



THESIS



This is to certify that the

thesis entitled

TAX EXPENDITURES IN PANAMA,  
1975: AN EMPIRICAL Study

presented by

VICTORIANO MORENO VARGAS

has been accepted towards fulfillment  
of the requirements for

PHD degree in ECONOMICS

A handwritten signature in cursive script, reading "Nelson Taylor".

Major professor

Date

6/2/78



OVERDUE FINES:  
25¢ per day per item

RETURNING LIBRARY MATERIALS:  
Place in book return to remo-  
charge from circulation recoi

--	--

TAX EXPENDITURES IN PANAMA, 1975:

AN EMPIRICAL STUDY

By

Victoriano Moreno Vargas

A DISSERTATION

Submitted to  
Michigan State University  
in partial fulfillment of the requirements  
for the degree of

DOCTOR OF PHILOSOPHY

Department of Economics

1978



## ABSTRACT

TAX EXPENDITURES IN PANAMA, 1975:  
AN EMPIRICAL STUDY

By

Victoriano Moreno Vargas

This dissertation presents an estimate of tax expenditures in the income tax system of Panama for 1975. There is a need to measure the contribution of the government to corporations and individuals through the different forms of tax incentives and other forms of tax preferences. These preferences affect the vertical and the horizontal equity of the tax system. On the other hand, the tax base of system has been eroded due to the indirect measures to promote certain economic and social activities and have affected the market resources allocation.

Tax expenditures may be defined as those special provisions of the income tax system which represent government expenditures made through the tax system to achieve specific social and economic objectives. These special provisions involve deductions, credits, exclusions, exemptions, deferrals, and preferential tax rates to taxpayers.

An overview of Panamanian economic development during 1970 to 1975 is presented, including a descriptive outline of the public sector and the tax system. During the 1960's Panama's economy

achieved a high rate of growth, but the distribution of income and wealth was markedly unequal. The public sector, at the same time emphasized a policy of tax incentives to promote private investment.

During the 1970's, the tax system was unable to raise the required resources for the government's programs. This problem caused public sector investment to be financed largely through foreign loans. Therefore, public debt services as a proportion of the gross domestic product reached much higher levels. Moreover, the tax system is generally regressive with a narrow taxable base. Almost every tax has extensive exemptions, deductions and exclusions, and the income tax discriminates in favor of non-labor income.

This study reviewed the theory of tax expenditures and their effects on the tax system. It has been observed that tax expenditures affect the equity and efficiency of the tax system, and unlike direct government spending, they are not subject to budgetary controls. Consequently, these special tax provisions have become major loopholes for avoidance and evasion in the personal and corporate income tax.

The analysis of a random sample of 2,237 individuals' income tax returns revealed that the deduction of mortgage interest payments on owner-occupied homes, and property tax deductions were the major tax expenditures. Almost 89 percent of total individual tax expenditures are accounted for by these two deductions. These tax expenditures are concentrated basically in the private ownership of homes by middle- and high-income groups. That is to say, the

benefits due to individual income tax deductions are quite unequally distributed.

The Panamanian income tax system excludes from taxation certain non-labor incomes such as prizes from the national lottery, interest payments from savings accounts, gains from the race track, etc. Close to B/.18.0 million was the estimated loss of revenue in 1975 for these tax provisions.

Corporate tax expenditures were estimated to be B/.3.5 million in 1975. The study of a random sample of the corporate income tax returns revealed that 11.3 percent of total corporate tax expenditures are due to special deductions allowed by the income tax law. These deductions are highly favorable to large corporations. Manufacturing, commerce, real estate and banking benefit the most from these tax expenditures.

It is concluded that Panamanian individual and corporate tax expenditures are very unequally distributed among taxpayers. Tax savings from the special provisions are highly pro-rich. Moreover, tax incentives to promote economic and social objectives are contributing to tax evasion, avoidance, and inefficiency in the use of resources. The study recommends that the extensive use of tax expenditures should be a special concern in the country.

**Dedicated to**  
**Noemi, Nani, Olito and Cristian**

## ACKNOWLEDGMENTS

I am indebted to a number of people who in various ways helped me to conclude this study.

My principal debt is to Milton Taylor, who has always shown an interest in my work, supported my effort, and as my thesis advisor guided me during the study. I am also grateful to Dan Saks, Ron Fisher, and A. Gurwitz, as members of the thesis committee, for their liberal assistance and orientation during the stages of writing.

I am grateful to Nicolás Ardito Barletta, Ministry of Planning and Economic Policy of Panama, who allowed me the opportunity to conclude this demanding program. I am indebted to the Agency for International Development (USAID, Panama) for the financial assistance which allowed me to carry on this study. I also appreciate the assistance of Luis M. Adames P., Ministry of the Treasury of Panama, for granting me the income tax information and Miguel Welsh from the Computer Department and Daisy Ampudia from Norms and Planning Department for their help during the tax survey. For typing of innumerable drafts, I am grateful to Cándida Fuentes.

Finally, my special gratitude to my family for their moral support. My wife, Noemi, has been a continual source of encouragement, and with her, my little ones: Cristian, Olito, and Nani, have borne well the burden and endured my absence from home, required during

the time of my graduate study. Without these special contributions it is doubtful that I would have completed this demanding task.

## TABLE OF CONTENTS

	Page
LIST OF TABLES . . . . .	vii
 Chapter	
I. THE PURPOSE AND SCOPE OF THE STUDY . . . . .	1
The Purpose of the Study . . . . .	1
Procedures Used in the Study . . . . .	9
The Scope of the Study . . . . .	10
II. THE PANAMANIAN ECONOMY, THE PUBLIC SECTOR, AND THE TAX SYSTEM . . . . .	12
The Economic Development of Panama from 1969 to 1975 . . . . .	13
The Public Sector . . . . .	22
The Public Debt . . . . .	24
The Tax System . . . . .	28
Summary . . . . .	42
III. THE THEORY OF TAX EXPENDITURES . . . . .	44
Tax Incentives . . . . .	45
Individual Tax Expenditures . . . . .	58
Capital Gains . . . . .	60
Exclusion of Interest on State and Local Bonds . . . . .	63
Other Individual Tax Expenditures . . . . .	64
Corporate Tax Expenditures . . . . .	65
Depletion Allowances . . . . .	67
Excess Depreciation Allowances . . . . .	67
Investment Credits . . . . .	68
Summary . . . . .	72
IV. SAMPLE DESIGN TO DETERMINE THE INDIVIDUAL AND CORPORATE TAX EXPENDITURES FROM PANAMA'S INCOME INCOME TAX RETURNS . . . . .	75
Individual Sample . . . . .	75
Corporate Sample . . . . .	80
V. INDIVIDUAL TAX EXPENDITURES . . . . .	84

Chapter	Page
Measurement of Individual Tax Expenditures . . .	85
Estimate of Individual Tax Expenditures from Non-Reported Income, 1975 . . . . .	89
Tax Expenditure Estimates from Social Security Benefits, 1975 . . . . .	91
Tax Expenditure Estimates from Income Derived from Individual Properties . . . . .	93
Individual Tax Expenditures Derived from Income Tax Returns . . . . .	96
Summary . . . . .	100
VI. CORPORATE TAX EXPENDITURES . . . . .	102
Investment Tax Credits . . . . .	102
Export Tax Credits . . . . .	104
Corporate Tax Expenditures Derived from Income Tax Returns . . . . .	107
Summary . . . . .	114
VII. SUMMARY AND CONCLUSIONS . . . . .	115
BIBLIOGRAPHY . . . . .	124



## LIST OF TABLES

Table	Page
1. Distribution of Income in Panama and Other Latin American Countries . . . . .	17
2. Gross Domestic Product by Sectors, 1970 to 1976 (in Millions Balboas at Constant 1960 Prices) . .	19
3. Aggregate Demand and Supply, 1970 to 1976 (in Millions of Balboas at Constant 1960 Prices) . .	21
4. Central Government Expenditures by Departments, 1970 to 1975 (in Millions of Balboas) . . . . .	23
5. Public Sector Expenditures and Gross Domestic Product, 1970 to 1975 (in Millions of Balboas at Constant 1960 Prices) . . . . .	25
6. Central Government Operations and the Public Debt, 1970 to 1975 (in Millions of Balboas) . . . . .	27
7. Ordinary Government Revenues of the Republic of Panama, 1970 to 1976 (Millions of Balboas) . . . .	36
8. Distribution of Tax Expenditures, 1972 . . . . .	50
9. Corporations Paying No Federal Income Taxes, 1974 (Millions of Dollars) . . . . .	52
10. Net Income and Federal Income Tax of a Corporate Tax Sample, 1973 and 1974 (Billions of Dollars) .	53
11. Federal Government Direct Expenditures and Tax Expenditures, 1976 (Billions of Dollars . . . . .	57
12. Estimated Distribution of Total Tax Expenditures of Individuals, Calendar Year 1974 . . . . .	59
13. The Effect of Capital Gains Provisions, Fiscal Year 1974 . . . . .	61
14. Tax Expenditures from Interest on State and Local Debt Government, Fiscal Year 1974 . . . . .	64

Table	Page
15. Other Individual Tax Expenditures, Fiscal Year 1974 . . . . .	66
16. Corporate Special Tax Expenditures, Fiscal Years 1974 to 1977 (Millions of Dollars) . . . . .	69
17. Distribution of Benefits by Income Class for Special Provisions, Fiscal Year 1974 . . . . .	70
18. Population and Sample of the Survey to Determine the Individual Tax Expenditures from Panama's Income Tax Returns, 1975 . . . . .	76
19. Population and Sample of the Survey to Determine the Corporate Tax Expenditures from Panama's Income Tax Returns, 1975 . . . . .	81
20. Distribution of Income Tax Returns by Income Brackets for 1975 . . . . .	86
21. Distribution of Income by Income Brackets, 1975 (Percentages) . . . . .	88
22. Estimate of Individuals' Tax Expenditures from Non-Reported Income, 1975 (in Millions of Balboas) . . . . .	90
23. Tax Expenditures Estimates from Social Security Benefits, 1975 (Thousands of Balboas) . . . . .	92
24. Tax Expenditures Estimate from Property Income, Years 1973 to 1975 (Millions of Balboas) . . . . .	95
25. Estimate of Individual Tax Expenditures from the Individual Income Tax Returns, 1975 (in Balboas) . . . . .	97
26. Individual Tax Expenditures by Income Groups, 1975 . . . . .	99
27. Dividends Capitalized Due to Investment Tax Credit, 1977 (in Thousands of Balboas) . . . . .	103
28. Total Exports of Goods and Exports Subject to Export Tax Credits, 1975 to 1977 (Millions of Balboas) . . . . .	105
29. Exports Promoted by Tax Credits, 1975 to 1977 (in Balboas) . . . . .	106

Table	Page
30. Tax Expenditures Due to Exports Tax Credit Certificates, 1975 to 1977 (in Balboas) . . . .	108
31. Estimate of Corporate Tax Expenditures from Corporate Income Tax Returns, 1975 (in Balboas) .	110
32. Corporate Tax Expenditure by Income Groups, 1975 . .	112
33. Corporate Tax Expenditures by Economic Activity, 1975 (in Thousands of Balboas) . . . . .	113
34. Panama Individual and Corporate Tax Expenditures from Income Tax Returns, 1975 (in Balboas) . . .	118
35. Summary of Panama Tax Expenditures, 1975 (in Millions of Balboas) . . . . .	121

## CHAPTER I

### THE PURPOSE AND SCOPE OF THE STUDY

#### The Purpose of the Study

This study is an attempt to measure the tax expenditures in Panama for the year 1975. The tax expenditure concept is applied to an income tax, taking into consideration that such a tax is built on two structural elements. One element affects the structural provisions required for the application of a normal income tax, that is, the determination of net income, the use of annual accounting periods, the specification of the entities subject to tax, and the rate schedule and exemption levels. These elements shape the revenue-raising factors of the tax. The other structural element represents the special preferences found in every income tax. These special preferences, generally called tax incentives or tax subsidies, are departures from the normal tax structure designed to favor a particular industry, activity or class of persons. These special provisions take many forms, such as deferrals of tax liabilities, deductions, permanent exclusions from income, and credits against taxes or special rates. It is important to say that no matter what the form is, the provisions represent government spending for the benefited activities of groups, made through the tax system rather than through loans, direct grants, or any other forms of direct government assistance.

Traditionally, the impact of the public sector in the economy has been analyzed by the multiple budget theory developed by Richard Musgrave, which emphasizes the allocative, stabilization and distributive functions.<sup>1</sup> Even though, in practice, governments do not budget separately for the various functions they perform, the analysis of the effects of government intervention in the economy frequently follow this framework.

The first function of the public sector deals with the problem of allocating resources. Classical economic theory assumed that the price mechanism of the market secured an optimal allocation of resources, and public policy need not concern itself with matters of allocation except in a limited sense. However, it is now recognized that there are many situations where the market forces fail to secure optimal results. In such cases, the allocation function of the public sector, through public policy, intervenes in order to secure a more efficient resource allocation.

For example, the market mechanism can have inefficiency in resource allocation in the following situations: (1) the supply of public goods--consumer preferences are not known and no one can be excluded from the benefits of public goods; (2) in imperfect market situations, where both monopoly and the existence of institutional restrictions inhibit a firm's free entry into the industry, causing resource allocation to diverge from that obtained under purely competitive conditions; (3) decreasing cost industries, which lead

---

<sup>1</sup>Richard A. Musgrave, The Theory of Public Finance (New York: McGraw-Hill, 1959), Chapter 1.

to losses and to a non-optimal output; (4) the presence of externalities with economies or diseconomies in a production and consumption; and finally (5) when there is a high risk in undertaking investment because of uncertainty.

Public policy, because of market failures, is used to secure necessary adjustments in the allocation of resources. These adjustments may be implemented through the instruments of direct subsidies, indirect subsidies through taxation, and legislation for control and regulation.

A second function of the public sector is to alter the distribution of income, which has been created by the free activities of market forces, so that the new distribution is more consistent with what is desired by society. In general terms, the goal of distribution is to transfer income to those social groups which have not succeeded in attaining a minimum income for subsistence. The usual methods of changing the distribution of income is through the application of progressive taxes on high-income groups and pro-poor expenditures and transfers.

Lastly, the stabilization function of the public sector involves the implementation of policies to attain objectives such as: (1) a full employment of productive resources and the avoidance of involuntary labor unemployment; (2) a relatively stable price level; (3) economic growth; and (4) an equilibrium in the balance of payments.

In many countries, a fiscal policy to maintain the objective of full employment has been promoted through a direct increase in

government investment and the encouragement of private investment. In economies dominated by the private market sector, it is important to prevent a reduction in private investment as the public sector investment is expanded.

The tax system also constitutes a principal instrument through which the government administers its policies for growth, distribution and stabilization. However, probably the main concern of government policy in many Latin American countries is the achievement of a high rate of economic growth. This last policy implies, if neoclassical economics is to be followed, a full and efficient utilization of resources, and an optimum functioning of the market economy. The government would also use the tax system as an instrument in order to facilitate the activities of the private sector.

Many Latin American economies also attempt to achieve economic growth through indirect measures in the form of tax incentives given to the private sector. However, the use of tax incentives for growth interferes with income distribution. Joseph A. Pechman<sup>2</sup> and other analysts have found that tax incentives operate as a subsidy for individuals and corporations, thus benefiting the rich, while the low-income groups receive little or nothing from the subsidies.

During the decade of the 1960's, Panama had an average annual real growth rate of about 8 percent, which was one of the

---

<sup>2</sup>Joseph A. Pechman, ed., Comprehensive Income Taxation (Washington, D.C.: The Brookings Institution, 1977), pp. 57-62, 116.

highest rates in Latin America. As a market-oriented economy, tax incentives were used in Panama to stimulate the private sector in order to promote investments for import-substitution industries. As a result, the structure of taxation since that period has depended on regressive indirect taxes as a principal source of government revenues. Besides promoting a regressive tax system, the use of tax incentives reduced the income tax base. The reduction of the tax base, in turn, affected income distribution. In addition, the reduction of the tax base made it difficult for the government to finance necessary government programs, such as in education, health and housing.

As a consequence of these policies, Panama developed a marked unequal distribution of income and wealth, with a narrow band of wealthy and a relatively large group of poor. Panama may have had a high rate of growth during the 1960's, but there is little doubt that the use of tax incentives exacerbated the mal-distribution of income.

In Panama, as in most developing countries, the tax system is considered to be an instrument for the achievement of a higher standard of living for the population. The tax system is geared towards promoting social and economic welfare through the encouragement of expenditures by the private sector, expenditures to be made with income saved through a series of tax incentives. The government, then, plays an essentially passive role and relinquishes control of economic and social programs to individuals and firms in the



private sector, who are to use their tax benefits towards public welfare.

Unfortunately, however, this passive role of the government in encouraging private sector involvement through the provision of tax incentives has not been an unqualified blessing. Tax incentives for development in Panama have facilitated tax and avoidance and evasion. Moreover, the costs of the tax incentive is unknown, as they have never been measured. In addition, the deductions, credits, and preferential treatment of certain economic activities allowed by the tax incentives policies have reduced the tax base and increased the difficulties of raising adequate revenue to finance needed government programs.

Developed nations also share these dilemmas. In fact, it has been estimated in the United States that federal tax incentives totaled about \$92 billion in 1976.<sup>3</sup> Even before such facts became known, Assistant Secretary of the Treasury for Tax Policy, Stanley S. Surrey, took a new look at government subsidies as "tax expenditures" in 1968. At that time, Surrey was examining the relationship between a comprehensive, efficient, equitable, and simple tax system and a tax system based on the promotion of reductions in tax liabilities to encourage certain activities by the private sector. He discovered that the tax system in the United States discriminated against those who earn income from labor and benefits the rich,

---

<sup>3</sup>George F. Break and Joseph A. Pechman, Tax Reform: The Impossible Dream? (Washington, D.C.: The Brookings Institution, 1975), p. 12.

large corporations, and the owners of property. In other words, he found that the tax system was inhibiting seriously the principle of vertical equity.

The effects of taxation policy on the distribution of income is usually determined by comparing income distributions before and after the impact of taxes. This requires a general equilibrium analysis, for any government policy involving a new tax, the substitution of a new tax for another of equal yield, or the introduction of a tax incentive will affect the whole of the economy. Also, any tax measure in one market of the economy is not likely to be confined to that market alone. It is likely to produce repercussions in other markets and bring about possible feedback effects in the market initially affected.

It is important to note that the distributive and substitution effects of a tax measure can affect any household. This results from changes in the prices for the productive services on wages, interest rates, rents and profits. On the other hand, any of these changes is likely to lead to changes in the equilibrium quantities of productive resources that households are willing to supply to the relevant markets. In addition, the households may find themselves confronted with a new set of relative prices for the outputs they consume. Given the household preference patterns, such changes in the relative prices of outputs in turn alters the equilibrium demanded of those outputs.

As a result of all of these interactions, the taxpayers will face a new distribution of income and wealth which reflects the

burden of the new tax measures. The effect of such tax policies can be measured in the change of real or nominal income of the population, expressed through the use of a Lorenz curve.

In Panama, as in most developing economies, the distributive effect of government tax policies has been neglected. The policies of the public sector were dominantly oriented to the stabilization and allocative functions, due to the fact that the main thrust of tax policies and tax incentives were directed toward economic growth.

On the other hand, this study is concerned with inquiring into the degree to which the tax system of Panama is redistributive. Two studies have been undertaken on the distribution of income and the incidence of taxation in Panama. In the first of these studies completed in 1969, McLure noted that "income in Panama was distributed quite unevenly . . ."<sup>4</sup> His reasoning in part was based on the monopoly position enjoyed in many industries.<sup>5</sup> More specifically, he states:

This (distribution) results from an essentially dual economy in which one group receives relatively high incomes originating in the advanced sector while a much larger group lives on substantially lower incomes derived from farming, domestic service and minor commerce.<sup>6</sup>

In a second study undertaken in 1973, Arun Shourie claimed that the

---

<sup>4</sup>Charles E. McLure, Jr., The Distribution of Income and Tax Incidence in Panama, Summary and Conclusions (Panama: Agency for International Development, 1969), p. 10.

<sup>5</sup>Ibid., p. 6.

<sup>6</sup>Ibid., p. 10.

inefficiency of the Panamanian tax system contributed to the pattern of inequality of income distribution.<sup>7</sup>

Basically, these two studies were primarily concerned with the incidence of taxation. In the present study, the principal concern is with tax expenditures. More specifically, this study will attempt to quantify the degree to which personal and corporate income taxes have been used for subsidy purposes to induce economic growth in Panama.

This study of tax expenditures is significant for the following reasons: (1) there have been no studies undertaken to measure the impact of tax expenditures on personal and corporate income taxes in Panama; (2) there have been no studies to determine quantitatively the equity and the efficiency of tax incentives in Panama; (3) at this point in time, no one knows the amount of revenue the government of Panama spends through tax incentives or tax expenditures; and (4) this study will make it possible for the government to formulate policy concerning the distribution of income.

#### Procedures Used in the Study

In order to identify and measure tax expenditures in Panama, this study first includes a brief review of the theory of tax expenditures. An examination of the Panamanian tax code will then be undertaken in order to list the principal deductions allowed as

---

<sup>7</sup>Arun Shourie, Ways of Helping the Poor of Panama: Some First Impressions (Panama: Ministry of Planning and Economic Policy, 1973), p. 28.

incentives for the personal and corporate income taxes. In addition, an analysis of Panama's tax structure and its performances in the development of the economy during the period 1970 to 1975 will be presented in an effort to identify the economic impact of indirect subsidies.

A principal goal of the study will be an examination of a random sample of personal and corporate tax returns from Panama in order to measure the amount of tax expenditures that existed in 1975. An analysis of these tax expenditures will be undertaken, using economic activity and income brackets, in order to appraise the fairness of the tax system, and the patterns of income distribution in corporate and personal income. The principal criterion for this analysis will be the principle of ability to pay.

### The Scope of the Study

The study is based on tax information for 1975. This year was chosen because data for personal and corporate tax returns are more readily available for this period than for more recent years. It is assumed that the number of those persons and corporations that were required to declare tax returns for 1975 have already been presented and reviewed by the Ministry of the Treasury of Panama for this year.

As the remaining chapters in this study have been developed, Chapter II includes an analysis of the Panamanian economy for the period from 1970 to 1975. This chapter also briefly describes the expenditures of the public sector and the tax system. Chapter III

presents the theory of tax expenditures, and also includes an outline description of the tax expenditures which have been used in Panama. Chapter IV includes the study sample design, while Chapters V and VI present an analysis of personal and corporate tax expenditures in Panama, and in particular, shows the effects of tax expenditures on the distribution of income. Chapter VII presents a summary and conclusions of the study.

## CHAPTER II

### THE PANAMANIAN ECONOMY, THE PUBLIC SECTOR, AND THE TAX SYSTEM

In comparison to economic development in most Latin American countries, the development of the Panamanian economy has been unique. The principal factor contributing to its uniqueness is the relation of Panama to the international world economy, which has been shaped by the Panama Canal. Its currency unit, the balboa, also has been at a par with the U.S. dollar since 1904, and is completely convertible. These characteristics have tied Panama to the movement of the world economy.

Of all the factors responsible for the economic growth of Panama, during the recent past, the chief source of growth is found in the foreign sector. During this period, the government has been engaged in preparing a more adequate environment for the activities of the private sector, and in giving tax incentives to import substitution industries. The tax system was also used to channel resources from the private sector for the regular government programs, such as education, health protection and public works.

This chapter considers these changes by presenting a summary of the Panamanian economy in three parts: (1) the economic

development of Panama from 1969 to 1975, (2) the public sector, and (3) the tax system.

The Economic Development of Panama  
from 1969 to 1975

The Republic of Panama is a small developing country with an area of 47,906 square miles. This area includes approximately 8 percent within the Panama Canal Zone. Its population, estimated at 1.7 million in 1975, is growing at an annual rate of approximately 2.8 percent. Close to 50 percent of this population lives in urban areas, mainly Panama City.

As has been mentioned before, the economic growth of Panama has been deeply influenced by its geographical position, and closely tied to world trade and commerce. The 1960's was a period of rapid economic growth which broadened the productive base of the economy. The gross domestic product (GDP) at constant prices increased at an average annual rate of 8 percent. During the same period, the average real per capita income increased at an annual rate of 5 percent.

The two dynamic variables which contributed to this outstanding performance of the economy were: (1) a high increase in the export of goods and service, from the level of B/.153 million in 1960 to B/.390 million in 1970, an increase at an annual rate of 9.8 percent in real terms; and (2) the development of import substitution industries, such as food manufacturing and light industries.



Income from banana exports, canal earnings, tourism and the international operations of the Colon Free Zone constituted the chief elements of growth.<sup>1</sup> Banana exports and income from the Panama Canal increased from B/.52 million in 1960 to B/.184 million in 1969, representing about 55 percent of the increase in exports for the period 1960 to 1969.

The positive effect of the import substitution industries is evident from observing the sectorial GDP annual rates of growth for 1960 to 1969: manufacturing, 10.3 percent; construction, 8.4 percent; power, water and gas, 12.1 percent; transport 10.5 percent; and banking and financial activities, 14.4 percent. The policies that the government instituted to make Panama a center for international banking also reinforced the dynamic performance of the economy.

The dynamism is indicated in the coefficient of investment to gross domestic product (I/GDP), which rose from 19.0 percent in 1960 to 28.0 percent in 1969. The rate of growth of gross investment in annual terms averaged 13.1 percent in this period.

Even though there was a favorable trend in the economic growth in Panama during the 1960's, the economy entered the 1970's with an imbalance in its economic base. A high proportion of the country's economic activities are found concentrated in the cities of Panama and Colon; these cities account for 48 percent of the

---

<sup>1</sup>Ministry of Planning and Economic Policy, Plan Nacional de Desarrollo 1976-1980, vol. 1: Objetivos, Políticas y Metas Globales y Sectoriales (Panama, 1976), p. 240.

population and about 45 percent of the nation's income. The majority of the national output has been generated through manufacturing, utilities, commerce and the service sectors. On the other hand, the primary sectors, such as agriculture and mining, declined in importance. The percentage of GDP accounted for in the agricultural sector declined from 23.1 percent in 1960 to 19.4 percent in 1969. Over the same period, growth in manufacturing, construction, and utilities increased their share of the GDP, from 20.9 percent to 26.0 percent, and growth in the transport, commerce and banking sectors increased their overall share from 21.0 percent to 24.0 percent of GDP.

In addition, although the per capita income was doubled during this period, this indicator obscures the unequal distribution of income and wealth existing in Panama. This distribution resulted in a considerable proportion of the population living in conditions of poverty in both rural and urban areas of the country.

The Dirección de Estadística y Censo conducted a survey for 1970, which revealed a sharp distortion in the distribution of income and wealth in the country. It was found that the highest 30 percent of the population received 73 percent of the income, while the lowest 30 percent of the population received only 3.8 percent of the total income.<sup>2</sup>

---

<sup>2</sup>Contraloría General de la República, Dirección de Estadística y Censo, Estadística Panameña 1970. Distribución del Ingreso en Panama, 1970, Table 1 (Panama, 1971), p. 58.

A similar condition was presented by the census data for 1970. In that year, 10 percent of the families in Panama reported having a monetary income of above B/.6,000, 25 percent reported monetary income of above B/.2,400, 53 percent reported a monetary income above B/.1,700, and the remaining 47 percent received less than B/.1,700.

The census report also showed that the agriculture sector was the one most adversely affected by low income. It showed that the agricultural land is divided into 52,400 units of less than 5 hectares. About one-third of these farm units was engaged in trade, while the remaining two-thirds were subsistence farms. Most of these small agricultural units did not receive any financial credit or technical assistance.

Panama started the 1970's with an unequal distribution of income and wealth which was close to the average observed in Latin American countries. This indicates a high concentration of income received by a relatively small proportion of the population. A comparison of the distribution of income found in Panama and Latin America is shown in Table 1.

Table 1 shows that the lowest 20 percent of the population received only 1.6 percent of the income in Panama, while the same proportion of population received 3.1 percent of the income in Latin American countries. At the same time, the highest 5 percent of the population receives 30.5 percent of the income in Panama, while the same proportion of population for Latin American countries receives 33.4 percent of the income.

TABLE 1.--Distribution of Income in Panama and Other Latin American Countries.

Percentage of Population	Percentage of Income in Panama, 1970	Percentage of Income in Latin American Countries, 1971
Lowest 20 percent	1.6	3.1
Next 30 percent	10.2	10.3
Next 30 percent	28.4	24.1
Next 15 percent	29.3	29.2
Highest 5 percent	30.5	33.4

SOURCE: Contraloría General de la República, Dirección de Estadística y Censo, "Encuesta de Ingresos 1970," and "Lineamiento para Alcanzar Mayor Empleo en América Latina," CIES (OEA) 1971.

As compared to the 1960's the Panamanian economy during the first part of the 1970's showed a slower rate of growth. The average compound annual rate fell to 5 percent in real terms for the period 1970 to 1975.

The economy of Panama during this most recent period has been adversely affected by both domestic and foreign factors. The domestic factors involved a slowdown in the exports of goods and services, banana sales, sales to the Panama Canal Zone, tourism, operations of the Colon Free Zone, and the import substitution sector. While this slowdown in the domestic activities was taking place, the economy was sustained until 1973 by a boom in the construction industry made possible by the financial support of the banking

system. The average annual rate of growth of the construction sector was 12 percent during the period from 1970 to 1973.

Another domestic factor which contributed to the decrease in the rate of growth of the economy was the passing of the Labor Code in 1972 and a reform in the housing laws. The new Labor Code led to a new pattern of relationship between employers and employees, and it stabilized jobs for the workers, as no worker could be fired without the Labor Ministry's consent. The housing law froze the rent of rental housing for rents up to B/.100 monthly, which restricted private investment in low-income housing construction.

By 1974, several foreign factors also had adversely affected Panama's economy. Worldwide inflation resulted in significant increases in Panamanian import prices. This had a severe impact, because Panama imports about 37 percent of its consumption needs.

The energy crisis also had a severe impact. The increase in oil prices alone resulted in a net loss of B/.128 million for the period from 1973 to 1975. The energy price increase was responsible for 14 percent and 26 percent of the balance-of-payments deficit in 1974 and 1975 respectively. For 1974, the negative effect of the energy crisis and world inflation was reflected in a wholesale price index increase of 30.2 percent.

The recession in developed countries that reduced the volume of Panama's exports, the worldwide inflation, and the reduction of domestic economic activity resulted in a decline of the real growth of the GDP in Panama. Table 2 presents the sectorial gross domestic product at 1960's constant prices from 1970 to 1976. The gross

TABLE 2.--Gross Domestic Product by Sectors, 1970 to 1976<sup>1</sup> (in Millions Balboas at Constant 1960 Prices).

Sectors	1970	1971	1972	1973	1974	1975	1976 <sup>1</sup>
Agriculture, Forestry, Hunting and Fishing	161.1	167.1	172.0	177.9	175.2	183.6	182.6
Mining and Quarrying	2.3	2.6	2.7	3.7	3.5	3.3	3.5
Manufacturing	153.6	166.7	177.1	184.6	176.4	174.9	172.0
Construction	54.0	64.1	71.8	76.3	79.4	66.5	60.2
Electricity, Gas, Water & Sewage	26.0	30.4	34.2	38.5	40.3	44.1	46.6
Transportation and Communication	59.6	68.0	72.2	80.4	92.5	94.5	97.9
Commerce	126.6	135.9	144.4	153.7	161.7	153.7	147.1
Banking and Insurance	34.8	39.9	45.1	54.7	59.9	65.6	70.8
Ownership of Dwellings <sup>2</sup>	60.1	66.5	73.7	81.0	84.9	87.6	91.0
Public Administration	23.4	25.3	27.3	27.7	30.0	33.0	35.6
Public and Private Services	122.7	132.8	142.0	147.9	157.4	158.5	160.0
Services to the Canal Zone <sup>3</sup>	70.3	73.3	71.3	74.8	68.9	71.9	70.3
TOTAL	894.5	972.6	1,033.8	1,101.2	1,130.1	1,137.2	1,137.6

SOURCE: Contraloría General de la República, Dirección de Estadística y Censo, Panamá en Cifras Años 1970 a 1976 (Panamá, Octubre 1976), p. 141.

<sup>1</sup>Preliminary.

<sup>2</sup>Consists of imputed rent for owner-occupied dwellings.

<sup>3</sup>Consists primarily of wages paid to residents of Panama working in the Canal Zone.

domestic product from manufacturing decreased from B/.176.4 million in 1974 to B/.174.9 million in 1975, while the gross domestic product in construction decreased from B/.79.4 million in 1974 to B/.66.5 million in 1975. As a whole, the gross domestic product for the economy increased only from B/.1,130.1 million in 1974 to B/.1,137.2 in 1975. Preliminary information indicates that the GDP rate of growth for 1976 decreased to zero percent.

As private investment decreased, the government sought to compensate for the decline by developing a policy of increases in investment expenditures in infrastructure, such as hydroelectric power, a new airport and sugar mill, roads and housing construction for low-income groups. Public sector investment grew at a rate of 20 percent annually during the period from 1970 to 1975, while private investment decreased at the rate of 2.0 percent annually. It is significant that the ratio of public sector to total gross fixed investment was 2.6 percent in 1970, but in 1975 the ratio had risen to 50 percent.

Table 3 presents the aggregate demand and aggregate supply of Panama's economy at 1960 constant price for the years 1970 to 1976. For the public sector, the fixed gross capital formation increased from B/.59.0 million in 1970 to B/.146.6 million in 1975, and to B/.155.4 million in 1976. Public sector consumption increased also from B/.102.4 million in 1970, to B/.148.0 in 1975, and to B/.150.8 million in 1976.

TABLE 3.---Aggregate Demand and Supply, 1970 to 1976 (in Millions of Balboas at Constant 1960 Prices).

Items	1970	1971	1972	1973	1974	1975	1976
Aggregate Demand, Exports	364.2	394.5	397.4	399.6	367.2	374.1	326.3
Fixed Gross Capital Formation							
Private Sector	162.9	197.0	186.0	214.1	158.3	147.8	128.4
Public Sector	59.0	57.7	122.8	78.0	78.2	146.6	155.4
SUB-TOTAL	221.9	254.7	308.8	292.1	236.5	294.5	283.8
Change in Inventory							
Private Sector	20.5	19.4	22.1	24.8	42.3	4.9	-14.8
Public Sector	-0.2	1.9	2.4	-1.1	-2.9	10.7	6.5
SUB-TOTAL	20.3	21.3	24.5	23.7	45.2	15.6	- 8.3
Consumption							
Private Sector	621.8	678.6	685.8	741.6	778.1	720.9	761.6
Public Sector	102.4	113.6	124.6	132.0	137.0	148.0	150.8
TOTAL Aggregate Demand	1,330.6	1,462.7	1,541.1	1,589.0	1,564.0	1,553.0	1,514.2
Aggregate Supply, Imports	396.4	435.8	455.2	449.9	446.9	434.3	401.3
Gross Domestic Product	894.5	972.6	1,033.8	1,101.2	1,130.1	1,137.2	1,137.6
Terms of Trade Effects	39.7	54.3	52.1	37.9	-13.0	-18.5	-24.7
TOTAL Aggregate Supply	1,130.6	1,462.7	1,541.1	1,589.0	1,564.0	1,553.0	1,514.2

SOURCE: Contraloría General de la República, Dirección de Estadística y Censo, Situación Economía Cuentas Nacionales: 1970 a 1976 (Panamá, 1976), p. 3.



### The Public Sector

The public sector in Panama is composed of the central government, the autonomous agencies, certain public enterprises and the municipalities. The autonomous agencies are a group of wholly-owned government institutions which provide a variety of services ranging from utilities, transportation, health, education and entertainment. Some of these entities are subsidized institutions, while others are public companies or national monopolies which provide revenue-earning services not requiring operating subsidies.

The public enterprises are either wholly owned by the government or have mixed ownership. They were created to develop specific projects which enhance output through the production of goods and services for export and for import substitution.

The expenditures of the central government are the biggest element in total public sector expenditures. Table 4 presents the central government expenditures from 1970 to 1975. Central government expenditures increased from B/.176.1 million in 1970 to B/.306.2 million in 1975, an average annual rate of increase of 11.7 percent. On the other hand, the spending of all municipalities increased from B/.8.7 million in 1970 to B/.18.0 million in 1975. Although the local governments cooperate with the central government in matters relating to the achievement of social welfare, it is obvious from the data that the responsibilities of the municipalities in Panama is relatively unimportant.

One reason for this is that there has been a tendency on the part of the central government to absorb traditional municipal

TABLE 4.--Central Government Expenditures by Departments, 1970 to 1975 (in Millions of Balboas).

Departments	1970	1971	1972	1973	1974	1975
National Assembly	0.1	0.1	1.1	1.3	2.0	3.5
Controller General	3.3	3.2	3.3	3.3	3.9	4.3
Presidency	3.1	3.3	3.7	2.5	3.2	1.6
Government and Justice	25.3	25.7	28.7	29.3	34.7	40.3
Foreign Affairs	3.4	3.5	3.7	4.3	4.5	5.1
Finance and Treasury	4.6	4.7	4.9	4.8	5.5	6.0
Education	37.4	43.3	50.2	53.6	62.0	68.5
Commerce and Industry	2.3	2.1	1.9	2.0	2.2	2.5
Public Works	14.7	12.3	13.2	13.3	14.1	14.8
Agricultural Development	6.0	5.9	6.2	8.3	9.5	10.3
Price Regulation	0.3	0.3	0.4	0.4	0.6	0.6
Public Health	19.5	19.8	23.6	24.8	28.6	31.2
Labor and Welfare	1.8	1.9	2.0	2.0	2.1	2.4
Judicial Branch	1.9	2.1	2.0	2.0	2.2	2.5
Public Ministry	1.1	1.2	1.2	1.2	1.5	1.8
Electoral Court	0.8	1.0	2.2	1.3	1.5	1.7
Housing	-	-	-	-	3.2	4.2
Planning	-	-	-	1.3	1.6	1.9
Unforeseen Expenses	<u>0.2</u>	<u>0.2</u>	<u>0.1</u>	<u>0.0</u>	<u>0.0</u>	<u>-</u>
SUB-TOTAL	125.8	130.6	148.4	155.7	182.6	203.2
Subsidies	24.1	20.5	25.9	21.8	29.6	38.2
Interest on Public Debt	11.3	19.3	22.3	27.2	43.3	41.6
Public Debt Amortization	<u>14.9</u>	<u>17.2</u>	<u>17.4</u>	<u>21.5</u>	<u>19.7</u>	<u>23.2</u>
TOTAL	<u>176.1</u>	<u>187.6</u>	<u>214.0</u>	<u>226.2</u>	<u>275.4</u>	<u>306.2</u>

SOURCE: Contraloría General de la República. Dirección de Estadística y Censo, Panamá en Cifras Años 1970-1976 (Panamá, Octubre 1976), p. 148.

functions directly or by establishing new autonomous institutions. As an illustration, water supply and garbage removal, which are municipal functions in many countries, are services provided by autonomous institutions in Panama.

Table 4 shows that only four central government departments accounted for 77 percent of the central government expenditures in 1975 excluding subsidies and public debt services. These are the Ministry of Education, the Ministry of Government and Justice, the Ministry of Public Health, and the Ministry of Public Works.

Table 5 shows public sector expenditures compared to the gross domestic product from 1970 to 1975. The proportion of total public sector expenditures to gross domestic product varied considerably from 1970 to 1975. The lowest ratio was 17.8 percent in 1971, and the highest was 26.8 percent in 1975. This variation was due principally to an expansion of public investment during the years of economic recession. For example, public sector capital expenditures were 36 percent of total public sector expenditures in 1970, but were 52 percent in 1975.

#### The Public Debt

Central government expenditures exceeded government revenues from 1970 to 1975. The lowest deficit of B/.1.2 million occurred in 1973, while the highest deficit of B/.16.0 million occurred in both 1970 and 1972. Government deficits from 1970 to 1975 were the result of three major factors: (1) the increased cost of goods and services needed for the administration of the government and for

TABLE 5.--Public Sector Expenditures and Gross Domestic Product, 1970 to 1975 (in Millions of Balboas at Constant 1960 Prices).

Items	1970	1971	1972	1973	1974	1975	TOTAL
Public Sector Expenditures							
Consumption	102.4	113.6	124.6	132.0	137.0	148.0	757.6
Investment	58.8	59.6	125.2	76.9	81.1	157.3	558.9
TOTAL	161.2	173.2	249.8	208.9	218.1	305.3	1,316.5
Gross Domestic Product	894.5	972.6	1,033.8	1,101.2	1,130.1	1,137.2	6,269.4
Total Public Sector Expenditures to Gross Domestic Product (Percent)	18.0	17.8	24.2	19.0	19.3	26.8	21.0

SOURCE: Contraloría General de la República. Dirección de Estadística y Censo, Situación Económica Cuentas Nacionales: 1970-1976 (Panamá, 1976), p. 3.

social services; (2) the increase in interest payments due to increased government debt and the high interest paid on new government loans, and (3) the relative weakness of the revenue system because of the economic recession.

Table 6 shows the central government operations, the public debt, and the relationship of the public debt to the gross domestic product. Central government debt increased steadily from B/.285.5 million in 1970 to B/.710.4 million in 1975. Close to 45 percent of the debt was acquired from 1973 to 1975, a period when the economy was in the depth of the economic recession. In addition, the public debt service also increased steadily from B/.26.2 million in 1970 to B/.65.8 million in 1975. The public debt service charges of 1975 were almost two and one-half times the service charges of 1970.

Comparing the debt interest payments to current government revenues, Table 6 shows that this relationship increased considerably from 7.1 percent in 1970 to 16.0 percent in 1974, and to 14.0 percent in 1975. Interest payments depend on both the size of the debt and the average interest rate. These two factors resulted in the B/.85.0 million of interest paid in 1974 and 1975. About 69 percent of the central government external debt outstanding was borrowed at an interest rate of 9 percent or more.

The burden of the public debt in the economy had been increasing, as can be observed by the ratio of the public debt to the gross domestic product from 1970 to 1975. The ratio of the public debt to the gross domestic product was 27.3 percent in 1970, 31.6 percent in 1973, and 36.7 percent in 1975.

TABLE 6.--Central Government Operations and the Public Debt, 1970 to 1975 (in Millions of Balboas).

Item	1970	1971	1972	1973	1974	1975
Receipts Excluding Borrowings	160.1	181.2	197.9	225.0	271.4	297.1
Expenditures Excluding Debt Operations	149.9	151.1	174.3	177.5	212.2	241.4
Interest on Public Debt	11.3	19.3	22.3	27.2	43.3	41.6
Public Debt Amortization	<u>14.9</u>	<u>17.2</u>	<u>17.4</u>	<u>21.5</u>	<u>19.7</u>	<u>23.2</u>
Debt Service	26.2	36.5	39.7	48.7	63.0	64.8
Surplus or Deficit (-)	-16.0	- 6.4	-16.1	- 1.2	- 3.8	- 9.1
Internal Debt	144.9	155.9	174.5	168.9	218.7	282.8
External Debt	<u>140.6</u>	<u>173.4</u>	<u>214.9</u>	<u>296.9</u>	<u>358.9</u>	<u>427.4</u>
Total Public Debt	285.5	328.4	389.4	465.8	577.6	710.4
Debt Service/Receipts	16.4%	20.1%	20.1%	21.6%	23.2%	21.8%
Interest on Public Debt/Receipts	7.1%	10.7%	11.3%	12.1%	16.0%	14.0%
Interest on Public Debt/GDP	1.1%	1.7%	1.7%	1.8%	2.4%	2.2%
Total Public Debt/GDP	27.3%	28.4%	30.0%	31.6%	31.5%	36.7%

SOURCE: Contraloría General de la República, Dirección de Estadística y Censo, Panamá en Cifras Años 1970 a 1975 (Panamá, Octubre 1976), pp. 147-150.

The increase in the level of the public debt reflects the new role played by the government in promoting the social and economic development of the country. This function is manifested by the steadily increasing investment by the public sector. Government investment has been financed primarily by international development loans, public sector savings, suppliers credits and private lenders.

Before 1973, public sector investment was concentrated on the development of Panama's highway system, housing, education, health and sanitary services. After 1973, public sector investment emphasized infrastructure, the production of goods and services, and special sectors such as electricity and agricultural production.

#### The Tax System

Panama's revenue system, classified according to the way the revenue statistics are reported, has three categories of receipts: (1) indirect taxes, (2) direct taxes, and (3) proprietary and miscellaneous income. This statistical classification departs somewhat from the conventional theory of taxation.

Conventional theory of taxation assumes that indirect taxes are largely shifted, while direct taxes are believed to resist shifting. However, there are direct taxes, such as taxes on real estate, which are believed to be shifted at least in part to renters, and income taxes on corporations likewise may be shifted in part to consumers. On the other hand, business license fees, an indirect

tax, also resist shifting in some situations.<sup>3</sup> In this study, the statistical classification is used for convenience only, and does not imply the probability of shifting or non-shifting of the taxes.

Panama relies basically on indirect taxes, even though their relative importance to total ordinary government revenues has declined during the period from 1970 to 1976. Table 5 presents the ordinary government revenues from 1970 to 1976. The proportion of indirect taxes to total ordinary revenues has changed from 41.8 percent in 1970 to 37.9 percent in 1975, and to 39.8 percent in 1976.

Within the indirect taxes, custom duties alone represented about 20 percent of the total ordinary revenues of the government, and 52 percent of total indirect taxes in 1975. Custom duties includes taxes from both imports and exports. Before 1974, about one percent of total revenues from custom duties represented income from the tax on banana exports, but the proportion of taxes from exports to total custom duties increased to 17 percent in 1974, to 24 percent in 1975, and to 17 percent in 1976. The income from exports increased due to the increase in the tariff on exported bananas in 1974. The new tariff on banana exports resulted in an average increase of B/.10 million annually from 1974 to 1976.

On the other hand, revenues from imports increased from B/.36.9 million in 1970 to B/.50.8 million in 1974. For the most

---

<sup>3</sup>Bernard P. Herber, Modern Public Finance, the Study of Public Sector Economics, 3rd ed. (Homewood, Ill.: Richard D. Irwin, Inc., 1975), pp. 149, 161.



recent years of 1975 and 1976, however, the import tax revenues was only at a level of B/.44 million. Even though import tax revenues is one of the major sources of government revenues, the share of this tax to total government revenues has been decreasing steadily from 1970 to 1976. Import tax revenues to total ordinary government revenues have decreased from 23 percent in 1970 to 19.6 percent in 1973, and to 15 percent for both 1975 and 1976.

Although imports were continually increasing from B/.326.4 million in 1970 to B/.738.3 million in 1976, the tax from these imports was decreasing relatively because of two factors: (1) the high proportion of exemptions, an average of 18 percent of total imports from 1970 to 1976,<sup>4</sup> and (2) the decrease in the average effective tariff on imports, from 16 percent in 1970 to 8 percent in 1976.

The reduction of the average effective tariff on imports resulted from the existence in the Panama custom duties schedule of a high proportion of specific rates (tariffs based on the quantity of goods imported rather than on ad valorem). During periods of inflation, as was experienced by Panama from 1970 to 1975, the revenue from specific rates does not increase as the value of the imported goods increases. The main sources of revenues from custom duties originate from the imports of foods, automobiles, radios,

---

<sup>4</sup>Goods are exempted under Decree Law Number 12 of 1950, Decree Law Number 25 of 1957, and Cabinet Decree Number 172 of 1971.

television sets, refrigerators, chemical products, and other manufactured goods.

Excise taxes is the next most important source of revenue among the indirect taxes. Taxes on alcoholic beverages, gasoline and tobacco are the major revenues produced within the excise taxes. About 90 percent of total excise taxes depend upon these three taxes. Revenues from excise taxes increased from B/.22.8 million in 1970 to B/.39.0 million in 1974, and to B/.48.4 million in 1976. In 1974, there was an increase in the gasoline tax, and the introduction of a new tax on soft drinks.

Other indirect taxes involve principally a stamp tax. About 10 percent of total indirect taxes was obtained from stamp taxes during the period from 1970 to 1976.

Except for automobiles, some durable goods, and some alcoholic beverage taxes, the remaining indirect taxes have a regressive impact on the low-income groups in Panama. Luxury goods are generally taxed at a low rate to promote tourism. In 1976, all the imported goods related to tourism activity were declared free of duty by the government. The existence of the Canal Zone and the Free Zone of Colon, however, created special custom duty problems. Both areas are sources of contraband activity.

The existence of high protective tariffs and the restriction of imports through a quota system of such products as foods, shoes, and clothing has produced a regressive tax burden on the population

in the form of higher prices. At the same time, high protective tariffs and quotas on these products have reduced revenues for the government.

Direct taxes, the second major source of government revenues, consists of personal and corporate income taxes, the property tax and inheritance and gift taxes. Total direct taxes increased from B/.62.1 million in 1970 to B/.114.4 million in 1975, but decreased to B/.108.4 million in 1976. The share of direct taxes to total ordinary government revenues remained almost constant at 38 percent from 1970 to 1976.

Within direct taxes, the income tax (personal and corporate) is the principal source of revenue. The proportion of income tax to total indirect taxes fluctuated between 86 percent to 89 percent from 1970 to 1976. Since the income tax liability is based on source rather than on residence, all income arising within Panama is taxable, and all income arising outside Panama is exempt.

Panama has a single income tax law which applies to both individuals and corporations. Each of these entities has its own progressive tax schedule. For individuals, there are 20 taxable income brackets. Rates range from 2.5 percent up to B/.1,000 to 56 percent over B/.200,000. In 1976, the minimum rate was raised to 2.8 percent for income up to B/.2,000.<sup>5</sup> The income tax is close to a gross income levy on salaries and wages, but for professionals it has the characteristic of a net income tax on profits.

---

<sup>5</sup>Republic of Panama, Law Number 75 of December 22, 1976, Article 2.

There are five taxable income brackets in the tax schedule for corporations. Corporate income up to B/.15,000 is taxed at a 15 percent tax rate, while income over B/.500,000 is taxed at the maximum rate of 50 percent. In 1976, the corporate tax schedule was reduced to four taxable income brackets, with the lowest bracket of B/.30,000 being taxed at 20 percent.<sup>6</sup> Corporate earnings are assumed to be taxed at full at the business level. Thus, dividends are not subject to taxation at the individual level.

The Fiscal Code defines gross taxable income in broad terms, including all forms of compensation for personal services, rents, profits and interest. On the other hand, the definition includes a long list of exemptions: (1) income earned by virtue of special contracts with the government; (2) income received by charitable, religious and non-profit institutions; (3) income received from foreign countries; (4) income from international maritime commerce of merchant vessels registered in Panama; (5) interest derived from Panamanian government securities, and in saving accounts maintained in banking institutions registered in Panama; (6) lottery prizes and other income from games of chance operated by the Panamanian government; (7) amounts received as compensation for labor, accidents and insurance in general, and pension and social security benefits; (8) salaries and fees paid to members of the consular corps accredited to Panama; (9) income earned by personnel abroad as royalties from individuals located in the Free Zone of Colon; and (10) interest

---

<sup>6</sup>Republic of Panama, Law Number 76 of December 22, 1976, Article 1.

earned from loans granted for the construction of housing for low-income families.

From taxable income, the taxpayer is allowed to deduct personal exemptions as follows: (1) B/.600 for each individual filing single returns; (2) B/.1,000 for married couples filing jointly; (3) B/150 for each dependent minor or adult student supported by the taxpayer because of mental or physical incapability; and (4) medical expenses that exceed 5 percent of taxable income.

A recent law allows an exemption for all individuals whose taxable income is below B/.1,000. For professionals, the law provides an exemption of net taxable income up to B/1,000 if the gross income does not exceed more than B/.3,000 yearly.<sup>7</sup>

In another income tax reform of 1976, deductions from taxable income were allowed for: (1) interest payments up to B/.3,600 annually on the mortgage of owner-occupied houses located within Panama; (2) interest payments on educational loans; and (3) certified medical expenses incurred exclusively within Panama that exceed 5 percent of taxable income.<sup>8</sup>

Capital gains from bonuses given in corporate stock are excluded from taxation if they do not constitute a regular source of income. Capital gains from the sale of land, buildings and other assets are taxed only when these assets are realized. No statistics

---

<sup>7</sup>Republic of Panama, Law Number 75, of December 22, 1976, Articles 2 and 3.

<sup>8</sup>Republic of Panama, Law Number 76, December 22, 1976, Articles 3 and 4.

are available on the amount of assets held and sold in order to evaluate the characteristics of capital gains taxation in Panama, but the law obviously provides a bias in favor of upper-income groups.

Dividends and interest are treated differently in the income tax law of Panama. Dividends are taxed at a 10 percent rate when distributed by the corporation, but they are exempt when received by individuals. On the other hand, interest payments on the bonded indebtedness of the corporation are deductible before determining the income tax at the business level, but are taxable at the individual level. Interest received from an individual is taxable, while interest from savings accounts in banking institutions and from government bonds is exempt.

Panamanian income tax law provides a general rule for deductions: deductible expenses are payments for all items incurred in the production of income and in the conservation of resources. At the same time, individuals receiving salaries and wages are not permitted to deduct any incidental costs involved in earning income, such as membership fees in professional societies. Therefore, the deductions from gross income are reserved almost exclusively to taxpayers involved in business activities.

For corporations, all ordinary and necessary business expenses are permitted as deductions, but qualifications are made for the following expenses: (1) personal or living expenses of the taxpayer and his family; (2) the cost of repairs made to real or personal property if depreciation is allowable on the same property;

(3) the cost of any improvement made to real or personal property must be depreciated rather than deducted in full; (4) amounts spent on travel for recreation, club dues, fairs, entertainment and gifts not directly related to the business activity of the firm; (5) bonuses paid to employees are deductible providing that they do not exceed the amount of one month's salary or a maximum of B/750 per employee; (6) expenses of local film distribution related to the producing enterprises; (7) payments sent or credited by persons located in the Free Zone of Colon to persons abroad as royalties; and (8) any other expenses, which although legally deductible, cannot be satisfactorily verified to the income tax administration.

From Table 7, it may be seen that income tax collections increased from B/.54.5 million in 1970 to B/.101.8 million in 1975, but decreased to B/.96.3 million in 1976. The average annual growth rate for income tax collections was 8.5 percent from 1970 to 1976. However, the rate of inflation was 10.6 percent for the same period. Thus income tax collections actually decreased in real terms from 1970 to 1976.

The contribution of income tax collection to total ordinary government revenues fluctuated between a minimum of 30.3 percent to a maximum of 34.3 percent from 1970 to 1976. The decrease in real terms of income tax collections and the fluctuations in relationship to total ordinary government revenues reveals deterioration of this tax as a source of government revenues. Some of the factors that have contributed to the weak performance of Panamanian income tax collections are: (1) the long list of exemptions, (2) the special

TABLE 7.--Ordinary Government Revenues of the Republic of Panama, 1970 to 1976 (Millions of Balboas).

Item	1970	1971	1972	1973	1974	1975	1976
<b>Indirect Taxes</b>							
Customs Duties	37.7	41.5	42.8	44.9	61.0	58.2	53.9
Excise Taxes	22.8	25.1	34.2	35.3	39.0	43.4	48.4
Other Indirect Taxes	<u>6.4</u>	<u>7.4</u>	<u>8.8</u>	<u>10.9</u>	<u>10.2</u>	<u>11.1</u>	<u>12.6</u>
TOTAL	66.9	74.0	85.8	91.1	110.2	112.7	114.9
<b>Direct Taxes</b>							
Income	54.5	60.0	60.0	71.4	88.9	101.8	96.3
Property	6.9	8.6	8.9	9.9	10.8	11.9	11.7
Inheritance and Gifts	<u>0.7</u>	<u>1.0</u>	<u>0.7</u>	<u>0.5</u>	<u>0.6</u>	<u>0.7</u>	<u>0.4</u>
TOTAL	62.1	69.6	69.6	81.8	100.3	114.4	108.4
<b>Proprietary and Miscellaneous</b>							
National Services and Monopolies	16.8	21.2	23.5	29.4	32.7	43.3	34.1
Rent and Royalties	9.7	11.0	13.1	15.0	15.8	15.7	19.4
Canal Annuity	1.9	1.9	1.9	2.1	2.3	2.3	2.3
Miscellaneous	<u>2.7</u>	<u>3.5</u>	<u>4.0</u>	<u>5.6</u>	<u>10.1</u>	<u>8.7</u>	<u>9.7</u>
TOTAL	31.1	37.6	42.5	52.1	60.9	70.0	65.5
Ordinary Revenues	160.1	181.2	197.9	225.0	271.4	297.1	288.8

SOURCE: Contraloría General de la República, Dirección de Estadística y Censo, Hacienda Pública y Finanzas: Años 1974 a 1976 (Panama, 1976), p. 11.



treatment of such types of income as capital gains and interest, and (4) tax evasion.

The property tax is also considered to be a direct tax in the Panamanian system of classification. Table 7 shows that the property tax has a weak collection record, rising from B/.6.9 million in 1970 to B/.11.7 million in 1976. In relation to total ordinary government revenues, the property tax share had been approximately constant at 4 percent from 1970 to 1976.

The property tax is relatively narrow in Panama. All land and buildings, unless exempted by law, are taxable. On the other hand, all personal property and intangibles are exempt. The base of application of the property tax is the value of the property as declared by the owner or as assessed by the Dirección Catastral of the Ministry of the Treasury. The tax is applied at a nation-wide rate, and the rate is established by law. Three major factors contribute to the low collection level: (1) a wide number of exemptions, (2) low assessment, and (3) special tax incentives for new construction.

Property tax exemptions include: (1) properties of the national government, municipalities, and municipal corporations; (2) properties of the autonomous institutions of the national government; (3) properties used for religious, social public welfare, or other purposes of a non-profit nature; (4) properties of private schools, having a contract with the Ministry of Education to grant from 5 to 25 permanent scholarships to low-income Panamanian students; (5) properties of private hospitals, having a

contract with the Ministry of Health to care for any sick person in the event of emergency and to give free hospitalization each year to 25 low-income Panamanians; (6) property exempt in accordance with international treaties or agreements; (7) properties constituting the Patrimonio Familiar;<sup>9</sup> and (8) properties of a value of not more than B/.10,000.<sup>10</sup>

For the assessment of properties, the owners of land, houses, apartments or buildings for business purpose simply declared and registered their value on an official form. This property value usually is lower than the real value of the property. When a property is purchased, the purchase price declared is legally the assessed value, but taxpayers typically declare low sales prices in order to save taxes. There is little supervision in the administration of the tax. The regulations require only that when a property is sold, that the new value cannot be lower than that previously declared.

Through tax reform action in 1976, the property tax rate schedule was reduced from five to four brackets, and the graduated tax rates were increased by 40 percent as compared to the previous rates in effect since 1960. The new property tax schedules adopted in 1977 are as follows:<sup>11</sup>

---

<sup>9</sup>A small quantity of land given by the government to a farmer and his family.

<sup>10</sup>Republic of Panama, Law Number 78 of December 22, 1976, Article 1.

<sup>11</sup>Ibid., Article 2.

<u>Assessment</u>			<u>Rates (Percent)</u>
B/.10,000	to	B/.20,000	1.40
B/.20,000	to	B/.50,000	1.75
B/.50,000	to	B/.75,000	1.95
B/more than		B/.75,000	2.10

Tax incentives for new construction, adopted for development purposes, have contributed to the weak property tax collection.

These exemptions include: (1) all new construction during the period January 1, 1960 to December 31, 1967; (2) by Law No. 100 of October 4, 1973, all property tax for 20 years for new housing up to B/.20,000, and (3) by Law No. 68 of December 22, 1976, an extension for 10 years of the property tax exemption for all houses, buildings or improvements in which construction starts within 16 months from January 1, 1977.

The remaining source of revenue from direct taxes in Panama is the inheritance and gift taxes. The collection of these taxes provides only a small contribution to total ordinary government revenues. Their contribution fluctuated between B/.0.4 million and B/.1.0 million from 1970 to 1976.

The small collection from these taxes results from the reduction of the tax base due to exclusions, exemptions, and deductions. For example, the inheritance or receipt of gift property from outside of Panama is not taxable. On the other hand, there is no tax on the estate; that is, in death taxation, what is received is taxed, not what is left.

The administration of these taxes also contributes to their weakness. There is no formal trial between the government and the heirs in an inheritance tax case, in which there is required testimony by witnesses and arguments by lawyers. The process is simply between the government and the opposing estate representative, in which the latter submit briefs, the briefs are examined and then a judgment is made on the written material.

Beside taxes, the government has the following sources of ordinary revenues: (1) revenues from the sale of public services and from government monopolies; (2) rents and royalties, (3) the Panama Canal annuity, and (4) miscellaneous revenues. The revenues from these sources rose from B/.31.1 million in 1970 to B/.65.5 million in 1976. These amounts represented a share of total ordinary government revenues which rose from 19.4 percent in 1970 to 22.7 percent in 1976.

It is beyond the scope of this study to undertake a detailed analysis of each of the above-listed sources of government revenues. However, it is important to mention that revenues from public services and government monopolies arise in large part from autonomous agencies and public enterprises. There are 22 of these government institutions. Most of them rely to a great extent on their own revenues derived from the sale of public utilities, the operation of a national lottery and other gambling activities, and from a sugar mill. As indicated in Table 5, the contribution from these institutions to the ordinary revenues of the government increased from B/.16.8 million in 1970 to B/.34.1 million in 1976.

From the above descriptive outline, it is obvious that direct taxes in Panama have a narrow scope because of a combination of evasion and various reductions of the base through exclusions and deductions. The tax burden to gross domestic product was only 11 percent on an average from 1965 to 1975. These factors affect in a negative way the current expenditures of the government, and create a pressure to create more taxes. The recent introduction of a retail sales tax was based on the need of resources to finance current central government programs, including the public debt service for 1977.

### Summary

The purpose of this chapter was to present an overview of the economic development of the Panamanian economy from 1970 to 1975, as well as a descriptive outline of the public sector and the tax system. It shows that during the 1970's Panama's economy maintained a high rate of growth, but this was achieved with a distribution of income and wealth that was markedly unequal. From 1970 to 1975, the distribution of income and wealth is virtually the same, even though the government has promoted more expenditures for social programs.

The public sector has emphasized a policy of tax incentives to promote private investment, and has increased its current expenditures for social programs such as education, health and housing. Because of a recession and rising inflation during 1974 to 1976, the public sector has engaged in investment to promote exports and infrastructure in order to strengthen the productive capacity of the

country. However, investment in infrastructure has been financed largely through foreign loans, both from private and international financial institutions. This has increased the public debt service to 21.8 percent of total ordinary government revenues in 1975.

On the other hand, the tax system was unable to raise the required resources for the government's program. The tax system is generally regressive with a narrow taxable base. Almost every tax has extensive exemptions, deductions and exclusions. In the case of the income tax, the long list of exemptions, the special treatment of capital gains, dividends and interest, as well as evasion, have reduced the tax base, and affected in a negative way the vertical and horizontal equity of the tax. These elements also show that the income tax in Panama discriminates in favor of unearned income.

## CHAPTER III

### THE THEORY OF TAX EXPENDITURES

Tax expenditures are a means by which the government subsidizes the private sector indirectly. Problems associated with tax expenditures were the subject of a study in the United States in 1968 by Stanley S. Surrey, Assistant Secretary of the Treasury for Tax Policy. In analyzing the tax structure and the government's indirect system of promoting economic activities in the United States, he revealed some reasons why the country's tax base has tended to decrease. As a result of his study, Surrey recommended the need for a full accounting in the government's budget of the special provisions granted to taxpayers by the federal government in determining their net taxable income.<sup>1</sup>

This new approach of viewing the government's intervention through its taxation policy offers an opportunity to review government participation in developing as well as developed economies. This chapter, by using the experience of the United States, will consider this newly-developed theory of tax expenditures.

---

<sup>1</sup>U.S. Congress, Joint Economic Committee, Annual Report of Secretary of Treasury, Fiscal Year 1968, 91st Cong., 1st sess., 1969, p. 322.

### Tax Incentives

The principle of tax incentives is based on the conception that the government serves as a vehicle to promote certain actions by the private sector aimed at attaining public objectives which are considered to be desirable for national welfare. Usually, a tax incentive policy is designed to promote economic development through the stimulus of some economic activity.

To stimulate economic activity, tax incentive may be made available to the three major groups of decision-makers: households, businesses and the government. For households, tax measures may affect the selection of certain occupations, patterns of consumption, or type of investment. From a business point of view, tax incentives may influence the geographical location of firms, the productive technology used, or a businessman's decision to remain in, enter, or leave an industry. Tax incentives for business also may shape the package of wages to be offered; that is, how much will be in cash or in other forms of remunerations. Finally, federal-level tax incentives may affect the flow of state and local government resources to business firms.

In a broad sense, the principal purpose of tax incentives is to provide monetary assistance or benefits through the tax law so as to make a desired course of action financially more attractive to the taxpayers involved, and thereby induce them to take that action.<sup>2</sup> This purpose may be achieved in a number of ways:

---

<sup>2</sup>Tax Institute of America, Tax Incentives (Mass: Heath Lexington Books, 1969), p. 11.



(1) investment credits may provide the financial means to purchase machinery and equipment; (2) generous bad debt reserves may support the growth of savings in order to accumulate resources for investment; (3) a corporate surtax exemption may assist small businesses as a relief provision; (4) generous depreciation allowances may encourage research or the establishment of new firms in an industry; (5) charitable deductions may foster philanthropy; and (6) the preferential tax treatment of pension plans may increase resources for a broader pension coverage.

Each tax incentive is a provision justified basically because it will improve efficiency, growth or equity. For example, an investment tax credit may be adopted to increase capital formation and thus accelerate the rate of growth in the economy. Accelerated depreciation increases the amount of capital available for reinvestment, which may provide more jobs, income and consumption expenditures. Equity is achieved by tax incentives which encourage donations to charitable and educational institutions, or to health care organizations.

Even though tax incentives are defended as instruments to achieve equity and growth in the economy, growth as a goal probably has prevailed in the fiscal policy of developed as well as developing countries.<sup>3</sup>

---

<sup>3</sup>Richard M. Bird and Oliver Oldman, eds., Reading on Taxation in Developing Countries (Baltimore: The John Hopkins Press, 1975), p. 339.

There are some arguments which cite the virtue of tax incentives in their promotion of certain social programs. One could argue that the magnitude of social problems requires the assistance of the government in seeking solutions. In this assistance, the government employs incentives to encourage the participation of the private sector, especially business, in contributing to the solutions. Thus, the incentives are a way to attract private sector involvement in social programs. Along these lines, the tax incentives for training labor proposed in the U.S. Senate was defended by the argument that the tax system should be used for social purposes, and the government should encourage business to participate by providing the incentives needed to lower the high cost incurred by private enterprises in hiring, training, and providing services for low-skilled labor.<sup>4</sup>

However, there is a fallacy in this argument. This fallacy is that there is an alternative to tax incentives, which is the use of direct subsidies, and the option of using one or the other device should be compared.

Another argument in favor of tax incentives maintains that this instrument is relatively simple, and that it involves less governmental supervision. This means that there is no need for additional government bureaucracy. Proponents of tax incentives

---

<sup>4</sup>U.S. Congress, House of Representatives, Employment Incentive Act of 1969, S.2192, 91st Cong., 1st sess., May 16, 1969, Congressional Record, 115:12875.



also maintain that they can be introduced promptly, as soon as they are enacted.

Another argument maintains that tax incentives are an instrument that encourages private decision-making instead of government decision-making. Encouraging private participation, it is maintained, can achieve a better solution for many social problems because of the variety of responses which result. Such pluralism is preferred, it is argued, to a system of government-centered decision-making.

In the process of resolving an economic or social problem, tax incentives may affect both the equity of the tax structure and the allocation of resources. The following illustrations indicate these effects. Tax incentives may affect the equity of the tax structure by providing a greater benefit to high-income taxpayers than to low-income taxpayers. In addition, those who are outside the tax system for any reason--because they have experienced losses, or are exempted from taxes, or have incomes too low to qualify--do not benefit from tax incentives. With regard to the personal income tax, tax benefits for the aged or the sick do not reach those who are too poor to pay income taxes, and tax credits for educational expenses do not help poor families with incomes below the taxable level. Finally, deductions for mortgage interest or charitable contributions favor high-income taxpayers more than low-income taxpayers; they are, in effect, upside-down subsidies.

Emphasizing the distributive effect of tax expenditures, Philip Stern has shown the vertical inequity of the average tax

saving per family in Table 8.<sup>5</sup> This table shows that a poor family with an annual income under \$3,000 received only \$16 from the "welfare" programs in 1972, while a rich family with an income above \$1,000,000 received \$720,490.

Tax incentives also affect the allocation of resources. Consider, for example, the effect of the favorable tax treatment of capital gains in the planning and programming for urban renewal. Urbanization is a principal source of increased land value. Special tax treatment of capital gains allows the landowner preferentially lower tax rates than apply to normal taxable income. Such treatment encourages land speculation to obtain capital gains benefits from the appreciation in the value of land. While a physical improvement yields an annual return subject to normal tax rates, the potential reward is greater for securing a change which will be reflected in price and taxed at favorable capital gains rates.

The special treatment of such gains may encourage speculation not only in real estate, but also in stocks of high-risk ventures. Undue speculation with capital assets may interfere with the orderly flow of financial capital into useful channels. The favorable tax treatment of capital gains increases the after-tax earnings on assets, and thereby may encourage people to invest in assets which may appreciate in value. This behavior may have distorting effects on saving, investment and economic efficiency.

---

<sup>5</sup>Philip M. Stern, The Rape of the Taxpayer (New York: Vintage Book, 1974), p. 6.

TABLE 8.--Distribution of Tax Expenditures, 1972.

Income Level	Average Yearly "Tax Welfare" Payment	Average Increase in Weekly "Take Home Pay"
Over \$1,000,000	\$720,490	\$13,855.58
500,000 - 1,000,000	202,751	3,899.06
100,000 - 500,00	41,480	797.69
50,000 - 100,000	11,912	229.08
25,000 - 50,000	3,897	74.94
20,000 - 25,000	1,931	37.13
15,000 - 20,000	1,181	22.71
10,000 - 15,000	651	12.52
5,000 - 10,000	339	6.52
3,000 - 5,000	148	2.85
Under 3,000	16	0.31

SOURCE: Philip M. Stern, The Rape of the Taxpayer (New York, 1974), p. 6.

The U.S. system of hospital payment under the programs of Medicare and Medicaid is another example of an inefficient allocation of resources through tax incentives. Because the government pays a full reimbursement to hospitals for the cost associated with the Medicare and Medicaid patients, there is a tendency to over-use hospital services. This increases hospital cost for patients.

Tax credits for purchasing machinery for pollution control may also be distorting. If they encourage the use of certain kinds of equipment for control to the exclusion of other methods of pollution control, the result may be an inefficient choice of materials for the manufacturing process.

Tax incentives in some cases permit windfall gains to taxpayers, because the taxpayers may receive support from the government for doing what they would normally do. The tax credit program to hire unskilled labor, for example, may benefit employers who for one reason or another would have hired these employees anyway.

Tax incentives also have been used as instruments to avoid the personal and corporate income tax. In a survey of 142 U.S. corporations in 1974, it was found that eight companies did not pay a federal income tax and some companies were able to receive refunds from the Internal Revenue Service through tax credits.<sup>6</sup> Table 9 shows that these eight companies paid no federal corporate income taxes despite their total profits of \$644 million.

---

<sup>6</sup>U.S. Congress, House of Representatives, Corporate Tax Study 1974, 94th Cong., 1st sess., October 7, 1975, Congressional Record 121:H9755.

TABLE 9.--Corporations Paying No Federal Income Taxes, 1974  
(Millions of Dollars).

Company	Net Income before Taxes <sup>1</sup>	Federal Income Tax <sup>2</sup>
Ford Motor Co.	\$351.9	\$(56.7)
Lockheed Aircraft Corp.	29.8	0
Honeywell	98.9	( 2.2)
U.S. Industries, Inc.	17.9	( 2.8)
American Airlines	26.8	0
Eastern Airlines	17.6	0
American Electric Power Co.	163.7	(19.3)
Allstate Insurance Co.	<u>137.3</u>	<u>(16.8)</u>
TOTAL	643.9	--

SOURCE: U.S. Congress, House of Representatives, Corporate Tax Study 1974, 94th Cong., 1st sess., October 1975, Congressional Record, 121:H9755.

The same study found that 18 companies reported \$5.3 billion of net income before tax, which was taxed at an effective rate of only 10 percent or less. A comparison for the years 1973 and 1974 of the sample of tax returns investigated is shown in Table 10.

It may be noticed in Table 10 that that average effective income tax rate for all the companies surveyed was 22.6 percent in 1974, which was not even one-half of the 48 percent highest corporate rate. It may also be noticed that there is a decreasing trend in the effective tax rate from 1973 to 1974.



TABLE 10.--Net Income and Federal Income Tax of a Corporate Tax Sample, 1973 and 1974 (Billions of Dollars).

	1973	1974
Number of corporations in sample <sup>1</sup>	143	142
Adjusted net income before federal income tax	45.7	45.9
Approximate current federal income tax	10.8	10.4
Approximate effective tax rate (percentage)	23.6	22.6

<sup>1</sup>Including manufacturing, mining, transport, utilities, retailing, banks, and grain companies.

SOURCE: U.S. Congress, House of Representatives, Corporate Tax Study 1974, 94th Cong., 1st sess., October 7, 1975, Congressional Record, 121:H9756.

Tax incentives also have affected the distribution of income and have thus distorted the equity of the tax system. Tax incentives have become a means to avoid taxes. The concept of tax expenditures may be used to study these means of avoidance. This concept is defined as follows:

Tax expenditure has been used to describe those special provisions of the federal income tax system which represent government expenditures made through that system to achieve various social and economic objectives. The special provisions provide deductions, credits, exclusions, exemptions, deferrals, and preferential rates, and through these tax benefits serve ends similar in nature to those served by direct government expenditures and loan programs.<sup>7</sup>

The income tax law establishes the base to measure net taxable income. This income tax base is designed to promote certain social and economic objectives such as increased saving or investment for economic growth. In many cases, however, the achievement of these objectives through tax incentives to the private sector result in a higher cost than that cost obtained through direct government spending or through loans.

Because of the special provisions, the personal and corporate income tax bases are altered significantly from the standard and accepted definition of net taxable income. Numerous kinds of income are excluded from taxation altogether, while others are included in

---

<sup>7</sup>Tax Institute of America, Tax Incentives (Mass.: Heath Lexington Books, 1969), p. 3.

part. Various other types of expenditures by households give rise to deductions which are subtracted from income.<sup>8</sup>

As deviations from the personal net income tax base, the special tax provisions can take different forms, as capital gains, social security benefits, interest from state and local government bonds, life insurance premiums and employer payments for fringe benefits. Other special personal expenses are charitable contributions, medical expenses and interest payments.

For business activities, tax expenditures are presented as deductions from the actual cost of certain expenditures, such as depletion allowances, bad debt reserves, expenditures for research, exploration and discovery of natural resources, capital gains, and tax credits.

It should be noted that these special tax provisions are different from personal exemptions and special low-income allowances. These provisions are part of the regular structure of the tax system that are provided solely for equity purposes. All tax expenditures do not include necessary business deductions for the determination of net income.<sup>9</sup>

Until recent years, little has been known about tax expenditures. Evaluating how these special tax provisions function to attain the government's objectives has been difficult. Unlike

---

<sup>8</sup>U.S. Congress, Joint Economic Committee, The Tax Expenditure Budget: Economic Analysis and the Efficiency of Government, 91st Cong., 1st sess., 1970, pp. 82-91.

<sup>9</sup>Ibid., p. 86.

direct government spending, the federal budget until recently did not report those revenues which were not collected due to the reduction of the tax base by the special tax provisions.

However, since 1968, the documentation of the extent of tax expenditures and concern by the government has been increasing. Comparison of these special tax provisions and their revenue cost with direct expenditures for the same social and economic objectives presents more completely the role of the federal government. This was explained by the Treasury in the following way:

Since these expenditures serve ends similar to those which are . . . served by direct expenditure programs . . . it would be appropriate and instructive to juxtapose the tax provisions and the (direct) expenditures in the same functional category in order to understand better the purpose to which public resources are allocated.<sup>10</sup>

Table 11 presents the tax expenditures estimates for fiscal year 1976. These estimates disclose the impact of the government's budget in the allocation of resources. Tax expenditures amounted to an estimated \$82.4 billion for this year, which represented about 25 percent of the amount of the direct expenditure budget of the year.

Income security, health, commerce and transportation were the functional categories with the greater amount of tax expenditures. Nearly \$32 billion was estimated for those activities.

---

<sup>10</sup>U.S. Congress, House of Representatives, Joint Economic Committee, Annual Report of Secretary of Treasury, Fiscal Year 1968, 91st Cong., 1st sess., 1969, p. 329.

TABLE 11.--Federal Government Direct Expenditures and Tax Expenditures, 1976 (Billions of Dollars).

Description	Direct Expenditures	Tax Expenditure Estimates	Tax Expenditures as a Percentage of Direct Expenditures
National defense	94.0	0.7	1
International affairs	6.3	1.5	24
General science, space and technology	4.6	0	0
Agriculture	1.8	1.0	56
Natural resources, environment and energy	10.0	4.6	46
Commerce and transportation	13.7	5.5	40
Housing and community development	5.9	0.1	2
Health	28.0	6.4	23
Education, manpower and social services	14.6	1.7	12
Income security	118.7	20.0	17
Veterans benefits and services	15.6	0.8	5
Interest on public debt and miscellaneous	28.7	0.1	0
Business investment, other than capital gains	0	6.6	N/A (b)
Personal investment, other than capital gains (a)	0	14.6	N/A (b)
Capital gains	0	4.9	N/A (b)
Other tax expenditures	0	8.7	N/A (b)

<sup>a</sup>Includes items such as the deductibility of mortgage interest, the deductibility of property taxes on owner-occupied houses, and the exclusion on life insurance savings.

<sup>b</sup>Not applicable since this is not a budget outlay category.

SOURCE: U.S. Congress, Senate, The Budget Outlay of the United States Government, Fiscal Year 1976 (Washington D.C.: Government Printing Office, 1976), pp. 101-117.

### Individual Tax Expenditures

In a broad sense, all taxpayers and all types of income should be treated alike. Of course, the general exception to this rule, manifested in a progressive rate structure, is to treat every taxpayer according to his or her ability to pay. But when the government deviates from this general principle and uses the tax system to promote other special activities by allowing preferential tax treatment, such as allowing special deductions, special credits, or preferential tax rates, it is reducing the tax base. At the same time, this preferential treatment also affects the equity of the tax system.

These special tax features (tax expenditures for individuals) take different forms. A study for the Senate of the United States has identified 57 individual tax expenditures totaling \$58.2 billion in 1974.<sup>11</sup>

Table 12 shows that 160,000 taxpayers with incomes over \$100,000 received tax expenditures of \$7.3 billion, an average of \$45,662 per taxpayer, while 16 million taxpayers with income between \$10,000 and \$15,000 received tax subsidies of only \$8.9 billion, an average of less than \$600 for each taxpayer. Taxpayers in the lower range of the income brackets, with an income under \$5,000, constituted about 12 million taxpayers. They obtained less than \$3.0 billion of tax relief, an average of only \$250 for each taxpayer. The structure of tax expenditures, as is presented here, clearly demonstrates that the system of special tax treatment support, to a great extent,

---

<sup>11</sup>U.S. Congress, Senate, 94th Cong., 1st sess., June 2, 1975, Congressional Record, 121:S9173-S9177.

TABLE 12.--Estimated Distribution of Total Tax Expenditures of Individuals, Calendar Year 1974.

Adjusted Gross Income Class	Taxable Returns		Tax Expenditures		Tax Savings per Taxpayer
	Number (Thousands)	Percentage	Millions of Dollars	Percentage	
0 - 3,000	4,057	6.1	1,085	1.9	264.97
3,000 - 5,000	7,579	11.3	1,738	3.0	241.93
5,000 - 7,000	8,273	12.4	2,357	4.1	284.90
7,000 - 10,000	11,428	17.1	4,403	7.6	385.28
10,000 - 15,000	15,952	23.8	8,875	15.3	556.35
15,000 - 20,000	9,856	14.7	8,881	15.3	901.09
20,000 - 50,000	9,006	13.4	17,414	29.9	1,933.59
50,000 - 100,000	655	1.0	6,116	10.5	9,337.40
100,000 & over	160	.2	7,306	12.6	45,662.50
TOTAL	66,966	100.0	58,175	100.0	862.72

SOURCE: U.S. Congress, Senate, Proceedings and Debates of 94th Cong., 1st sess., June 2, 1975, Congressional Record, 121:84.

taxpayers with high incomes. As a result, the progressivity of the income tax system is reduced.

### Capital Gains

Capital gains represent income generated from the increase in the value of assets of a taxpayer. Capital gain from assets which has been held by the taxpayer for more than the required holding period typically are subject to a lower tax. Short-term capital gains typically receive no favored tax treatment.

The Tax Reform Act of 1976 in the U.S. raised the holding period defining short-term capital gains from six months to nine months for assets sold in 1977, and to one year for assets sold after 1977.

There are also alternative tax rates and exclusions determining taxes on capital gains. Individuals may exclude from taxable income 50 percent of the excess of the net long-term capital gain over the net short-term capital loss for the year. They may also elect to have the first \$50,000 of net capital gains taxed at an alternative rate of 25 percent.

Table 13 presents capital gains tax expenditures estimates using the special tax treatment previous to the changes enacted in 1976. This table applies to a period when capital gains were taxed at one-half of the tax rate on other forms of income, with a maximum rate of 25 percent. It is shown in the table that this special treatment on income from assets generated \$6.7 billion in tax expenditures, but 47 percent of this amount is received by



TABLE 13.--The Effect of Capital Gains Provisions, Fiscal Year 1974.

Adjusted Gross Income Class	Millions of Dollars	Percentage	Tax Savings per Taxpayer
0 - 3,000	86	1.3	21.20
3,000 - 5,000	66	1.0	8.71
5,000 - 7,000	138	2.0	16.68
7,000 - 10,000	241	3.6	21.09
10,000 - 15,000	413	6.1	25.89
15,000 - 20,000	345	5.1	35.00
20,000 - 50,000	1,262	18.8	140.12
50,000 - 100,000	1,013	15.1	1,546.56
100,000 & over	<u>3,161</u>	<u>47.0</u>	<u>19,756.25</u>
TOTAL	6,725	100.0	100.42

SOURCE: U.S. Congress, House of Representatives, Proceeding and Debates of 94th Cong., 1st sess., Congressional Record, 121:84.

taxpayers with a gross income of over \$100,000. On the average, the taxpayer in this bracket is saving almost \$20,000 in taxes. On the other hand, a taxpayer in the income bracket of \$15,000 to \$20,000 is receiving about \$35. This means that the rich gain most from this special provision of the tax law. The principle reason for this is that taxpayers with incomes of less than \$20,000 have capital gain income of less than five percent of their total income, while with taxpayers with \$50,000 of income, capital gains income represents 62 percent of their total income.

In fact, the capital gains provisions have become one of the principal mechanisms used by the rich to evade taxes. On this issue, Philip Stern has noted:

Of all the various loopholes, none contributes so flagrantly or so dramatically to the upside-down "tax welfare" system as the preferential treatment accorded so called "capital gains," the profits from the sale of stock and bonds, buildings, land and other kinds of property which are taxed at no more than half the rates that apply to other kinds of income.<sup>12</sup>

While the special treatment of capital gains is a source of tax avoidance, it has been justified as a means to encourage taxpayers in the high-income brackets to invest in risky economic activities.<sup>13</sup> In this respect, Butters, et al., in a study on the effects of taxation, concluded that the special capital gains provisions were an important factor in encouraging venturesome

---

<sup>12</sup>Stern, The Rape of the Taxpayer, p. 13.

<sup>13</sup>J. E. Stiglitz, "The Effects of Income, Wealth and Capital Gains Taxation on Risk-Taking," The Quarterly Journal of Economics 83 (May 1969):263-283.

individuals to "shift funds out of relatively conservative investments offering little or no opportunity for capital appreciation, and into some venturesome types of investment."<sup>14</sup>

However, this has not always been the case. Stiglitz, in commenting on the effects of taxation on risk-taking, wrote:

The important point to observe is that even if one wished to encourage greater risk-taking, and even if preferential treatment of capital gains did this effectively, it is not clear that preferential treatment of capital gains is the most desirable way of encouraging risk-taking.<sup>15</sup>

#### Exclusion of Interest on State and Local Bonds

The U.S. federal tax law has established that taxpayers who own state and local government bonds do not have to pay tax on interest earned on these bonds. Like capital gains taxation, this special tax treatment has had a special attraction for the rich.

This provision resulted in a reduction of \$1.0 billion in federal government revenues in 1974. About 82 percent of this tax expenditure benefited those taxpayers with an income of over \$50,000. The rich taxpayer with income above \$100,000 received through this relief more than \$3,400, while taxpayers earning income under \$10,000 received nothing. An average tax saving of \$34,125 was realized by 160 taxpayers at the top of the income distribution. On

---

<sup>14</sup>J. K. Butter, L. E. Thompson, and L. L. Bollinger, Effects of Taxation on Investment by Individuals (Boston: Harvard University Graduate School of Business Administration, 1953), p. 42.

<sup>15</sup>Stiglitz, The Effects of Income, Wealth, and Capital Gains Taxation on Risk-Taking, p. 274.

the other hand, about 8.3 million taxpayers with incomes between \$7,000 to \$10,000 received one million from this tax relief resulting in a tax saving per taxpayer of only nine cents. Tax expenditures from interest on state and local government bonds are presented in Table 14.

TABLE 14.--Tax Expenditures from Interest on State and Local Debt Government, Fiscal Year 1974.

Adjusted Gross Income Class	Millions of Dollars	Percentage	Saving per Taxpayer
7,000 - 10,000	1	0.1	0.09
10,000 - 15,000	4	0.4	0.25
15,000 - 20,000	22	2.1	2.32
20,000 - 50,000	98	9.2	10.88
50,000 - 100,000	389	36.7	593.89
100,000 & over	<u>546</u>	<u>51.5</u>	<u>34,125.00</u>
TOTAL	1,060	100.0	15.83

SOURCE: U.S. Congress, House of Representatives, Proceeding and Debate of 94th Cong., 1st sess., Congressional Record, 121:84.

#### Other Individual Tax Expenditures

Excess depreciation on housing and other assets, the deduction of medical expenses, the preferred treatment of mortgage interest, and the deduction of property taxes on owner-occupied homes are the remaining principal forms of individual tax

expenditures. These categories accounted for 25 percent of the total of \$58 billion in estimated tax expenditures in 1974.

Table 15 presents these other individual tax expenditures classified by adjusted gross income class. The income class of \$100,000 and over received the highest tax savings per taxpayer for each of the tax expenditures; that is, \$593.75 for saving on mortgage interest, \$1,331.25 on property taxes, \$443.75 for medical expenses, and \$362.50 for excess depreciation.

On the other hand, the tax saving per taxpayer for the same categories of tax expenditures for the income group of less than \$3,000 were only 25 cents in property taxes, 98 cents for medical expenses, 26 cents for excess depreciation and an insignificant amount for mortgage interest.

#### Corporate Tax Expenditures

During 1976, the corporate income tax rate was 20 percent on the first \$25,000 of taxable income, 22 percent on the next \$25,000, and 26 percent on the excess over \$50,000. It was found for 1973 and 1974 that the special provisions such as depletion allowances, accelerated depreciation, investment tax credits, and others reduced the effective tax rate by more than 50 percent for those years (see Table 10).

Corporation tax expenditure averaged \$23 billion for the years 1974 to 1977. They were estimated to be \$25 billion in 1977.

TABLE 15.--Other Individual Tax Expenditures, Fiscal Year 1974.

Adjusted Gross Income Class	Mortgage Interest		Property Taxes <sup>1</sup>		Medical Expenses		Excess Depreciation <sup>2</sup>	
	Millions of Dollars	Tax Saving per Taxpayer	Millions of Dollars	Tax Saving per Taxpayer	Millions of Dollars	Tax Saving per Taxpayer	Millions of Dollars	Tax Saving per Taxpayer
0 - 3,000	*	*	1	0.25	4	0.98	2	0.26
3,000 - 5,000	13	1.71	24	3.17	38	5.01	6	0.72
5,000 - 7,000	52	6.28	66	7.98	112	13.54	15	1.31
7,000 - 10,000	265	23.19	221	19.33	264	23.10	30	1.88
10,000 - 15,000	886	55.54	583	36.55	481	30.15	52	3.25
15,000 - 20,000	1,133	114.96	771	78.23	376	38.15	48	4.87
20,000 - 50,000	2,078	230.74	1,774	196.98	634	70.40	164	18.21
50,000 - 100,000	348	531.30	407	621.37	145	221.37	105	160.30
100,000 & over	<u>95</u>	<u>593.75</u>	<u>213</u>	<u>1,331.25</u>	<u>71</u>	<u>443.75</u>	<u>58</u>	<u>362.50</u>
TOTAL	4,870	72.72	4,060	60.63	2,125	10.45	480	7.16

<sup>1</sup>Deduction of property taxes on owner-occupied homes.<sup>2</sup>Excess depreciation on housing assets over the straight line depreciation method.

\*The data is not significant.

SOURCE: U.S. Congress, House of Representatives, Proceedings and Debates of 94th Cong., 1st sess., Congressional Record, 121:84.

About 50 percent of total corporate tax expenditures were attributable to depletion allowances, excess depreciation and investment credits. Additional data on these are shown in Table 16.

#### Depletion Allowances

Gas, oil, and mineral extractive industries were allowed to write off 22 percent<sup>16</sup> of the selling price for ten years in order to recover the cost of the value of depleted reserves. In 1975, this allowance resulted in a tax reduction of about \$2.5 billion. Estimates for 1976 and 1977 are close to \$1.6 billion for each year. This subsidy results in a significant advantage for corporations in the extractive industries as compared to firms in other activities.

#### Excess Depreciation Allowances

Depreciation represents the loss in value of plant and equipment due to obsolescence or deterioration in the process of production. Every firm can choose its own depreciation system, whichever is more beneficial to the firm. Accelerated depreciation provides corporations a reduction in tax liability by recovering their investment in machinery and other capital goods in a relatively short period of time. Excess depreciation provided \$2.3 billion of tax reduction in 1976. The estimate for 1977 is expected to save about \$2.6 billion for corporations.

---

<sup>16</sup>The Tax Reform Act of 1975 modified the percentage depletion allowance in the tax law, retaining the 22 percent depletion allowance rate from 1976 to 1980, and then providing a reduction to 15 percent by two percentage points a year from 1981 through 1984, when it reaches 15 percent.

### Investment Credits

This special provision has been used to stimulate investment by the private sector when the economy is suffering from a recession. During the 1971 recession, corporations could write off 7 percent of their new investment as a tax credit. This rate of tax credit was increased to 10 percent in 1975 because of the high rate of unemployment of about 10 percent.

The tax expenditures of \$5.8 billion in 1975 reflects the effect of the 10 percent investment tax credit allowed to the private sector for their new investment in that year. Estimates for 1976 and 1977 show that this special tax provision will provide a tax saving of close to \$8.0 billion yearly to corporations (see Table 16).

Although the corporations are receiving an increasing tax saving due to these special tax provisions, the benefits are not equally distributed among taxpayers. Taxpayers in the low-income brackets are receiving almost nothing relative to the high-income taxpayers. This problem is shown in Table 17.

These allowances substantially benefit the high-income taxpayers whose earnings are over \$50,000. They received 30 percent of the total benefits in 1974. Taxpayers with over \$100,000 a year are saving an average of \$1,281 each, while taxpayers with less than \$3,000 of income are receiving only 98 cents. As it may be noted in Table 17, these corporate special provisions are highly pro-rich in their distributional effects.



TABLE 16.--Corporate Special Tax Expenditures, Fiscal Years 1974 to 1977 (Millions of Dollars).

Detail	1974	1975	1976	1977
Total corporate tax expenditures	19,120	22,270	25,845	25,460
Total special tax expenditures	<u>8,455</u>	<u>10,405</u>	<u>12,145</u>	<u>11,960</u>
Depletion allowances	2,120	2,475	1,580	1,595
Excess depreciation	1,765	2,120	2,305	2,550
Investment credits	4,570	5,810	8,260	7,815

SOURCE: U.S. Congress, Committee on Ways and Means and Committee on Finance, Estimates of Federal Tax Expenditures 1975 and 1976 (Washington, D.C.: Government Printing Office, 1977), p. 8.

TABLE 17.--Distribution of Benefits by Income Class for Special Provisions,<sup>1</sup> Fiscal Year 1974.

Adjusted Gross Income	Millions of Dollars	Percentage	Tax Saving per Taxpayer
0 - 3,000	4	.3	.98
3,000 - 5,000	20	1.4	2.64
5,000 - 7,000	42	3.0	5.08
7,000 - 10,000	95	6.8	8.31
10,000 - 15,000	193	13.7	12.10
15,000 - 20,000	178	12.7	18.06
20,000 - 50,000	451	32.1	50.08
50,000 - 100,000	217	15.4	331.30
100,000 & over	<u>205</u>	<u>14.6</u>	<u>1,281.25</u>
TOTAL	1,405	100.0	20.98

<sup>1</sup>Includes excess percentage over cost depletion, depreciation on assets and buildings (other than rental housing) in excess of straight line, and the investment tax credit.

SOURCE: U.S. Congress, House of Representatives, Proceedings and Debates of 94th Cong., 1st sess., Congressional Record, 121:84.

Although some of the tax incentive policies which the U.S. government has followed has brought results contrary to the objectives it had hoped to achieve, it is important to mention that most of the tax incentive policies used have resulted from particular economic or social problems that could not be solved by using governmental budgets on a short-term basis. For example, the tax incentive through accelerated depreciation was adopted in the United States when the federal administration was anxious to encourage capital investment, and was rationalized on the grounds that it provided a more realistic and uniform basis for depreciation. It was claimed by the Treasury that standard depreciation did not adequately reflect the effects of technology on the rate of obsolescence. Similarly, the deferral of income from foreign subsidiary corporations controlled by U.S. citizens sought to maintain the neutrality of the tax law on foreign and domestic sources of income.

The special provisions for the extractive industries were introduced in the United States by the Revenue Act of 1918 with the concept of discovery value depletion. The purpose was to permit the recovery of tax-free income in excess of costs. The annual deductions for depletion were to be based on the value of property after discovery. But the procedure was difficult to administer in the case of the oil and gas industries. The concept of percentage depletion as a percentage of net income, as is used today, is, of course, quite different from the one previously used.

The tax incentives for exports adopted in 1971 allowed an indefinite deferral of taxation of roughly 50 percent of the profits

from export activities. This provision was developed during the late 1960's and the early 1970's, at a time when there was concern over the balance-of-payments difficulties of the U.S. due to declining exports. The measure was promoted as a means to remove competitive disadvantages faced by U.S. exporters.<sup>17</sup>

In Latin America, the process of industrialization developed during the 1950's and 1960's was encouraged by tax incentive such as tax holidays, the tax exemption of reinvested profits, and the duty-free importation of raw materials and capital goods. These measures were designed to induce increased domestic investment and to attract foreign investment.

In general, tax incentives are instruments for achieving certain governmental goals such as promoting investment and increasing business activities in certain economic sectors or specific geographical areas in the country. Since tax expenditures involve special revenue benefits as an inducement for undertaking these activities, there is a need to evaluate the cost and benefit of achieving social and economic goals through these tax expenditure policies.

### Summary

The purpose of this chapter is to review some aspects of the theory of tax expenditures, based on the experience of the United

---

<sup>17</sup> Bruce F. Davie and Stephen A. Nauheim, "Report on United States: On Tax Incentives as an Instrument for Achievement of Governmental Goals," Studies on International Fiscal Law, vol. LXIa Congress IFA (Jerusalem, 1976), pp. 317-334.

States. It has been observed that the tax incentive policies to promote social and economic objectives have affected the equity and efficiency of the tax system. The set of special provisions to promote certain activities has provided additional resources for some groups of taxpayers covered by the tax system. These have taken the form of tax exemptions, deductions, special tax treatment, excess allowances for depletion and depreciation, and tax credits. On the other hand, the same economic and social goals promoted by these special tax treatments could be achieved by government loans or direct government subsidies to the private sector.

Unlike direct government spending, tax expenditures are not subject to federal budgetary controls. Consequently, these special tax provisions have become major loopholes for the avoidance and evasion of the personal and corporate income tax, and have thus reduced the tax base.

The distributional effect of tax expenditures is highly pro-rich, and has provided tax shelters for the wealthy. At the same time, this has resulted in the allocation of resources for purposes other than what they were intended. For example, the special taxation of capital gains and the tax exemption of interest from state and local government bonds have shifted resources from productive investments to both speculative and riskless investments.

Along with this, equal income has not been equally taxed, because the tax incentives discriminate against income from wages and salaries. The latter income has been taxed at a higher rate than unearned income.

As a by-product of the system of special tax provisions to promote certain social and economic goals, the progressivity of the tax system has been eroded. The rich and wealthy have received tax shelters and benefits from the tax reductions and loopholes. Consequently, they pay less taxes, and the burden of the tax system has been shifted more to the middle- and lower-income groups.

CHAPTER IV

SAMPLE DESIGN TO DETERMINE THE INDIVIDUAL AND  
CORPORATE TAX EXPENDITURES FROM PANAMA'S  
INCOME TAX RETURNS

Individual Sample

The Computer Department of the Ministry of the Treasury processed 35,998 individual income tax returns in 1975. From this universe, a stratified sample of 2,237 taxpayers (6.2 percent of the population) was drawn by using the economic activities reported by the taxpayers as major strata. Nine major categories were selected. These are: (1) agriculture, mining, transport, storage and communications; (2) manufacturing industries; (3) construction, power, gas, water and other similar sources of income; (4) commerce; (5) real estate; (6) services; (7) individual revenues; (8) professional revenues; and (9) Colon Free Zone firms. Each of these major categories were subdivided in sub-strata according to the economic activity or level of income recorded in the tax returns.

Table 18 shows the criteria used to draw the stratified sample. A general rule was followed: the sample elements for each sub-stratum were selected randomly in those cases where large populations of returns were recorded in the sub-stratum; in those cases where the populations were composed of a few elements, the whole population was included in the sub-stratum of the sample.

TABLE 18.--Population and Sample of the Survey to Determine the Individual Tax Expenditures from Panama's Income Tax Returns, 1975.

Sector and Strata		Population N	Sample Size n	Expansion Factor f
1. Agriculture, mining, transport storage and communications				
Stratum I:	Agriculture	1,003	200	1/5
Stratum II:	Mining	39	39	1/1
Stratum III:	Transport, storage and communication	<u>374</u>	<u>93</u>	1/4
	Sub-total	1,416	332	
2. Manufacturing industries		55	55	1/1
3. Construction, power, gas, water and other similar sources of income				
Stratum I:	Income less than B/.30,000	241	121	1/2
Stratum II:	Income B/.30,001 and over	<u>5</u>	<u>5</u>	1/1
	Sub-total	246	126	
4. Commerce				
Stratum I:	Income less than B/.30,000	5,804	301	1/19
Stratum II:	Income between B/.30,001 and B/.55,000	11	11	1/1
Stratum III:	Income of B/.55,001 and over	<u>6</u>	<u>6</u>	1/1
	Sub-total	5,821	318	



TABLE 18.--Continued.

Sector and Strata		Population N	Sample Size n	Expansion Factor f
5. Real estate				
Stratum I:	Income less than B/.30,000	3,435	219	1/15
Stratum II:	Income between B/.30,001 and B/.55,000	27	27	1/1
Stratum III:	Income of B/.55,001 and over	<u>6</u>	<u>6</u>	1/1
	Sub-total	3,468	252	
6. Services				
Stratum I:	Income less than B/.30,000	368	122	1/4
Stratum II:	B/.30,001 and over	<u>2</u>	<u>2</u>	1/1
	Sub-total	370	124	
7. Individual revenues				
Stratum I:	Income less than B/.30,000	10,833	473	1/23
Stratum II:	Income between B/.30,001 and B/.55,000	257	65	1/4
Stratum III:	Income of B/.55,001 and over	<u>41</u>	<u>41</u>	1/1
	Sub-total	11,131	579	

TABLE 18.--Continued.

Sector and Strata		Population N	Sample Size n	Expansion Factor f
8. Professional revenues				
Stratum I:	Income of less than B/.30,000	13,390	397	1/34
Stratum II:	Income between B/.30,001 and B/.55,000	63	16	1/4
Stratum III:	B/.55,001 and over	<u>28</u>	<u>28</u>	1/1
	Sub-total	13,481	441	
9. Colon Free Zone firms				
Stratum I:	Income of less than B/.30,000	9	9	1/1
Stratum II:	Income of B/.30,001 and over	<u>1</u>	<u>1</u>	1/1
	Sub-total	10	10	
	TOTAL	35,998	2,237	

SOURCE: Republic of Panama, Computer Department, Ministry of the Treasury, Individual Income Tax Returns, 1975 (Panama City: Ministry of the Treasury, 1975).

As it may be noticed in Table 18, the major stratum 1 are subdivided into three strata: Stratum I, agriculture; Stratum II, mining; and Stratum III, transport, storage and communication. Agriculture includes a population of 1,003 taxpayers. The sample includes 200 taxpayers, selected randomly by including one out of every five from the population in agriculture. In mining, the population of 39 taxpayers was included in the sample as Stratum II. In Stratum III (transport, storage and communication) the population includes 374 taxpayers; the sample includes 93 by selecting one taxpayer out of every other four from this stratum population.

For manufacturing industries, the whole population of 55 taxpayers was included as the major stratum two. In the major stratum three (construction, power, gas, water and other similar sources of income), the level of income reported by the taxpayers was used to determine the strata. Stratum I recorded a population of 241 taxpayers with reported income of less than B/.30,000. The sample included one taxpayer out of every two of this population. Stratum II includes a population of five taxpayers with reported income over B/.30,001; the sample includes this whole population.

For the remaining major strata (commerce, real estate, services, individual revenues, professional revenues, and Colon Free Zone firms) the elements of the sample for each sub-stratum were selected by the same procedure explained above. The sub-strata are determined by the level of income reported by the taxpayers.

### Corporate Sample

Corporate income tax returns were classified in six major economic activities. These are: (1) agriculture, mining, transport, storage and communication; (2) manufacturing industries; (3) construction, power, gas, water and other sources of income; (4) commerce; (5) real estate and banks; and (6) services.

Corporate income was the indicator selected to determine the sample size. It was assumed that the income's variance was related to the variance of the tax expenditures registered in each firm. Income's variance was determined for those strata of large population. Optimal allocation was the criterion used to estimate the sample size of the strata. This criterion assumed that the sample size for each stratum is proportional to the variance of the population in the stratum. On the other hand, in those cases where the population in the stratum consisted of only a few taxpayers, the whole population was included in the sample. This occurred in agriculture, mining, transport, storage and communication.

Table 19 shows the stratified sample structure for corporations. The Ministry of the Treasury processed a total of 8,582 corporate tax returns. Of this total, the random sample included 888 returns, that is, 10.3 percent of total corporate tax returns. As it may be seen in Table 19, for the strata manufacturing, construction, other sources of income and services, which reported over B/40,000 of income, the elements included in the sample consisted of one out of four returns of the total returns reported in the stratum. For example, considering the manufacturing stratum, 463 tax returns

TABLE 19.--Population and Sample of the Survey to Determine the Corporate Tax Expenditures from Panama's Income Tax Returns, 1975.

Sector and Strata		Population N	Sample Size n	Expansion Factor f
1. Agriculture, mining, transport storage and communications				
Stratum I:	Agriculture	48	48	1/1
Stratum II:	Mining	6	6	1/1
Stratum III:	Transport, storage and communication	<u>78</u>	<u>78</u>	1/1
	Sub-total	132	132	
2. Manufacturing industries		<u>463</u>	<u>120</u>	1/4
3. Construction, power, gas, water and other sources of income				
Stratum I:	Construction	281	73	1/4
Stratum II:	Power, gas and water	9	9	1/1
Stratum III:	Other sources of income	<u>235</u>	<u>61</u>	1/4
	Sub-total	525	143	
4. Commerce				
Stratum I:	Less than B/.100,000	4,186	197	1/20
Stratum II:	Income of B/.100,001 and over	<u>226</u>	<u>29</u>	1/8
	Sub-total	4,412	226	
5. Real estate and banks				
Stratum I:	Real estate	1,843	119	1/15
Stratum II:	Banks	<u>10</u>	<u>10</u>	1/1
	Sub-total	1,853	129	

TABLE 19.--Continued.

Sector and Strata		Population N	Sample Size n	Expansion Factor f
6. Services				
Stratum	I: Less than B/40,000	1,108	115	1/10
Stratum	II: Income of B/40,001 and over	<u>89</u>	<u>23</u>	1/4
	Sub-total	1,197	138	
	TOTAL	8,582	888	

SOURCE: Republic of Panama, Computer Department, Ministry of the Treasury, Corporate Income Tax Returns, 1975 (Panama City: Ministry of the Treasury, 1975).

were reported. The sample included only 120, selected randomly by choosing one out of every four of total returns reported in this stratum.

In commerce, the Stratum I included 4,186 tax returns. The sample included 197, selected randomly from one out of every 20 of the total returns in the stratum. Stratum II consisted of 29 elements, selected randomly from one out of every eight of the 226 tax returns reported.

In Stratum I, real estate, the sample included 119 tax returns, obtained by selecting one out of every 15 tax returns from the total of 1,843 reported in this group. Finally, in services, Stratum I, the sample included 115 tax returns, obtained by selecting one out of every 10 tax returns from 1,108 reported in this group.

## CHAPTER V

### INDIVIDUAL TAX EXPENDITURES

The definition of personal income is the guideline to determine what is a tax expenditure. The Haig-Simon definition of personal income is a widely-accepted concept of income. This definition states that personal income is the algebraic sum of market value of rights exercised in consumption and the change in value store of property rights between the beginning and the end of a period in question. This definition allows deductions for current expenditures directly related to the process of earning income. By comparison, this study defines tax expenditures as those tax incentives or special tax provisions which cause a deviation from this widely-accepted definition of income.

Tax expenditures exclude current expenditures directly related to the process of earning net income, i.e., expenditures for a medical doctor's equipment or professional books. These are treated as costs related to the process of earning income. The other deductions excluded are personal exemptions. These deductions reflect a government's policy to exempt income needed for basic living expenses.



Panama's principal tax expenditures include donations to educational and charitable institutions, dues paid to nonprofit entities and associations, and mortgage interest payments of owner-occupied homes.

Individual tax expenditures also include various kinds of excluded income that is not reported by the taxpayer in his tax return, such as: (1) prizes paid by government lotteries, (2) income from games of chance operated by the government, (3) nontaxable earnings of government employees, (4) certain income from individuals the properties of individuals, (5) compensation paid by insurance companies to individuals, (6) commissions paid by insurance companies to individuals, (7) social security benefits, (8) compensation for labor accidents, (9) pensions, and (10) interest payments from savings accounts.

#### Measurement of Individual Tax Expenditures

The measuring of individual tax expenditures is based on information from individual tax returns for calendar year 1975. Individual tax returns totaled approximately 36,000 taxpayers reporting a total of B/.129.2 million in income and B/13.6 million in tax liability. Panama's individual tax schedule has 20 taxable income brackets of from less than B/.1,000 to a taxable income bracket of over B/.200,000. Table 20, obtained from the Computer Department of Panama's Ministry of the Treasury, presents data for the individual income tax. This table shows: (1) the number of tax returns, (2) the income declared, (3) the tax liability, and

TABLE 20.--Distribution of Income Tax Returns by Income Brackets for 1975.

Income Brackets (Balboas)	Number of Returns	Total Amount Income (Balboas)	Tax Liability (Balboas)	Effective Rate (Percent)
1 to 1,000	20,083	3,666,186	91,658	2.5
1,001 to 2,000	3,248	4,693,668	131,799	2.8
2,001 to 3,000	1,951	4,830,902	163,506	3.4
3,001 to 4,000	1,395	4,878,527	195,062	4.0
4,001 to 5,000	1,238	5,669,915	256,054	4.6
5,001 to 6,000	999	5,486,895	289,025	5.3
6,001 to 8,000	1,699	11,823,979	748,463	6.3
8,001 to 10,000	1,249	11,192,326	849,226	7.6
10,001 to 15,000	2,010	24,688,029	2,418,115	7.8
15,001 to 20,000	1,000	17,265,890	2,106,848	12.2
20,001 to 30,000	743	17,795,146	2,607,252	14.7
30,001 to 40,000	215	7,296,971	1,260,812	17.3
40,001 to 50,000	80	3,543,676	698,303	19.7
50,001 to 60,000	28	1,529,982	336,514	32.0
60,001 to 70,000	20	1,284,552	308,084	24.0
70,001 to 80,000	15	1,120,330	291,923	26.1
80,001 to 90,000	11	938,456	263,761	28.1
90,001 to 100,000	4	377,961	112,781	29.8
100,001 to 200,000	10	1,220,541	423,081	34.7
Over 200,000	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
TOTALS	35,998	129,193,812	13,552,268	10.5

SOURCE: Ministry of the Treasury, Computer Department.

(4) the effective tax rate by income brackets. Table 21 shows the same data by percentages.

In determining tax expenditures, no judgment is made about the desirability of any specific provision, or about the effectiveness of this tax approach relative to other methods of achieving government goals.

It was necessary to measure each tax expenditure in isolation. Therefore, the amount of each deduction was added back to calculate the taxable income. Then, the difference in tax liabilities between the existing structure of tax rates and this new higher level of tax liabilities is taken as the amount of each tax expenditure.

Determining each tax expenditure is a difficult and time-consuming task without the help of a computer, for it requires that each deduction on the tax return be recorded. In Panama, the Ministry of the Treasury's Computer Department maintains records on global data only, with the following information for each tax return: (1) the code of the taxpayer, (2) the main source of income, (3) the taxable income bracket, (4) the gross income, (5) the amount deducted, (6) the net taxable income, and (7) the tax liability.

The unrecorded breakdown of deductions limited the use of the computer to work with 36,000 tax returns in order to determine the tax expenditures. Therefore, for the purpose of this study, a random stratified sample method was used to determine Panama's tax expenditures. This method was selected because of the highly skewed distribution of income shown in Tables 20 and 21.

TABLE 21.--Distribution of Income by Income Brackets, 1975 (Percentages).

Income Brackets (Balboas)		Number of Returns	Declared Income	Tax Liability
1 to	1,000	55.8	2.8	0.7
1,001 to	2,000	9.0	3.6	1.0
2,001 to	3,000	5.4	3.7	1.2
3,001 to	4,000	3.9	3.8	1.4
4,001 to	5,000	3.4	4.5	1.9
5,001 to	6,000	2.8	4.8	2.1
6,001 to	8,000	4.7	9.2	5.5
8,001 to	10,000	3.5	8.7	6.3
10,001 to	15,000	5.6	19.1	17.8
15,001 to	20,000	2.8	13.4	15.5
20,001 to	30,000	2.1	13.9	19.2
30,001 to	40,000	0.6	5.6	9.3
40,001 to	50,000	0.2	2.7	5.2
50,001 to	60,000	0.1	1.2	2.5
60,001 to	70,000	0.1	1.0	2.3
70,001 to	80,000	0.0	0.9	2.2
80,001 to	90,000	0.0	0.7	1.9
90,001 to	100,000	0.0	0.3	0.8
100,001 to	200,000	<u>0.0</u>	<u>0.9</u>	<u>3.1</u>
TOTALS		100.0	100.0	100.0

SOURCE: Ministry of the Treasury, Computer Department.

These tables show that the income brackets of less than B/.1,000 and up to B/.8,000 accounted for 85 percent of the tax returns and 13.8 percent of the tax liability. The remaining income brackets of B/.8,000 through B/.200,000 account for only 15 percent of the taxpayers while accounting for 86.2 percent of total tax liability. With a population of this type, stratification by income brackets usually is more effective in determining the estimate of the population than a simple random sampling method.

Estimate of Individual Tax Expenditures  
from Non-Reported Income, 1975

The tax law excludes from tax liability a long list of individual income items, such as prizes from the national lottery, gambling made available by the government, non-taxable earnings of government employees, interest from savings accounts, commissions paid by insurance companies to individuals, compensation paid by insurance companies to individuals, etc.

Table 22 presents an estimate of tax expenditures due to individual non-reported income for 1975. These items accounted for B/.168.3 million of individual non-reported income. Assuming an average effective tax rate of 10.5 percent of an estimate of individual tax expenditures results in B/.17.7 million. This amount represents 7.8 percent of total tax revenue of B/.227 million in 1975.

It is important to note that the main source of tax expenditures from individual non-reported income are prizes from the national lottery of B/.9.2 million, winnings from the horse race

TABLE 22.--Estimate of Individuals' Tax Expenditures from Non-Reported Income, 1975 (in Millions of Balboas).

Non-Reported Income	Amount	Tax Expenditures
Prizes from the national lottery,	B/.88.0	B/.9.24
winnings from the race track,	23.5	2.47
prizes from gambling (casinos)	25.4	2.67
Non-taxable earnings of government employees	5.2	0.55
Interest from savings accounts	7.4	0.74
Commissions paid by insurance companies to individuals	6.3	0.68
Compensations paid by insurance companies to individuals	<u>12.5</u>	<u>1.31</u>
TOTAL	168.3	17.68

SOURCE: Republic of Panama, Contraloría General de la República, Dirección de Estadística y Censo, Situación Económica, Hacienda Pública y Finanzas. Año 1975 (Panama City: Contraloría General de la República, 1975), pp. 82, 85, 86, 94, 145 and 160.

track of B/.2.5 million, and prizes from gambling (casinos) of B/.2.7 million.

Tax Expenditure Estimates from  
Social Security Benefits, 1975

Social security benefits include: (1) compensation payment for labor accidents, (2) pension payments on retirement, (3) pension payments because of labor disability, (4) pension payments to widows and survivors, and (5) payments due to motherhood.

These payments amounted to nearly B/.40 million for 1975. Table 23 presents a summary of the payments from social security benefits approximated at B/.4.2 million. No information could be obtained on the income structure of the recipients of social security benefits. The obstacle of having a breakdown by income groups benefiting from social security payments limited a more precise estimate of these tax expenditures.

The Panamanian social security system includes both employees as well as employers in the system. The whole range of taxable income and income tax rates are represented in the social security system. The difficulty of determining the income brackets of the social security recipients leads to the need to use the individual average income tax rate to estimate the social security tax expenditures.

The average income tax rate for individuals was 10.5 percent in 1975. Applying this tax rate to the B/.39.8 million payment on social security benefits results in B/.4.2 million in tax expenditures for this year.

TABLE 23.--Tax Expenditures Estimates from Social Security Benefits, 1975 (Thousands of Balboas).

Benefits	Numbers of Recipients	Amount	Tax Expenditures <sup>1</sup>
Compensation payment for labor accidents	34,807	2,207	232
Pension payments <sup>2</sup>	25,814	33,501	3,518
Motherhood subsidies	6,372	<u>4,103</u>	<u>431</u>
TOTALS		39,811	4,181

SOURCE: Republic of Panama, Contraloría General de la República, Dirección de Estadística y Censo, Panamá en Cifras Años 1971 a 1975 (Panamá: Contraloría General, 1976), pp. 174 and 175.

<sup>1</sup>Estimated using the average individual income tax rate, which was 10.5 percent for 1975.

<sup>2</sup>Includes pension payments to retirement labor disability, and payments to widows and survivors.



It is important to notice that tax expenditures are underestimated by using the individual average income tax rate. This is so because of the erosion of the tax base due to tax evasion, special deductions, and other special tax privileges allowed in the income tax system. These elements tend to reduce the real average income tax rate of the tax system.

Tax Expenditure Estimates from Income  
Derived from Individual Properties

Income derived from individual properties should be included in the individual income tax base. Part of this income is not recorded either in the government income tax statistics or in the income tax returns.

The Panamanian government only taxes the private ownership of land, buildings, and other permanent constructions attached to the land. The property tax rate schedule is applied to both corporations and individuals. The property tax rate is low, from a minimum of 1.40 percent for a property value of B/.10,000 to a maximum tax rate of 2.10 percent for a property value of over B/.75,000. Private non-profit institutions are exempted from the property tax. Revenues from this tax accounted for only 5 percent (B/.11.9 million) of total tax revenue in 1975. As it may be noticed, property other than land and buildings traditionally has been omitted from the property tax system, as well as the income derived from the ownership of these properties. These features of the property tax system lead to expenditures that need to be measured.

In attempting to measure tax expenditures from income derived from individual properties, two ways may be followed:

(1) undertake a survey of property owners to determine an indicator of income derived from properties; and (2) the use of national income statistics that have an estimate of the different sources of national income. This study used the information from the national income statistics due to the time and the cost implied in undertaking an income survey.

Table 24 presents an estimate of tax expenditures derived from income due to individual properties. The estimate is based on the item "income from property ownership from households and private non-profit institutions" of the national income statistics.<sup>1</sup> As it may be noticed, this item includes some non-individual property income, such as income of hospitals, labor unions, sports associations, and income from charitable institutions.

Table 24 shows that income derived from individual property accounted for B/.106.2 million in 1975. Tax expenditure estimates accounted for B/.11.2 million. This estimate was determined by applying the 10.5 percent individual average income tax rate to the amount of income derived from individual property registered in the national income statistics in 1975. It may be observed that tax expenditure estimates cover almost the same amount of revenues from the property tax in 1975, which amounted to B/.11.9 million.

---

<sup>1</sup>Contraloría General de la República, Dirección de Estadística y Censo, Situación Económica, Cuentas Nacionales, Años 1973 a 1975 (Panamá: Contraloría General, 1976), pp. xiii, 12.

TABLE 24.--Tax Expenditures Estimate from Property Income, Years  
1973 to 1975 (Millions of Balboas).

Year	Property Income	Tax Expenditures <sup>1</sup>
1973	71.3	-
1974	81.4	-
1975 <sup>2</sup>	106.2	11.2

SOURCE: Contraloría General de la República, Dirección de Estadística y Censo, Situación Económica, Cuentas Nacionales, Años 1973 a 1975 (Panamá: Contraloría General, 1976), p. 12.

<sup>1</sup>Estimated using individual average income tax rate of 10.5 percent for 1975.

<sup>2</sup>Preliminary.

Individual Tax Expenditures Derived  
from Income Tax Returns

A random sample of 2,237 individuals representing 6.2 percent of 36,000 taxpayers was the basis for estimating individual tax expenditures from the income tax returns in 1975. Table 25 presents the individual tax expenditure estimates obtained through the review of the deductions allowed by the income tax law. Individual tax expenditures amounted to B/.2.2 million in 1975.

The major individual tax expenditures are: (1) the deduction of interest on mortgages of owner-occupied homes, representing B/.1.5 million, or 68 percent of total tax expenditures; (2) the deduction of property taxes, accounting for B/.447,000, or 20.5 percent of total tax expenditures, and (3) the deduction of medical expenses, accounting for B/196,000, or 9 percent of total expenditures. Other tax expenditures, such as donations to schools and to religious and charitable institutions, and other deductions, accounted for only 2.5 of total tax expenditures.

Table 26 presents the tax expenditures by income group. This table shows that individual tax expenditures are concentrated on taxpayers in the income range of B/.10,000 and over. About 80 percent of the B/.2.2 million of tax expenditures is accounted for in this income range, and benefits only 4,136 taxpayers, representing 11.5 percent of total taxpayers. On the other hand, 20,083 individuals included in the income range under B/.1,000 represent 55.8 percent of total taxpayers and obtain only 0.6 percent of individual tax expenditures.

TABLE 25.--Estimate of Individual Tax Expenditures from the  
Individual Income Tax Returns, 1975 (in Balboas).

	Amount	Percentages
<b>Education</b>		
Donation to schools	293	0.01
Seminar attendance expenses	88	0.00
Donations to art institutions	9	0.00
Training expenses	<u>4</u>	<u>0.00</u>
Sub-total	394	0.02
<b>Health</b>		
Medical expenses	195,781	8.95
<b>Religious Institutions</b>		
Church donations	1,338	0.06
Religious associations	2,002	0.09
Other donations	<u>565</u>	<u>0.03</u>
Sub-total	3,905	0.18
<b>Charitable Institutions</b>		
Asylum donations	286	0.01
Other donations	<u>341</u>	<u>0.02</u>
Sub-total	627	0.03
<b>Nonprofit Institutions</b>		
Contributions to professional associations	8,416	0.38
Social clubs	2,182	0.10
Other contributions	<u>4,955</u>	<u>0.23</u>
Sub-total	15,553	0.71

TABLE 25.--Continued.

	Amount	Percentages
Investments		
Mortgage interest payments on owner-occupied homes	1,490,620	68.21
Property tax deductions	447,223	20.46
Split of business profits between partners	<u>4,317</u>	<u>0.20</u>
Sub-total	1,942,160	88.87
Other Deductions		
Bonuses to employees	24,730	1.13
Unspecified donations	1,340	0.06
Christmas donations	<u>1,002</u>	<u>0.05</u>
Sub-total	27,072	1.24
TOTAL	B/.2,185,493	100.00

SOURCE: Republic of Panama, Computer Department, Ministry of the Treasury, Individual Income Tax Returns, 1975 (Panama City: Ministry of the Treasury, 1975).

TABLE 26.--Individual Tax Expenditures by Income Groups, 1975.

Income Groups	Number of Returns	Percentage	Tax Expenditures (Thousands of Balboas)	Percentage	Tax Saving per Taxpayer (in Balboas)
B/. 0 - B/.1,000	20,083	55.8	12.7	0.6	0.63
1,000 - 2,000	3,248	9.0	20.8	1.0	6.39
2,000 - 3,000	1,951	5.4	20.0	1.0	10.22
3,000 - 4,000	1,395	3.9	15.7	0.7	11.28
4,000 - 5,000	1,238	3.4	39.8	1.8	32.16
5,000 - 6,000	999	2.8	45.4	2.1	45.40
6,000 - 8,000	1,699	4.7	184.8	8.5	108.78
8,000 - 10,000	1,249	3.5	91.1	4.2	72.93
10,000 - 15,000	2,010	5.6	454.7	20.7	226.21
15,000 - 20,000	1,000	2.8	178.6	8.2	178.58
20,000 - 30,000	743	2.1	330.1	15.1	444.28
30,000 - 40,000	215	0.6	556.0	25.3	2,585.88
40,000 - 50,000	80	0.2	60.8	2.8	760.44
50,000 - 60,000	28	0.1	48.0	2.2	1,714.67
60,000 - 70,000	20	0.1	77.8	3.6	3,892.73
70,000 - 80,000	15	0.0	29.2	1.3	1,943.72
80,000 - 90,000	11	0.0	14.6	0.7	1,330.30
90,000 - 100,000	4	0.0	4.5	0.2	1,137.38
100,000 - 200,000	10	0.0	0.9	0.0	94.38
200,000 and over	0	0	0	0	0
TOTAL	35,998	100.0	2,185.5	100.0	60.71

SOURCE: Republic of Panama, Computer Department, Ministry of the Treasury, Individual Income Tax Returns, 1975 (Panama City: Ministry of the Treasury, 1975).

Considering the tax saving per taxpayer, Table 26 shows that 215 taxpayers in the income range of B/.30,000 to B/.40,000 receive about B/.2,600 each; 20 taxpayers in the income range of B/.60,000 to B/.70,000 receive close to B/.3,900 each; 15 taxpayers in the income range of B/.70,000 to B/.80,000 receive close to B/.2,000 each, while taxpayers in the low-income range under B/.1,000 obtain only 63 cents. Clearly, the benefits from individual tax expenditures are very unequally distributed among taxpayers.

### Summary

The Haig-Simon definition of income has been used as the basis for determining those deductions for current expenditures directly related to the process of earning income as compared to those deductions allowed by the income tax system as a measure to promote certain activities. These special tax provisions tend to deviate widely from the accepted definition of income, and at the same time affect the equity and neutrality of the tax system.

In Panama, the special tax provisions (tax expenditures) in general terms take the following forms: (1) individual non-reported income due to activities promoted by the government; (2) social security benefits; (3) property income; and (4) special deductions allowed by the income tax law as reflected in the individual income tax returns.

It is estimated that these four major categories of individual tax expenditures accounted altogether for estimated tax expenditures of B/.35 million in 1975, and represented 16 percent of



the total income tax revenue. Non-reported individual income tax represented B/.17.7 million in tax expenditures; social security benefits, B/.4.2 million; property income, B/.11.2 million; and deductions from individual income tax returns, B/.2.2 million.

The analysis of individual special tax deductions from the income tax returns through a sampling method showed that the benefits from tax expenditures are not equally distributed. It was found that taxpayers in the high-income range received an extraordinary share of tax expenditures as compared to taxpayers in the low-income range. Panama's individual tax expenditures are highly pro-rich.

## CHAPTER VI

### CORPORATE TAX EXPENDITURES

The accepted definition of income for business accounting which allows business cost deductions from gross income in the determination of net income is the framework for calculating tax expenditures. As defined before, tax expenditures are those tax incentives or special provisions in the income tax system which cause the current income tax base to deviate from the widely-accepted definition of income.

The special provisions or tax incentives allow business expenditures in excess of actual costs. In other cases they take the form of tax credits. In Panama, corporate tax expenditures take the form of an investment tax credit, a tax credit to promote export industries, and an employment tax credit. They also include such individual tax expenditures as donations to educational and charitable institutions, and dues paid to nonprofit entities. They also include such non-reported income as interest payments from government securities.

#### Investment Tax Credits

The first investment tax credit was enacted in 1976 through Law Number 70 of 1976. This incentive allows a preferential tax rate of one percent of capitalized dividends of corporations. According

to Article 733 of the Fiscal Code, dividend distributions are taxed at the rate of 10 percent.

Table 27 presents the tax expenditures due to capitalized dividends in 1977. It is shown that 330 corporations reported B/.49.1 million of capitalized dividends. At the rate of a one percent dividends tax, only B/.491,000 was reported as taxes. This implies a tax expenditures of B/.4.4 million for the period of January 1 to September 30, 1977.

TABLE 27.--Dividends Capitalized Due to Investment Tax Credit, 1977<sup>1</sup>  
(in Thousands of Balboas).

Capitalized Dividends	Number of Corporations	Total Amount Capitalized	Percentage	Tax Expenditures
Less than B/.10,000	20	112.6	0.2	10.2
B/.10.000 - 19,999	25	382.8	0.8	34.5
20,000 - 49,999	78	2,779.3	5.7	250.1
50,000 - 99,999	80	6,904.6	14.1	621.5
100,000 - 499,999	113	24,176.0	49.2	2,175.8
500,000 and over	<u>14</u>	<u>14,738.9</u>	<u>30.0</u>	<u>1,326.5</u>
TOTAL	330	49,094.2	100.0	4,418.6

SOURCE: Republic of Panama, Ministry of the Treasury  
(Panama City: September 1977).

<sup>1</sup>January 1 through September 30, 1977.

### Export Tax Credits

The export tax credit was enacted in Panama on December 30, 1974 as a policy designed to promote the export of non-traditional goods. These are products other than bananas, shrimp, sugar and oil, as well as particular goods listed in the law. The tax credit is 20 percent of the value added of the goods exported. The export tax credit certificates can be used only to pay import and direct taxes. The tax credit certificate is issued by the Ministry of Treasury and given to the exporter when the exports are made.

A reform of the export tax credit was introduced through Law Number 71 of December 22, 1976. This reform allows the export tax credit certificate to be transferable and not subject to interest payments by the government. On the other hand, the export tax credit certificate can be used only within nine months after issue.

Since 1975, exports of non-traditional products subject to the tax credit certificate have increased dramatically. These exports totaled B/.1.1 million in 1975, B/.2.3 million in 1976, and B/.10.1 million in 1977.

Table 28 shows total exports compared to the exports subject to export tax credits from 1975 to 1977. As can be seen, exports subject to the tax credits were 0.6 percent in 1975, 1.2 percent in 1976, and 5.5 percent in 1977 as a ratio of exports (excluding oil).

Table 29 presents detail for the main products eligible for export tax credits. During 1975, only a few eligible products were exported. These were B/.337,000 of clothing; B/.787,000 of tobacco,

TABLE 28.--Total Exports of Goods and Exports Subject to Export Tax Credits, 1975 to 1977 (Millions of Balboas).

Years	Total Exports of Goods <sup>1</sup>	Exports Subject to Tax Credits	Percentage
1975	193.8	1.1	0.6
1976	187.5	2.3	1.2
1977	185.0	10.1	5.5

SOURCE: Republic of Panama, General Programming Department, Ministry of Planning and Economic Policy (Panamá City: Ministry of Planning and Economic Policy, 1977).

<sup>1</sup>Excluding oil.

TABLE 29.--Exports Promoted by Tax Credits, 1975 to 1977 (in Balboas).

Products	1975	1976	1977
Clothing	336,893	1,723,627	4,006,161
Tobacco, paper, wooden flowers and plastic products	786,958	370,656	1,509,628
Food products	0	18,593	158,400
Chicken eggs for hatching	0	34,650	315,019
Leather	0	92,650	3,437,525
Aluminum structures	0	50,187	78,945
Plywood	16,910	0	520,626
Clay products	<u>0</u>	<u>0</u>	<u>50,202</u>
TOTAL	1,140,761	2,290,363	10,136,506

SOURCE: Republic of Panama, General Programming Department, Ministry of Planning and Economic Policy (Panama City: Ministry of Planning and Economic Policy, 1977).

paper, wooden flowers and plastic products, and B/.17,000 in plywood. From 1976 to 1977, a large increase in the exports of these goods was reported, and new products also were exported. Clothing exports increased to B/.1.7 million in 1976, and to B/.4.1 million in 1977; tobacco, paper, wooden flowers and plastic products registered B/.370,000 in 1976 and B/.1.5 million in 1977; and plywood exports reported B/.521,000 in 1977. New products exported are food, B/.19,000 in 1976 and B/.158,000 in 1977, and chicken eggs for breeding, B/.35,000 in 1976, and B/.315,000 in 1977; and leather, B/.93,000 in 1976 and B.3.4 million in 1977.

Export tax credits to promote non-traditional export products has provided a new source of tax expenditures in Panama. Table 30 presents the amount of tax expenditures due to export tax credit certificates from 1975 to 1977. As indicated, these tax expenditures have risen from B/.210,000 in 1975 to B/.310 in 1976, and to B/.1.3 million in 1977. The principal amounts of tax expenditures are for clothing, tobacco, paper, wooden flowers, plastic products, and leathers.

#### Corporate Tax Expenditures Derived from Income Tax Returns

The special treatment and deductions allowed by the Panamanian Fiscal Code that do not represent direct costs of firms lead to corporate tax expenditures. The tax expenditures found in a random sample of income tax returns are deductions for the purpose of education and health, contributions to charitable institutions, contribution to

TABLE 30.--Tax Expenditures Due to Exports Tax Credit Certificates, 1975 to 1977 (in Balboas).

Products	1975	1976	1977
Clothing	38,263	136,550	343,292
Tobacco, paper, wooden flowers, and plastic products	168,709	136,026	222,326
Food products	0	2,458	23,703
Chicken eggs for hatching	0	7,207	66,210
Leather	0	24,670	623,163
Aluminum structures	0	2,943	4,932
Plywoods	3,444	0	25,776
Clay products	<u>0</u>	<u>0</u>	<u>277</u>
TOTAL	210,416	309,854	1,309,676

SOURCE: Republic of Panama, General Programming Department, Ministry of Planning and Economic Policy (Panama City: Ministry of Planning and Economic Policy, 1977).



religious and nonprofit institutions, and deductions related to investment.

Table 31 presents an estimate of the corporate tax expenditures found in the corporate income tax returns for 1975. It is shown that tax expenditures accounted for an amount close to B/.3.3 million. Of this amount, almost 25 percent of B/.815,000 are due to contributions to non-profit institutions, such as professional associations, unspecified contributions, and social club contributions. On the other hand, B/.1.1 million or 34 percent are tax expenditures due to mortgage interest payments of owner-occupied homes. Bonuses to employees, Christmas donations to employees, and unspecified donations accounted for B/.1.1million or 34 percent of total tax expenditures. Tax expenditures related to education, health, religious and charitable institutions accounted for 2 percent of total tax expenditures.

The analysis of tax expenditures by income groups discloses that there is a concentration of tax expenditures in the high-income ranges. This feature is shown in Table 32. As it can be seen, 8,582 corporate income tax returns were reported to the Ministry of the Treasury in 1975. Of this total, 83.6 percent reported an income of less than B/.15,000 in 1975, and received only 6 percent of total tax expenditures. On the other hand, taxpayers with an income in the range of B/.100,000 and over accounted for 1.7 percent of total corporations, or 146 firms. These firms received 55.2 percent of tax expenditures. Furthermore, taxpayers in the income range of less than B/15,000 received only B/.22.88 per taxpayer,

TABLE 31.--Estimate of Corporate Tax Expenditures from Corporate Income Tax Returns, 1975 (in Balboas).

	Amount	Percentages
Education:		
Research expenses	15	0.00
Donations to schools	8,980	0.27
Scholarships	11,473	0.35
Seminar attendance expenses	1,210	0.04
Donations to art institutions	2,747	0.08
Training expenses	<u>20,220</u>	<u>0.62</u>
Sub-total	44,645	1.36
Health:		
Medical expenses	436	0.01
Health institutions	497	0.02
Health associations	<u>1,106</u>	<u>0.03</u>
Sub-total	2,039	0.06
Religious institutions:		
Church donations	677	0.02
Religious donations	1,655	0.05
Other donations	<u>2,349</u>	<u>0.07</u>
Sub-total	4,681	0.14
Charitable institutions:		
Handicapped institutions donations	832	0.03
Orphan donations	179	0.01
Asylum donations	10,558	0.32
Other donations	<u>9,565</u>	<u>0.29</u>
Sub-total	21,134	0.64
Non-profit institutions:		
Contribution to professional associations	428,537	13.05
Social club contributions	11,341	0.35
Other contributions	<u>375,091</u>	<u>11.42</u>
Sub-total	814,969	24.82

TABLE 31.--Continued.

	Amount	Percentages
Investments:		
Mortgage interest payments on owner-occupied homes	1,112,941	33.88
Split of business profits between partners	82,122	2.50
Property tax deductions	<u>68,395</u>	<u>2.08</u>
Sub-total	1,263,458	38.46
Other deductions:		
Bonuses to employees	953,387	29.02
Unspecified donations	112,520	3.43
Christmas donations to employees	<u>67,966</u>	<u>2.07</u>
Sub-total	1,133,873	34.52
TOTAL	3,284,799	100.00

SOURCE: Republic of Panama, Computer Department, Ministry of the Treasury, Corporate Income Tax Returns, Year 1975 (Panama City: Ministry of the Treasury, 1975).

TABLE 32.--Corporate Tax Expenditure by Income Groups, 1975.

	Number of Returns	Percentage	Tax Expenditure (Millions of Balboas)	Percentage	Tax Saving per Taxpayer (in Balboas)
B/.0 - B/.15.000	7,176	83.6	0.20	6.1	27.88
15,000 - 30,000	683	8.0	0.67	20.4	979.64
30,000 - 100,000	577	6.7	0.60	18.3	1,043.00
100,000 - 500,00	124	1.4	1.57	47.8	12,661.60
500,000 and over	22	0.3	0.24	7.4	11,079.59
TOTAL	8,582	100.0	3.28	100.0	382.75

SOURCE: Republic of Panama, Computer Department, Ministry of the Treasury, Corporate Income Tax Returns, Year 1975 (Panama City: Ministry of the Treasury, 1975).

while taxpayers in the income range of B/.100,000 to B/.500,000 received an amount of B/.12,661.60 per taxpayer, and each of the 22 taxpayers who reported an income of B/.500,000 received an average of B/.11,079.59.

Table 33 presents corporate tax expenditures by economic activity for 1975. The table shows that manufacturing receives B/.1.4 million or 42 percent of total tax expenditures, while commerce received B/.908,400 or 27.7 percent, and real estate and banks received B/.471.200 or 14.3 percent. The concentration of tax expenditures in the above mentioned economic activities correspond to the major economic activities of the country.

TABLE 33.--Corporate Tax Expenditures by Economic Activity, 1975  
(in Thousands of Balboas).

Economic Activity	Tax Expenditures	Percentage
Agriculture, mining, transport, storage and communication	247.0	7.5
Manufacturing	1,380.0	42.0
Construction, electricity, gas, water	69.2	2.1
Commerce	908.4	27.7
Real estate and banks	471.2	14.3
Services	<u>209.0</u>	<u>6.4</u>
TOTAL	3,284.9	100.0

SOURCE: Republic of Panama, Computer Department, Ministry of the Treasury, Corporate Income Tax Returns, Year 1975 (Panama City: Ministry of the Treasury, 1975).

Summary

Corporate tax expenditures in Panama include an investment tax credit, tax credit for export industries, employment tax credits, and special deductions in the income tax return permitted by the Fiscal Code.

The estimated total of corporate tax expenditures accounted for B/3.5 million in 1975. Deductions from income tax returns reported B/.3.3 million. There is no information available in 1975 about employment tax credit. This information will be reported for the first time in the corporate income tax return for 1977.

The study of a random sample of the corporate income tax returns revealed that tax expenditures are not equally distributed among taxpayers. The tax saving from the special deductions is highly favorable to high-income taxpayers. At the same time, manufacturing, commerce, real estate and banking are the economic activities benefiting the most from corporate tax expenditures.

## CHAPTER VII

### SUMMARY AND CONCLUSIONS

The purpose of this study is to measure tax expenditures in Panama for the year 1975. Tax expenditures represent government spending for particular activities or groups made through the tax system through tax incentives, deductions, exclusions from income, special tax rates, credits against taxes, and other similar devices.

Tax incentive policies in Panama have been oriented basically to promote growth and encourage private sector involvement in economic activity. At the same time, it was found that these policies have contributed to an increased concentration of income, have reduced the tax base, and increased the problems of obtaining resources needed for government programs. These tax expenditures also have facilitated tax avoidance and evasion.

It was found in this study that the Panamanian tax system also depends to a great extent on indirect taxes. As a result, a large proportion of the population, especially low- and medium-income groups, bear an undue burden of the tax system. Some tax incentives help to exclude from the tax system certain kinds of incomes. These phenomena lead us to conclude that these are inefficiencies in the Panamanian tax system which contribute to an inequality in income distribution.

The overview of Panama's economy during the 1960's revealed that, even though there was a high rate of economic growth, the period was characterized by an increasing maldistribution of income and wealth. During the 1970's, the world-wide inflation, the oil crisis, and national self-interest policies affected negatively the performance of the economy. Consequently, the tax system became unable to marshal adequate revenues for the current government's expenses. Another part of the problem was that almost every tax has extensive exemptions, deductions, and exclusions, which not only affects negatively the vertical and horizontal equity of the tax system but also reduces the tax base.

This study presents a new approach for viewing government policies to promote economic and social objectives through indirect tax measures rather than through direct expenditures. Basically, tax incentives tend to provide monetary assistance or benefits through the tax law so as to motivate a desired course of action which is financially more attractive to the taxpayers. To fulfill this purpose, the financial assistance can take the form of investment credits, generous bad debt reserves, a surtax exemption, generous depreciation allowances, charitable deductions, or preferential tax treatment, and similar devices. These incentives generally have been justified as a mechanism to improve efficiency and growth. That is, investment tax credits, as an example, may be adopted to increase capital accumulation, and consequently to accelerate the rate of growth in the economy. Accelerated



depreciation may increase the capital available for reinvestment that may provide more jobs, income and consumption.

It is important to notice that, although tax incentives as instruments to achieve efficiency and growth in the economy, growth as a goal may have prevailed in the fiscal policy of developed as well as developing economies. In the process of resolving economic and social problems, tax incentives may affect both the equity of the tax system and the allocation of resources. That is, tax incentives may affect the equity of the tax system by providing a greater benefit to high-income taxpayers than to low-income taxpayers. Besides, those who, for any reason, are outside of the tax system, do not benefit from the incentives.

Tax incentives also affect the allocation of resources. Favorable tax treatment of capital gains increases the after-tax earnings on assets, encouraging people to invest in assets which may appreciate in value. Consequently, this may encourage speculation, and interfere with the orderly flow of financial capital into useful channels. In other cases, these incentives permit windfall gains to taxpayers, because the taxpayers may receive support from the government for doing what they would normally do.

Tables 34 and 35 present a summary of Panama tax expenditure estimates for 1975.

Panamanian individual tax expenditures were B/.35 million in 1975. This amount represents 16 percent of the tax revenues of the government. Non-reported income, property income, social security benefits and special deductions allowed in the individual income tax

TABLE 34.--Panama Individual and Corporate Tax Expenditures from Income Tax Returns, 1975  
(in Balboas).

	Individual	Corporate	Total	Percentage
<b>Education</b>				
Research expenses	-	15	15	0.00
Donation to schools	293	8,980	9,273	0.17
Scholarships	-	11,473	11,473	0.21
Seminar attendance expenses	88	1,210	1,298	0.02
Donation to art institutions	9	2,747	2,756	0.05
Training expenses	4	20,220	20,224	0.37
Sub-total	394	44,645	45,039	0.82
<b>Health</b>				
Medical expenses		436	196,217	3.59
Health institutions	195,781	497	497	0.01
Health associations	-	1,106	1,106	0.02
Sub-total	195,781	2,039	197,820	3.62
<b>Religious Institutions</b>				
Church donations	1,338	677	2,015	0.04
Religious donations	2,002	1,655	3,657	0.07
Other donations	565	2,349	2,914	0.05
Sub-total	3,905	4,681	8,586	0.16

TABLE 34.--Continued.

	Individual	Corporate	Total	Percentage
<b>Charitable Institutions</b>				
Handicapped institution donations	-	832	832	0.02
Orphanage donations	-	179	179	0.00
Asylum donations	286	10,558	10,844	0.20
Other donations	341	9,565	9,906	0.18
Sub-total	627	21,134	21,761	0.40
<b>Non-Profit Institutions</b>				
Contributions to professional associations	8,416	428,537	436,953	7.98
Social club contributions	2,182	11,341	13,523	0.25
Other contributions	4,955	375,091	380,046	6.95
Sub-total	15,553	814,969	830,522	15.18
<b>Investments</b>				
Mortgage interest payments of owner-occupied homes	1,490,620	1,112,941	2,603,561	47.59
Property tax deductions	447,223	68,395	515,618	9.43
Split business profits between partners	4,317	82,122	86,439	1.58
Sub-total	1,942,160	1,263,458	3,205,618	58.60

TABLE 34.--Continued.

	Individual	Corporate	Total	Percentage
Other Deductions				
Bonuses to employees	24,730	953,387	978,117	17.88
Christmas donations	1,002	67,966	68,968	1.26
Unspecified donations	1,340	112,520	113,860	2.08
Sub-total	<u>27,072</u>	<u>1,133,873</u>	<u>1,160,945</u>	<u>21.22</u>
TOTAL	2,185,492	3,284,799	5,470,291	100.00

SOURCE: Tables 25 and 31.

TABLE 35.--Summary of Panama Tax Expenditures, 1975 (in Millions of Balboas).

	Amount	Percentage
Individual		
Non-reported income	17.68	45.6
Social security benefits	4.20	10.8
Property income	11.20	28.9
Deductions from income tax returns	<u>2.20</u>	<u>5.7</u>
Sub-total	35.28	91.0
Corporate		
Investment tax credits <sup>1</sup>	0	0
Export tax credits <sup>2</sup>	0.21	0.5
Deductions from income tax returns	<u>3.28</u>	<u>8.5</u>
Sub-total	3.49	9.0
TOTAL	38.77	100.0

SOURCE: Tables 22, 23, 24, 25, 27, 30 and 31.

<sup>1</sup>Tax expenditure estimate due to investment tax credit is B/.4.4 million for 1977.

<sup>2</sup>Tax expenditure estimate due to export tax credits is B/.0.31 million for 1976 and B/.1.31 million for 1977.

returns are the major tax expenditures. The analysis of individual tax expenditures from the income tax returns showed that the benefits from the special provisions are very unequally distributed. It was found that taxpayers in the high-income range are benefiting much more than low-income taxpayers.

Corporate tax expenditures accounted for B/3.5 million in 1975, close to 2 percent of total government tax revenue. Analysis of a random sample of 888 income tax returns for corporations revealed B/.3.3 million of tax expenditures due to special tax deduction allowed in the income tax law. This figure may be underestimated because of the difficulties involved in measuring some of the income tax deductions.

As in the case of individual tax expenditures, corporate tax expenditures are not equally distributed among corporations. Tax savings from the special provisions benefit the large corporations the most.

Panamanian corporate tax expenditures will increase because of new tax incentives enacted in December of 1976. These involve an investment tax credit, an employment tax credit, incentives to tourism industries, and the reform of the tax credit to non-traditional exports.

This study of Panamanian tax expenditures has shown the need to be more concerned about tax incentive policies. There is a need to evaluate the benefits and costs to the economy. There is a special need to be concerned about the distributional impact of tax expenditures. It is important to determine to what extent special

tax provisions, exclusions and deductions are promoting tax evasion and avoidance, and causing a misdirection and wastage of resources as well as social inequities.

## BIBLIOGRAPHY



## BIBLIOGRAPHY

- Aaron, H. "What is a Comprehensive Tax Base Anyway?" National Tax Journal 22 (December 1969):543-49.
- Bangs, Robert B. Financing Economic Development. Chicago: The University of Chicago Press, 1968.
- Barlow, E. R., and Wender, Ira T. Foreign Investment and Taxation. New Jersey: Englewood Cliffs, 1955.
- Barnes, Peter. "The Sharing of Land and Resources in America." The New Republic Pamphlet. New Jersey: Harrison-Blaine of New Jersey, Inc., 1973.
- Bermdt, Ernest R.; Kesselman, Jonathan R.; and Williamson, Samuel H. Tax Credits for Employment Rather than Investment. Madison: University of Wisconsin, 1975.
- Best, Michael H. "Uneven Development and Dependent Market Economics." The American Economic Review 66 (May 1976):136-41.
- Bird, Richard M. "Income Redistribution, Economic Growth and Tax Policy." Proceedings of the Sixty-First Annual Conference on Taxation of the National Tax Association. San Francisco, California: 1968, pp. 146-52.
- Bird, Richard M., and Head, John G. Modern Fiscal Issues. Toronto: University of Toronto Press, 1972.
- Bird, Richard M., and Oldman, Oliver, ed. Reading on Taxation in Developing Countries. Baltimore: The John Hopkins Press, 1975.
- Bird, Richard M., and DeWulf, Luc Henry. "Taxation and Income Distribution in Latin America: A Critical Review of Empirical Studies." Staff Papers 20 (November 1973):639-82.
- Bitteker, Boris I. "Accounting for Federal Tax Subsidies in the National Budget." National Tax Journal 22 (June 1969): 244-61.
- Blinder, Alan S.; Solow, Robert M.; Break, George F.; Steiner, Peter O.; and Netzer, Dick. The Economic of Public Finance. Washington, D.C.: The Brookings Institution, 1974.

- Break, George F., and Pechman, Joseph A. Federal Tax Reform, the Impossible Dream? Washington, D.C.: The Brookings Institution, 1975.
- Buchanan, J. M., and Pauly, M. V. "On the Incidence of Tax Deductibility." National Tax Journal 23 (June 1970): 157-67.
- Butter, J. K.; Thompson, L. E.; and Bollinger, L. L. Effects of Taxation on Investment by Individuals. Boston: Harvard University Press, 1953.
- Chelliah, Raja J. Fiscal Policy in Underdeveloped Countries. London: George Allen and Unwin Ltd., 1969.
- Chen-Young, Paul L. "A Study of Tax Incentive in Jamaica." National Tax Journal 20 (September 1967):292-308.
- Clairmonte, Frederick. Economic Liberalism and Under Development. Bombay: Asia Publishing House, 1960.
- Clark, Joel. "Tax Incentive in Central American Development." Economic Development and Cultural Change 19 (January 1971): 229-52.
- Conrad, Ernest - Albrecht T. "Trends in the Level of Corporate Taxation." Washington, D.C.: International Monetary Fund, November 3, 1972 (mimeographed).
- Colm, Gerhard, and Geiger, Theodore. "Public Planning and Private-Decision-Making in Economic and Social Development." In the Challenge of Development, pp. 5-16. Edited by Richard J. War. Chicago: Aldine Publishing Co., 1967.
- Das, Amritananda. The Political Economy of Development. Calcutta: The Minerva Associates, 1970.
- DeWulf, Luc. "Fiscal Incentives for Industrial Exports in Developing Countries." Washington, D.C.: International Monetary Fund, January 30, 1976 (mimeographed).
- Dosser, Douglas. "Tax Incidence and Growth." Economic Journal 71 (September 1961):572-91.
- Due, John F. Government Finance and Economic Analysis. Homewood: Richard D. Irwin, Inc., 1963.
- \_\_\_\_\_. Indirect Taxation in Developing Economics. Baltimore: The Johns Hopkins Press, 1970.

- \_\_\_\_\_. "Taxation and Economic Development in Tropical Africa."  
In Taxation for African Economic Development, pp. 178-202.  
Edited by Milton C. Taylor. Nigeria: University of Ife,  
1970.
- Fábrega F., Ramón E. y Campodónico Córdoba. José Código Fiscal de Panamá (Panama Fiscal Code). Costa Rica: Lehmann S.A.,  
1974.
- Freeman, R. A. "Tax Loopholes: The Legend and the Reality."  
Vital Speeches 42 (December 1975):102-8.
- Fromm, Gary, and Taubman, Paul. Public Economic Theory and Policy.  
New York: The MacMillan Company, 1973.
- Gelb, Bernard A. Tax-Exempt Business Enterprise: Its Extent & Impact on Tax Revenue. New York: The Conference Board,  
1971.
- Groves, Ronald L. Charitable Contribution by Corporations.  
Washington, D.C.: Tax Management Inc., 1973.
- Guha, A. "Fiscal Policy and Private Savings: An Utility Analysis."  
International Economic Review 11 (February 1970):131-38.
- Gurley, John G. "Federal Tax Policy." National Tax Journal 20  
(September 1967):319-27.
- Gutkin, Sydney A., and Beck, David. Tax Avoidance vs. Tax Evasion.  
New York: The Ronald Press Company, 1958.
- Haq, Mahbub Ul. "Employment in the 1970's: A New Perspective."  
Address at the SID World Conference. Ottawa: World Bank,  
1971.
- Harberger, Arnold C. "The Incidence of the Corporation Income Tax."  
Journal of Political Economy 70 (June 1962):215-40.
- \_\_\_\_\_. "Economic Policy Problems in Latin America: A Review."  
Journal of Political Economy 78 (August 1970):1007-16.
- Haveman, Robert H. The Economic of the Public Sector. New York:  
John Wiley & Sons, Inc., 1976.
- Haveman, Robert H., and Margolis, Julius. Public Expenditures and Policy Analysis. Chicago: Markham Publishing Co., 1970.
- Heller, Walter W. "Fiscal Policies for Underdeveloped Countries."  
In Reading on Taxation in Developing Countries, pp. 6-28.  
Edited by Richard M. Bird and Oliver Oldman. Baltimore:  
The Johns Hopkins Press, 1975.

- Herber, Bernard P. Modern Public Finance: The Study of Public Sector Economics. Homewood: Richard D. Irwin Inc., 1975.
- Hey, L. Economics of Public Finance. London: Pitman Publishing, 1972.
- Hohenstein, Henry J. The IRS Conspiracy. Los Angeles: Nash Publishing Corporation, 1974.
- Holmes, Grace V., and Cox, Jeralynn Lee. Tax Fraud. Ann Arbor: The Institute of Continuing Legal Education, 1973.
- Hyman, David V. The Economic of Governmental Activity. North Carolina: Rinehart Holt and Winston Inc., 1973.
- International Fiscal Association. Tax Incentives as an Instrument for Achievement of Governmental Goals. The Netherlands: Kluwer, 1976.
- Johnson, Harry G. Controls Versus Competition in Economic Development. Ghana: Ghana University Press, 1971.
- Jonas, Norman. Review of Rape of the Taxpayer, by Philip M. Stern. Business Week, 17 March 1973, pp. 15-16.
- Kirschen, E. S.; Bernard, J.; Besters, H.; Blackaby, F.; Eckstein, O.; Faaland, J.; Hartog, F.; Morissens, L.; and Tosco, E. Economic Policy in Our Time Vol. I. Amsterdam: North-Holland Publishing Co., 1964.
- Keyfitz, Nathan. "Can Inequality be Cured?" The Public Interest 31 (Spring 1973):91-101.
- Kurtz, Jerome. "Tax Incentives: Their Use and Misuse." Tax Planning for 1968, pp. 1-26. Twentieth Tax Institute of University of Southern California. New York: Matthew Bender, 1968.
- Lampman, Robert J. "Ends and Means in the War Against Poverty." In Poverty and Affluence, pp. 212-31. Edited by Leo Fishman. London: Yale University Press, 1966.
- Lent, George E. "Tax Incentives for Investment in Developing Countries." Staff Papers 14 (July 1967):249-323.
- \_\_\_\_\_. "Tax Incentives for the Promotion of Industrial Employment in Developing Countries." Staff Papers 18 (July 1971): 399-417.

- \_\_\_\_\_. "Tax Incentive in Developing Countries." In Reading on Taxation in Developing Countries, pp. 363-77. Edited by Richard M. Bird and Oliver Oldman. Baltimore: Johns Hopkins Press, 1975.
- Levin, Jonathan. "The Role of Fiscal Action in the Pursuit of Macroeconomic Objectives." In Reading on Taxation in Developing Countries, pp. 48-57. Edited by Richard M. Bird and Oliver Oldman. Baltimore: Johns Hopkins Press, 1975.
- McLure Jr., Charles E. "The Distribution of Income in Panama." Panama: Agency for International Development, 1969 (typewritten).
- \_\_\_\_\_. "The Incidence, Macroeconomic Policy, and Absolute Prices." Quarterly Journal of Economics 84 (May 1970): 254-67.
- \_\_\_\_\_. "The Proper Use of Indirect Taxation." In Reading on Taxation in Developing Countries, pp. 339-49. Edited by Richard M. Bird and Oliver Oldman. Baltimore: Johns Hopkins Press, 1975.
- McNamara, Robert S. Address to the Board of Director of Governors International Bank for Reconstruction and Development. Washington, D.C., 1972.
- \_\_\_\_\_. Address to the Board of Governors International Bank for Reconstruction and Development. Manila: 1976.
- Mansfield, Charles. "Tax Structure in Developing Countries: An Introduction." Finance and Development 8 (March 1971): 37-41.
- Maxwell, James A. Tax Credit and Intergovernmental Fiscal Relations. Washington, D.C.: The Brookings Institution, 1962.
- Metcalf, L. "Tax-Loopholes: The Farming Business." Vital Speeches 35 (February 1969):253-6.
- Meyers, H. B. "Tax Exempt Property: Another Crushing Burden for the Cities." Fortune 79 (May 1969):76-9.
- Mieszkowski, Peter M. "On Theory of Tax Incidence." Journal of Political Economy 75 (June 1967):250-62.
- Millikin, H. F. The Prudent Man: The Tax Dodging as an Art. New York: Aelard-Schuman, 1963.
- Musgrave, Richard A. The Theory of Public Finance. New York: McGraw Hill, 1969.

- \_\_\_\_\_. Public Finance in Theory and Practice. New York: McGraw Hill, 1973.
- North, Robert C. "Evolving Approaches to Development, Introduction." Stanford Journal of International Studies. Stanford: Stanford University, Spring 1974.
- Organization of American States. Interamerican Economic and Social Council. The Meeting 10 through 20 September 1971. Report on Employment and Growth in the Strategy of Latin American Development: Implications for the Seventies. Redistribution and Employments. (DEA/Ser. H/X.19) (CIES/1641/add 6). 13 August 1971.
- \_\_\_\_\_. Secretariat. A Statement of the Laws of Panama in Matters Affecting Business. Washington, D.C.: Organization of American States, 1974.
- Peacock, Alan T.; and Shaw, G. K. The Economic Theory of Fiscal Policy. London: George Allen and Unwin Ltd., 1971.
- Peacock, Alan T.; and Andic, Suphan. "Fiscal Survey and Economic Development." In Reading on Taxation in Developing Countries, pp. 89-104. Edited by Richard M. Bird and Oliver Oldman. Baltimore: The Johns Hopkins Press, 1975.
- Peachman, Joseph A., and Okner, Benjamin A. Who Bears the Tax Burden? Washington, D.C.: The Brookings Institution, 1974.
- Pechman, Joseph A. Federal Tax Policy. Washington, D.C.: The Brookings Institution, 1966.
- \_\_\_\_\_. The Rich, the Poor, and the Taxes They Pay. Washington, D.C.: The Brookings Institution, 1969.
- \_\_\_\_\_. International Trends in the Distribution of Tax Burdens: Implications for Tax Policy. Address at the First Annual Dinner of the Institute for Fiscal Studies. London: 30 October 1973.
- \_\_\_\_\_, ed. Comprehensive Income Taxation. Washington, D.C.: The Brookings Institution, 1977.
- Prest, A. R. "Taxation and Growth." The Political Quarterly 42 (March 1971):66-74.
- Proxmire, William. Uncle Sam--The Last of the Bigtime Spenders. New York: Simon and Schuster, 1972.

Raby, William L. The Income Tax and Business Decisions. Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1975.

Recktenwald, Horst Claus. Tax Incidence and Income Redistribution: An Introduction. Detroit: Wayne State University Press, 1971.

Republic of Panama. Decree Law Number 12. (Measures to Promote Investments on Natural Resources Economic Activities, Agriculture, Fishery and Other Industries.) Panama: May 10, 1950.

Republic of Panama. Law Number 25. (Incentive to Promote Manufacturing Industries.) Panama: February 7, 1957.

Republic of Panama. Decree Number 60. (Income Tax Regulations.) June 28, 1965.

Republic of Panama. Decree Law Number 26. (Incentives to Build and Rehabilitate Hotels, and Measures to Promote Tourism.) Panama: September 27, 1967.

Republic of Panama. Cabinet Decree Number 401. (Creation of the Community Health Committee and Their Coordination with the Ministry of Health.) Panama: December 29, 1970.

Republic of Panama. Cabinet Decree Number 413. (New Incentives for Manufacturing Industries.) Panama: January 13, 1971.

Republic of Panama. Cabinet Decree Number 172. (Modification to Cabinet Decree Number 413.) Panama: August 24, 1971.

Republic of Panama. Cabinet Decree Number 102. (Legislation for Special Touristic Areas and Incentives for Tourism Development.) Panama: June 20, 1972.

Republic of Panama. Law Number 108. (Tax Credit to Export's Industries.) Panama: December 30, 1974.

Republic of Panama. Law Number 68. (Incentives to the Construction Industry.) Panama: December 22, 1976.

Republic of Panama. Law Number 69. (Accelerated Depreciation.) Panama: December 22, 1976.

Republic of Panama. Law Number 70. (Incentives to Capitalize Non Distributed Profits.) Panama: December 22, 1976.

Republic of Panama. Law Number 71. (Modification to Law Number 180.) Panama: December 22, 1976.

- Republic of Panama. Law Number 75. (Creation of a Retail Sales Tax.) Panama: December 22, 1976.
- Republic of Panama. Law Number 76. (Tax Measures Affecting the Income Tax.) Panama: December 22, 1976.
- Republic of Panama. Law Number 90. (Tax Incentives to Promote Employment.) Panama: December 22, 1976.
- Republic of Panama. Contraloría General de la República. Dirección de Estadística y Censo. Panamá en Cifras: Años 1971 a 1975. Panama City: Contraloría General de la República, 1976.
- Republic of Panama. Contraloría General de la República. Dirección de Estadística y Censo. Estadística Panameña, Situación Económica, Hacienda Pública y Finanzas: Año 1975. Panama City: Contraloría General de la República, 1976.
- Republic of Panama. Contraloría General de la República. Dirección de Estadística y Censo. Estadística Panameña. Situación Económica. Cuentas Nacionales: Años 1973 a 1975. Panama City: Contraloría General de la República, 1976.
- Republic of Panama. Ministerio de Planificación y Política Económica Plan Nacional de Desarrollo: 1976-1980. Objetivos, Políticas y Metas, Globales y Sectoriales. Versión Preliminar. Panama City: Ministerio de Planificación y Política Económica, 1976.
- Republic of Panama. Ministerio de Planificación y Política Económica. Informe Económico 1977. Panama City: Ministerio de Planificación y Política Económica, 1977.
- Ross, Myron H. Income: Analysis and Policy. New York: McGraw Hill, 1964.
- Ross, Stanford G., and Cristensen, John B. Tax Incentive for Industry in Mexico. Massachusetts: Harvard Law School, 1959.
- Rudney, Gabriel G. "Implicit Public Grants Under the Tax System: Some Implications of Federal Tax Aids Accounting." In Redistribution to the Rich and the Poor, pp. 175-181. Edited by Kenneth Boulding and Martin Pfaff. Belmont, Colo.: Wadsworth Publishing Co., 1972.
- Stanford, D. "How Not to Give to the Politician: IRS. Slow to Investigate Contribution to Political Candidate." New Republic, February 1968, pp. 17-18.



- Schultze, Charles L. "The Role of Incentives, Penalties, and Reward in Attaining Effective Policy." In Public Expenditures and Policy Analysis, pp. 145-172. Edited by Robert H. Haveman and Julius Margolis. Chicago: Markham Publishing Co., 1970.
- Servan, Schreiber; Jean, Jacques; and Albert, Michel. The Radical Alternative. New York: W. W. Norton and Company Inc., 1971.
- Shenfield, A. A. The Political Economy of Tax Avoidance. London: The Institute of Economic Affairs, 1968.
- Shourie, Arun. "Ways of Helping the Poor of Panama: Some First Impressions." Panama: Ministry of Planning and Economic Policy, 12 March 1973 (typewritten).
- Stern, Philip M. The Great Treasury Raid. New York: Random House, 1964.
- \_\_\_\_\_. The Shame of the Nation. New York: Iran Iobolensky, 1965.
- \_\_\_\_\_. O, Say Can You See? Washington, D.C.: Acropolis Books, 1968.
- \_\_\_\_\_. The Oppenheimer Case: Security on Trial. New York: Harper and Row, 1969.
- \_\_\_\_\_. "How 381 Super-Rich Americans Managed Not to Pay a Cent in Taxes Last Year." New York Times, 13 April 1969, sec. 6, p. 30.
- \_\_\_\_\_. "Uncle Sam's Welfare Program for the Rich." New York Times, 16 April 1972, sec. 6, p. 28.
- \_\_\_\_\_. "Where the Loot Goes." New Republic, March 1974, pp. 18-19.
- \_\_\_\_\_. The Rape of the Taxpayer. New York: Random House, 1973; Vintage Books, 1974.
- Stiglitz, J. E. "The Effects of Income, Wealth, and Capital Gains Taxation on Risk-Taking." The Quarterly Journal of Economics 83 (May 1969):263-83.
- Suits, Daniel B. "Measurement of Tax Progressivity." American Economic Review 67 (September 1977):747-52.
- Surrey, Stanley S.; and Warren, William C. Federal Estate and Gift Taxation. Brooklyn: Foundation Press, 1956.

Surrey, Stanley S. "Federal Tax and Fiscal Policy: Some Aspects of Future Developments." Proceedings of the Sixty-Second Annual Conference of Taxation National Tax Association.

\_\_\_\_\_. Federal Income Taxation, Cases and Materials. New York: Foundation Press, 1972.

\_\_\_\_\_. Pathways to Tax Reform: The Concept of Tax Expenditures. Cambridge: Harvard University Press, 1973.

\_\_\_\_\_. "Sheltered Life." New York Times Magazine, April 13, 1975, pp. 62-3.

Tanzi, Vito; Bracewell-Milnes, J. B.; and Myddelton, D. R. Taxation: A Radical Approach. London: The Institute of Economic Affairs, 1970.

Tax Institute of America. Tax Incentives. Lexington, Mass.: Heath Lexington Books, 1971.

Ulmer, M. J. "How Unfair are our Taxes?" New Republic. November 7, 1970, pp. 17-19.

United Nations. Economic Commission for Latin America. Economic Survey of Latin America. New York: United Nations, 1969.

U.S. Congress. Joint Economic Committee. Annual Report of Secretary of Treasury: Fiscal Year 1968, by Stanley S. Surrey. 91st Cong., 1st sess., 1969.

U.S. Congress. House of Representatives, Employment Incentive Act of 1969. S.2192, 91st Cong., 1st sess., 16 May 1969. Congressional Record, vol. 115.

U.S. Congress. House of Representatives. Committee on Finance. Tax Reform Act of 1969. Hearing Before the Committee on Finance, H.R. 13270, 91st Cong., 1st sess., 1969.

U.S. Congress. Joint Economic Committee. Economic Analysis and the Efficiency of Government. Statement: The Tax Expenditure Budget by Stanley S. Surrey. Hearing Before the Subcommittee on Economy in Government of the Joint Economic Committee. 91st Cong., 1st sess., 1970.

U. S. Congress. Joint Economic Committee. The Economic of Federal Subsidy Programs. A Compendium of Papers Submitted to the Sub Committee on Priorities and Economy in Government of the Joint Economic Committee. Part 8. Selected Subsidies. 93rd Cong., 2nd sess., 1974.

- U.S. Congress. Joint Economic Committee. Statement Tax Analysis and Advocates by Samuel Hastings Black. The 1974 Economic Report of the President Hearing Before the Joint Economic Committee. 93rd Cong., 2nd sess., 1974.
- U.S. Congress. Joint Committee on Internal Revenue Taxation. Estimates of Federal Tax Expenditures. Washington, D.C.: Government Printing Office, 1975.
- U.S. Congress. House of Representatives, Corporate Tax Study 1974. Congressional Record, vol. 121. 94th Cong., 1st sess., 7 October 1975. Washington, D.C.: Government Printing Office, 1975.
- U.S. Congress. Senate. Committee on Budget. Tax Expenditures. Compendium of Background Material on Individual Provisions. 92nd Cong., 2nd sess. Washington, D.C.: Government Printing Office, 1976.

MICHIGAN STATE UNIVERSITY LIBRARIES



3 1293 03177 6671