

INDONESIA, CENTRAL GOVERNMENT FISCAL DATA AS A PERCENTAGE
OF GNP, 1965-1969^{1/}

	<u>1965</u>	<u>1966</u>	<u>1967</u>	<u>1968</u>	<u>1969</u> ^{2/}
domestic revenue		4.31	6.93	7.58	10.17
taxes		3.50	6.76	7.29	10.06
income taxes		.77	1.75	2.63	4.07
customs		.74	3.28	2.84	3.43
others		1.99	1.73	1.82	2.56
total expenditures ^{3/}		9.33	10.44	9.37	14.58
of which defense		1.19	2.58	2.89	3.84
of which other current		7.46	5.77	4.68	5.45
of which capital		.68	2.09	1.80	5.29
deficit		5.02	3.51	1.79	4.41
foreign grants and loans (net)		---	2.95	1.80	2.82
domestic borrowing (net)		5.02	.56	-.01	1.59
central bank borrowing		---	---	---	---
other		---	---	---	---
current account surplus		-4.34	-1.42	.01	.88

^{1/}Beginning with 1969, fiscal year starts on April 1. Prior fiscal years coincide with calendar year.

^{2/}budget basis.

^{3/}Current is defined as routine expenditure in the AID source.

Table A 10

INDONESIA, DATA FOR DERIVING FISCAL PERFORMANCE INDICATORS
 (values in millions of 1968 dollars)

	<u>1965</u>	<u>1966</u>	<u>1967</u>	<u>1968</u>	<u>1969</u>
GNP growth rate (%)	1.1	2.7	1.6	6.6	3.3
GNP (Y)	9750	10010	10170	10840	11200
per capita GNP	93	93	92	96	97
$Y_t - Y_{66}$			160	830	1190
cumulative increase in GNP			160	990	2180
taxes (T)		350	687	790	1127
$T_t - T_{66}$			337	440	777
cumulative increase in taxes			337	777	1554
current account surplus (CAS)		-434	-144	1	99
$CAS_t - CAS_{66}$			290	435	533
cumulative increase in CAS			290	725	1258

Table A 11

SOUTH KOREA, GENERAL GOVERNMENT FISCAL DATA AS A PERCENTAGE OF GNP ^{1/}
 (in billions of current wan)

	<u>1965</u>	<u>1966</u>	<u>1967</u>	<u>1968</u>	<u>1969</u> ^{2/}
domestic revenue	8.4	11.0	13.0	14.9	15.8
taxes	7.2	9.2	11.2	13.4	14.4
incomes taxes	2.9	4.0	5.0	6.1	6.2
customs	---	---	---	---	---
others	---	---	---	---	---
total expenditures	12.1	16.5	17.1	18.7	20.2
of which defense	3.7	3.9	4.0	4.1	4.1
of which other current	5.1	5.7	7.0	7.4	7.6
of which capital	3.3	6.9	6.1	7.2	8.4
deficit	3.7	5.5	4.1	3.8	4.4
foreign grants and loans (net)	4.7	5.8	4.4	3.6	3.7
domestic borrowing (net)	-1.0	-0.3	-0.3	0.3	0.7
central bank borrowing	---	---	---	---	---
other	---	---	---	---	---
current account surplus	-0.4	1.4	2.0	3.4	4.0

^{1/}Korea's "General Government" includes nearly all government transactions. Provincial and local governments receive most revenues as transfers from the Central Government. The above includes expenditures of foreign loans to finance public capital which are not included in budget data.

^{2/}Budget figures.

Table A 12

SOUTH KOREA, DATA FOR DERIVING FISCAL PERFORMANCE INDICATORS
 (values in millions of 1968 dollars)

	<u>1965</u>	<u>1966</u>	<u>1967</u>	<u>1968</u>	<u>1969</u>
GNP growth rate (%)	7.4	13.4	18.9	13.3	15.5
GNP (Y)	4096	4645	5057	5730	6620
per capita GNP	144	160	170	188	212
$Y_t - Y_{65}$		549	961	1634	2524
cumulative increase in GNP		549	1510	3144	5668
taxes (T)	295	427	566	768	953
$T_t - T_{65}$		132	271	473	658
cumulative increase in taxes		132	403	876	1534
current account surplus (CAS)	-17	65	101	195	291
$CAS_t - CAS_{66}$			36	130	226
cumulative increase in CAS		82	200	412	720

Table A 13

MOROCCO, CENTRAL GOVERNMENT FISCAL DATA
AS A PERCENTAGE OF GNP 1965-1969

	<u>1965</u>	<u>1966</u>	<u>1967</u>	<u>1968</u>	<u>1969</u> ^{1/}
domestic revenue	15.82	17.89	19.76	18.42	19.84
taxes	14.50	16.75	17.02	16.04	17.97
income taxes	2.89	3.35	3.30	3.51	3.51
customs	2.91	3.62	3.54	3.00	3.25
others	8.70	9.78	10.18	9.53	11.21
total expenditures	21.50	22.17	24.49	24.14	25.98
of which defense	2.59	2.84	2.84	2.96	2.85
of which other current	13.95	14.86	14.25	14.54	14.74
of which capital	4.96	4.47	7.40	6.64	8.39
deficit	5.69	4.27	4.73	5.72	6.14
foreign grants and loans (net)	3.67	2.68	2.32	1.75	2.02
domestic borrowing (net)	2.02	1.60	2.40	3.96	4.12
central bank borrowing	-.12	0	2.26	1.76	.99
other	2.14	1.60	.14	2.20	3.13
current account surplus	-.72	.20	2.67	.92	2.25

^{1/} budget basis

Table A 14

MOROCCO, DATA FOR DERIVING FISCAL PERFORMANCE INDICATORS
(values in millions of 1968 dollars)

	<u>1965</u>	<u>1966</u>	<u>1967</u>	<u>1968</u>	<u>1969</u>
GNP growth rate (%)	1.7	-1.8	8.2	11.7	-0.4
GNP (Y)	2511	2465	2668	2981	2970
per capita GNP	188	180	189	204	197
$Y_t - Y_{65}$		-46	157	470	459
cumulative increase in GNP		-46	111	581	1040
taxes (T)	364	413	454	464	534
$T_t - T_{65}$		49	90	100	170
cumulative increase in taxes		49	139	230	409
current account surplus (CAS)	-18	.5	71	27	67
$CAS_t - CAS_{66}$		23	89	45	85
cumulative increase in CAS		23	112	157	242

Table A 15

PAKISTAN, CONSOLIDATED GOVERNMENT FISCAL DATA AS A PERCENTAGE
OF GNP, 1965-1969 ^{1/}

	<u>1964/65</u>	<u>1965/66</u>	<u>1966/67</u>	<u>1967/68</u>	<u>1968/69</u>
domestic revenue	13.44	14.08	12.97	12.96	13.83
taxes	8.25	9.31	8.64	8.15	8.63
income taxes	1.39	1.77	1.32	1.21	1.21
customs	2.24	2.05	2.06		
others	4.62	5.49	5.26		
total expenditures	19.02	22.61	17.53	19.02	18.88
of which defense	2.79	5.60	3.83	3.44	3.51
of which other current	6.95	7.58	5.50	7.13	7.03
of which capital	9.28	9.43	8.20	8.45	8.34
deficit	5.58	8.53	4.56	6.06	5.05
foreign grants and loans (net)	4.47	3.96	4.11	4.69	4.56
domestic borrowing (net)	1.11	4.58	0.46	1.37	0.48
central bank borrowing	---	---	---	---	---
other	---	---	---	---	---
current account surplus	3.70	0.89	3.64	2.38	3.29

^{1/} Fiscal Year begins July 1.

Table A 16

PAKISTAN, DATA FOR DERIVING FISCAL PERFORMANCE INDICATORS
(values in millions of 1968 dollars)

	<u>1964/65</u>	<u>1965/66</u>	<u>1966/67</u>	<u>1967/68</u>	<u>1968/69</u>
GNP growth rate (%)	4.0	4.6	5.8	7.8	5.0
GNP (Y)	12078	12634	13365	14413	15130
per capita GNP		109	113	118	121
$Y_t - Y_{64/65}$		556	1287	2336	3052
cumulative increase in GNP		556	1843	4179	7231
taxes (t)	996	1176	1155	1175	1306
$T_t - T_{64/65}$		180	159	179	310
cumulative increase in taxes		180	339	518	828
current account surplus (CAS)	447	112	486	343	498
$CAS_t - CAS_{64/65}$		-335	39	-104	51
cumulative increase in CAS		-335	-296	-400	-349

Table A 17

TURKEY, CONSOLIDATED GOVERNMENT FISCAL DATA AS A PERCENTAGE
OF GNP, 1965-1969 ^{1/}

	<u>1965</u>	<u>1966</u>	<u>1967</u>	<u>1968</u>	<u>1969</u> ^{2/}
domestic revenue	15.96	16.19	17.61	18.31	20.15
taxes	14.11	14.59	15.68	16.64	18.47
income taxes	4.39	4.63	5.05	5.32	5.72
customs	1.58	1.65	1.46	1.65	1.71
others	8.14	8.31	9.17	9.67	11.04
total expenditures	18.89	19.24	20.62	20.05	21.19
of which defense	5.31	4.74	4.94	5.13	4.23
of which other current	8.50	9.08	9.63	8.61	10.42
of which capital	5.08	5.42	6.05	6.31	6.54
deficit	2.93	3.05	3.01	1.74	1.04
foreign grants and loans (net)	1.24	1.90	1.23	1.31	.69
domestic borrowing (net)	1.68	1.15	1.78	.43	.35
central bank borrowing	---	---	---	---	---
other	---	---	---	---	---
current account surplus	2.14	2.37	3.04	4.57	5.50

^{1/} Fiscal years begin March 1. Includes General Budget plus Annexed Budgets.

^{2/} Budget data.

Table A 18

TURKEY, DATA FOR DERIVING FISCAL PERFORMANCE INDICATORS
 (values in millions of 1968 dollars)

	<u>1965</u>	<u>1966</u>	<u>1967</u>	<u>1968</u>	<u>1969</u>
GNP growth rate (%)	5	10.4	6.0	6.6	6.8
GNP (Y)	9290	10260	10880	11660	12390
per capita GNP	298	321	332	346	360
$Y_t - Y_{65}$		970	1590	2310	3100
cumulative increase in GNP		970	2560	4870	7970
taxes (T)	1311	1497	1706	1930	2288
$T_t - T_{65}$		186	395	619	977
cumulative increase in taxes		186	581	1200	2177
current account surplus (CAS)	199	243	331	530	681
$CAS_t - CAS_{65}$		44	132	331	482
cumulative increase in CAS		44	176	507	989

Table A 19

GHANA, CENTRAL GOVERNMENT FISCAL DATA AS A PERCENTAGE
OF GNP, 1965-1969

	<u>1965</u>	<u>1966</u>	<u>1967</u>	<u>1968</u>	<u>1969</u> ^{1/}
domestic revenue	17.65	12.94	13.55	14.63	15.05
taxes	15.75	11.60	12.38	12.56	13.81
income taxes	3.54	3.00	3.08	2.81	2.23
customs	8.06	5.14	5.65	6.34	8.08
others	4.15	3.46	3.65	3.41	3.50
total expenditures	23.45	15.09	17.40	18.09	19.02
of which defense	1.60	1.43	2.03	2.17	1.96
of which other current	12.05	10.19	11.22	13.02	13.46
of which capital	9.80	3.47	4.15	2.90	3.60
deficit	5.80	2.14	3.85	3.46	3.97
foreign grants and loans (net)	1.06	---	.58	.95	2.82
domestic borrowing (net)	4.74	---	3.27	2.51	1.15
central bank borrowing	---	---	---	---	---
other	---	---	---	---	---
current account surplus	4.00	1.33	.29	-.56	-.37

^{1/} Budget basis.

Table A 20

GHANA, DATA FOR DERIVING FISCAL PERFORMANCE INDICATORS
(values in millions of 1968 dollars)

	<u>1965</u>	<u>1966</u>	<u>1967</u>	<u>1968</u>	<u>1969</u>
GNP growth rate (%)	0.7	0.6	1.5	0.8	5.3
GNP (Y)	1937	1948	1978	1994	2100
per capita GNP	250	245	243	238	244
$Y_t - Y_{t-65}$	---	11	41	57	163
cumulative increase in GNP	---	11	52	109	272
taxes (T)	342	226	245	250	290
$T_t - T_{t-65}$	---	-116	-97	-92	-52
cumulative increase in taxes	---	-116	-213	-305	-357
current account surplus (CAS)	77	26	8	-11	-8
$CAS_t - CAS_{t-65}$	---	-51	-69	-88	-85
cumulative increases in CAS	---	-51	-120	-208	-293

Table A 21

TUNISIA, CENTRAL GOVERNMENT FISCAL DATA AS A PERCENTAGE
OF GNP, 1965-1969

	<u>1965</u>	<u>1966</u>	<u>1967</u>	<u>1968</u>	<u>1969</u> ^{1/}
domestic revenue	22.23	24.32	24.11	23.38	24.29
taxes	19.24	22.03	21.74	20.75	22.04
income taxes	2.85	4.04	3.89	3.73	4.05
customs	3.31	3.33	2.74	2.55	2.35
others	13.08	14.66	15.11	14.47	15.64
total expenditures	32.29	33.53	33.80	32.85	33.70
of which defense	1.38	1.46	1.45	1.38	1.32
of which other current	16.03	18.19	19.32	20.56	20.29
of which capital	14.88	13.88	13.03	10.91	12.09
deficit	10.06	9.21	9.69	9.47	9.41
foreign grants and loans (net)	7.40	6.51	9.30	6.51	7.30
domestic borrowing (net)	2.67	2.70	.39	2.96	2.11
central bank borrowing	---	---	---	---	---
other	---	---	---	---	---
current account surplus	4.81	4.67	3.34	1.44	2.68

^{1/} Budget basis.

Table A 22

TUNISIA, DATA FOR DERIVING FISCAL PERFORMANCE INDICATORS
(values in millions of 1968 dollars)

	<u>1965</u>	<u>1966</u>	<u>1967</u>	<u>1968</u>	<u>1969</u>
GNP growth rate (%)	4.4	-.9	-.7	7.3	6.2
GNP (Y)	993	984	977	1048	1113
per capita GNP	228	221	214	224	232
$Y_t - Y_{t-65}$	---	-9	-16	55	120
cumulative increase in GNP		-9	-25	30	150
taxes (T)	191	217	212	217	245
$T_t - T_{t-65}$	---	26	21	26	54
cumulative increase in taxes	---	26	47	73	127
current account surplus (CAS)	48	46	24	15	30
$CAS_t - CAS_{t-65}$	---	-2	-24	-33	-18
cumulative increase in CAS	---	-2	-26	-59	-77

Table A 23

SELECTED DEVELOPING COUNTRIES:
STRUCTURE OF TOTAL TAX REVENUES,
1953-55 (I), 1966-68 (II) (percentages)

	Personal Income tax	Corp. tax	Property tax	Poll and personal taxes	Taxes on Inter- national trade	Imports taxes	Exports taxes	Excise & fiscal monopoly profits	Sales taxes	Other taxes on in- ternal trans.	Other non- class- ified
<u>Korea</u>											
I	29.6	3.7	3.7	---	14.8	14.8	---	22.3	25.9	---	---
II	23.0	10.7	2.6	---	15.8	15.8	---	19.0	28.1	.78	---
<u>Turkey</u>											
I	24.6	3.6	8.9	---	20.2	20.2	---	21.6	15.5	5.7	---
II	26.9	5.6	8.5	---	27.6	27.6	---	12.0	13.8	5.4	.18
<u>Morocco</u>											
I	2.8	15.5	9.8	11.0	33.8	29.7	4.1	18.8	6.3	---	2.0
II	7.4	22.3	5.5	---	19.9	17.9	2.0	8.5	33.9	.02	2.5
<u>Pakistan</u>											
I	--	18.1 ^{1/}	--	7.8	---	36.4	---	10.9	14.1	12.7	---
II	--	15.7 ^{1/}	--	5.7	---	24.2	---	28.5	14.9	10.9	---
<u>Brazil</u>											
I	--	16.4 ^{1/}	--	3.0	---	10.2	2.3	7.9	20.4	22.6	8.4
II	--	12.1 ^{1/}	--	1.7	---	3.3	3.3	---	28.7	35.4	3.5
<u>Bolivia</u>											
I	---	---	---	---	---	---	---	---	---	---	---
II	3.3	2.5	---	---	43.3	7.0	36.3	11.3	5.8	26.0	8.0
<u>Colombia</u>											
I	---	---	---	---	---	---	---	---	---	---	---
II	--	30.6 ^{1/}	--	8.9	---	30.2	25.4	4.8	13.6	8.6	5.2
<u>India</u>											
I	19.2	5.9	16.0	---	25.0	18.2	6.8	20.3	9.5	4.0	.04
II	10.0	9.8	9.3	---	17.8	14.9	2.9	35.7	13.8	3.5	.16
<u>Chile</u>											
I	--	39.0 ^{1/}	--	5.8	---	17.0	---	6.6	17.4	10.9	3.3
II	11.2	24.1	6.4	---	12.2	---	---	7.3	34.0	4.5	.17
<u>Indonesia</u>											
I	14.9	19.1	.92	.02	31.0	17.9	13.1	23.5	9.4	1.2	---
II	5.6	16.7	4.7	---	46.6	28.9	17.7	15.3	8.3	2.8	---

Table A 23 con't

SELECTED DEVELOPING COUNTRIES:
STRUCTURE OF TOTAL TAX REVENUES,
1953-55 (I), 1966-68(II) (percentages)

	<u>Personal Income tax</u>	<u>Corp. tax</u>	<u>Property tax</u>	<u>Poll and personal taxes</u>	<u>Taxes on Inter- national trade</u>	<u>Imports taxes</u>	<u>Exports taxes</u>	<u>Excise & fiscal monopoly profits</u>	<u>Sales taxes</u>	<u>Other taxes on in- ternal trans.</u>	<u>Other non- class- ified</u>
<u>Tunisia</u>											
I	7.4	5.3	6.1	4.0	9.1	7.6	1.5	36.9	22.8	.25	8.2
II	15.4	14.3	3.8	1.4	13.3	9.8	3.5	39.4	11.0	1.6	---
<u>Ghana</u>											
I	12.1	3.5	---	---	82.6	22.4	60.2	---	---	1.8	---
II	<u>8.6</u>	<u>14.6</u>	<u>2.7</u>	<u>---</u>	<u>49.1</u>	<u>32.3</u>	<u>16.8</u>	<u>11.0</u>	<u>12.0</u>	<u>2.0</u>	<u>---</u>
<u>Averages</u> ^{2/}											
I	15.80	8.09	6.89	5.01	28.01	16.64	15.60	20.14	15.94	5.62	6.51
II	12.38	13.40	5.44	1.40	25.28	18.29	11.49	19.19	18.30	5.52	4.38

Note

1/ Personal and corporate income taxes

2/ In computing the averages, the countries for which information on a particular tax share is not available have been excluded. Hence the sum of averages of individual shares will not add to 100.

Source: Chelliah, R.J., "Trends in Taxation in Developing Countries," 10/24/70 IMF Study, mimeograph, p. 80.

Table A 24

SELECTED DEVELOPING COUNTRIES.
CHANGES IN INDIVIDUAL AND TOTAL TAX RATIOS
1953-55 and 1966-68

	<u>Income taxes</u>	<u>Property taxes</u>	<u>Poll and personal taxes</u>	<u>Taxes on inter-national trade</u>	<u>(Import) taxes</u>	<u>(Export) taxes & other^{1/}</u>	<u>Taxes on prod. & inter-national trans.</u>	<u>Excise & fiscal monopoly profits</u>	<u>Sales taxes</u>	<u>Other taxes on in-ternal trans.</u>	<u>Other un-class-ified</u>	<u>Total</u>
Korea	1.8	.08	---	.89	(.89)	---	2.5	.81	1.6	.09	---	5.2
Turkey	1.3	.16	---	1.5	(1.5)	---	-.61	-.83	.13	.09	.05	2.4
Morocco	3.1	-.07	-1.1	-.09	(-.01)	(-.08)	4.5	-.47	5.0	---	.21	6.5
Pakistan	.19	-.01	---	-.24	---	---	2.2	1.7	.36	.11	---	2.1
Brazil	.14	-.10	---	-.92	(.41)	(-1.3)	7.5	3.4	4.7	-.59	.46	7.0
India	.71	.06	---	.47	(.57)	(-.10)	4.0	2.9	1.0	.17	.02	5.3
Chile	4.0	.88	---	1.1	---	---	7.0	1.0	6.0	---	-.28	12.6
Indonesia	-1.2	.20	---	.39	(.34)	(.05)	-.98	-.84	-.22	.07	---	-1.6
Tunisia	4.2	-.16	-.34	1.3	(.85)	(.49)	1.4	2.4	-1.3	.28	-1.3	5.5
Ghana	.24	.36	---	-8.5	(.21)	(48.7)	3.0	1.5	1.6	-.07	---	-4.9
Average	1.45	.14	-.72	-.41	(.60)	(-1.61)	3.05	1.16	1.89	.02	.14	4.01

Note

^{1/} Other refers to relatively small amounts of exchange taxes and miscellaneous duties.

Source: Chelliah, op. cit., p. 82

Table A 25

SELECTED DEVELOPING COUNTRIES: RATIOS OF TAXES TO
GROSS NATIONAL PRODUCT, MARGINAL TAX RATES, AND INCOME
ELASTICITIES OF TOTAL TAX REVENUE, 1953-55 and 1966-68 ^{1/}

	Ratio of Taxes to GNP		Marginal Tax Rate ^{2/}	Income Elasticity of Total Tax Revenue ^{3/}
	1953-55	1966-68		
Korea	5.6	10.8	11.0	2.0
Turkey	11.7	14.1	14.6	1.3
Morocco	10.0	16.5	22.2	2.2
Pakistan	6.2	8.3	9.5	1.5
Brazil	16.8	23.8	23.9	1.4
Colombia	10.3	10.3	10.3	1.0
India	6.3	11.6	15.1	2.4
Chile	10.1	22.7	23.1	2.3
Indonesia	7.3	5.7	5.7	.78
Tunisia	15.5	20.7	25.6	1.7
Ghana	18.2	13.3	12.4	.69
Average	<u>10.73</u>	<u>14.35</u>	<u>15.76</u>	<u>1.57</u>

Note

^{1/} Relate to total taxes excluding social security contribution

^{2/} Absolute change in taxes divided by absolute change in GNP

^{3/} Percentage change in taxes divided by percentage change in GNP.

Source: Chelliah, op. cit., p.10

Table A 26

SELECTED DEVELOPING COUNTRIES: INCOME ELASTICITY
OF MAJOR TAXES, 1953-55 and 1966-68

	<u>Income Taxes</u>	<u>Taxes on Production & Internal Transactions</u>	<u>Import Taxes</u>	<u>Taxes on Inter- national Trade</u>	<u>All Taxes</u>
Korea	2.0	2.0	2.1	2.1	2.0
Turkey	1.5	.85	1.8	1.8	1.3
Morocco	4.1	4.3	1.0	1.0	2.2
Pakistan	1.3	2.5	---	.83	1.5
Brazil	1.1	1.9	2.1	.45	1.4
India	1.7	4.1	1.8	1.5	2.4
Chile	2.1	3.0	---	1.6	2.3
Indonesia	.51	.60	1.3	1.2	.78
Tunisia	5.1	1.3	2.4	2.9	1.7
Ghana	1.1	11.7	1.1	.33	.69
Average	<u>2.05</u>	<u>3.23</u>	<u>1.70</u>	<u>1.37</u>	<u>1.63</u>

Source: Chelliah, op. cit., p.17.

Table A 27

COMPARATIVE RANKING: BASIC SAMPLE, TAX TO
GNP RATIOS AGAINST DOMESTIC REVENUES TO
GNP RATIO, 1966-68

	<u>Taxes to GNP</u>		<u>Ranking of domestic revenue to GNP</u>		<u>Rank discrepancy (number of ranks (1) exceeds (2))</u>
Korea	.108	8	9		-1
Turkey	.141	5	5		0
Morocco	.165	4	4		0
Pakistan	.083	11	8		3
Brazil	.238	1	1		0
Bolivia	.090	10	10		0
Colombia	.103	9	11		-2
India	.116	7	6		1
Chile	.227	2	2		0
Indonesia	.057	12	12		0
Tunisia	.207	3	3		0
Ghana	.133	6	7		-1
Mean discrepancy					0.67

Source: Challiah, R.J., "Trends in Taxation in Developing Countries,"
IMF Study, 10/24/70, p. 30, Table 1 above.