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TAX POLICY AND ECONOMIC GROWTH IN DEVELOPING NATIONS

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TABLE OF CONTENTS

PREFACE

At an October 1985 IMF/World Bank meeting in Seoul, Korea, Treasury Secretary James A. Baker, III, outlined a new U.S. approach to the the question of improving the economies of the Less Developed Countries (LDCs). In essence, the plan calls for using the World Bank to achieve economic growth in the LDCs by encouraging the adoption of market-oriented policies. Those countries that adopt market-oriented, pro-growth policies would be rewarded by receiving additional loans and aid both from the World Bank and private lenders.

Baker's approach to economic stagnation in LDCs grows from the Reagan Administration's belief that many developing countries will remain ensnared in the poverty trap unless old policies give way to a pro-growth mix of new measures. Secretary Baker outlined the following reforms which would be necessary to overcome economic stagnation in LDCs:

1. Increased reliance on the private sector, and less reliance on government, to help increase employment, production and efficiency.

2. Supply-side actions to mobilize domestic savings and facilitate efficient investment, both domestic and foreign, by means of tax reform, labor market reform and development of financial markets.

3. Market-opening measures to encourage foreign direct investment and capital inflows, as well as to liberalize trade,

including the reduction of export subsidies.

These policy recommendations are consistent with the findings of this report. A careful analysis of explicit and implicit taxes in up to 100 developing nations in Africa, Latin America, the Mediterranean, the Caribbean, and Asia suggests a set of measures that policymakers in LDCs can employ to stimulate growth.

First, high marginal tax rates should be sharply reduced, especially on personal incomes. Second, threshhold levels at which high marginal rates take effect should be increased. Third, fiscal policy should encourage savings and investment. Fourth, the ragtag mix of controls, regulations, parastatals, tariffs, and other interventions in the economy that distort the efficient allocation of resources--implicit taxes--should be eliminated or neutralized. Those implicit taxes that require serious attention include below-market, compulsory procurement of agricultural products and other commodities (to increase aftertax rates of return to producers), exchange rate restrictions and the elimination of overvalued currencies, elimination of capital controls, movement towards freer trade and international direct investment, repeal of minimum wage legislation and other impediments to the free movement and efficient utilization of labor, elimination of costly business regulations, and curtailing the devastating effect of inflation on holders of financial assets.

It may not be possible in every developing country to undertake a comprehensive overhaul of economic policy, but individual tax reforms that can be carried out on a piecemeal basis need not await the complete transformation of economic policy. The simple reduction of counterproductive marginal tax rates exceeding 50 percent would, by itself, have a beneficial effect, even in the absence of other policy changes.

We would like to thank a number of people who have assisted us in the preparation of this report. First, we thank those experts on development who attended the A.I.D. Conference on Taxation and Development held in Washington, D.C., October 2-3, 1985. The participants included Stuart Butler of the Heritage Foundation, Vito Tanzi and Ved Gandhi of the International Monetary Fund, Geraldo Sicat of the World Bank, Richard M. Bird of the University of Toronto, Gary Robbins of the Center for Strategic and International Studies, Richard Goode of the Brookings Institution, Oliver Oldman of the Harvard Law School, Howard Pack of Swarthmore College, Sidney Weintraub of the University of Texas at Austin, Gustav Papanek of Boston University, and Arnold Harberger of the University of Chicago. We appreciate the prepared comments of these scholars, though we do not necessarily agree with all of them. However, this final draft incorporates a number of their comments.

At the Agency for International Development we thank our project officer, Neal Riden, our conference moderator, Ed Hullander, and for his insights, Kenneth Kauffman. Others at

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Finally, as is always the case in a co-authored report, all errors of fact or interpretation are the fault of the other guy.

LIST OF TABLES

LIST OF FIGURES

CHAPTER I

INTRODUCTION

A basic premise of this study is that the impact of tax rates--especially marginal tax rates--has been largely ignored, or at least underemphasized, in the traditional development literature. Why is this? In a paper prepared for a conference sponsored by the Agency for International Development in October 1985, Vito Tanzi of the International Monetary Fund answers as follows:

"First, there has been the traditional view that, in developing countries, high incomes do not originate from work effort or entrepreneurship; they are assumed to reflect mostly inherited wealth. Thus, they are more in the nature of rents than of genuine incomes. As a consequence, they could be taxed away with little negative effects. Second, that high incomes inevitably result in high consumption and/or capital flight. Third, that in any case the government can generate a high rate of saving for the country by raising taxes while holding down its own consumption. In this way, whatever negative effect high marginal tax rates might have on the individuals' propensity to save could be more than compensated by higher government saving. Fourth, because of lack of knowhow and entrepreneurship in the private sector, the government had to take the initiative in carrying out investment. The government was seen as the engine of growth in the economy. Fifth, the negative effect on labor supply could be ignored because of the overabundance of labor. Some influential studies assumed that the supply of labor schedule was perrfectly elastic at a subsistance level of wages. Sixth, that private investment in desirable sectors could be stimulated through the use of specific tax incentives, so that low tax rates on corporate income were not necessary. Seventh, that in any case there was little solid evidence that marginal tax rates were important in determining the propensity to save, invest, or to supply greater effort."

Although these assumptions were clearly not shared by all development economists, Tanzi notes that many of them were prevalent throughout much of the literature on economic development and taxation until recent years. How did they prove faulty? According to Tanzi:

"First, in developing countries, large incomes are often more the result of...implicit taxes, than of property ownership. In many developing societies today it is more important to have access to subsidized credit, to scarce foreign exchange at official exchange rates, to import licenses, or to be able to produce behind a protective wall than to own property. The return to property ownership in the form of rents, profits, interests, etc., is often sharply reduced by price controls, regulations, and other similar policies so that property ownership is no guarantee of large incomes. Rents based on government policies have replaced rents based on property ownership.

"Second, the assumption that high income inevitably results in high consumption has been challenged in various theories of the consumption function. Some of these challenges are as relevant for developing countries as they are for industrial countries.

"Third, with the benefit of insight, it is easy to show that governments have been unable to resist pressures for higher public consumption, or for politically determined investment projects. Thus, in many countries the increase in the tax burden that took place over the years did not result in higher public saving, as had been anticipated, but in higher public consumption. Furthermore, whatever public investment did take place, it was often misallocated resulting in very low or negative rates of return.

"Fourth, it has become obvious that the government does not have a monopoly over knowhow or entrepreneurship. A country without entrepreneurs in the private sector is not going to produce them in the public sector. And, by the same token, Adam Smith's basic contention that when people do things for themselves they become more productive and more enterprising has been recognized to be valid in many countries today, including in a more glaring fashion in some centrally planned economies.

"Fifth, it has been recognized that even though the overall labor supply may be abundant, as evidenced by the existence of a high rate of unemployment, it is rarely abundant for particular skills. Trained workers are as scarce in labor abundant economies as they are in economies with overall labor scarcity.

"Sixth, the argument on whether one can stimulate more investment by low corporate tax rates or by investment incentives is still a debatable one. Even within the United States today there are well-known economists who are arguing that the reform proposed by the administration will discourage investment as it will trade some investment incentives for lower rates....

"Finally, while in the past it was often argued that there was no evidence that high marginal tax rates had any effects on the propensity to save, invest, and work harder, in recent years more and more studies using sophisticated techniques, have shown that taxation may in fact have some negative effects."

Despite the transformation in thinking which Tanzi describes that has taken place during the past several decades, the old views still influence many scholars of development and decision-makers in the developing world. It is common to find countries with marginal income tax rates of 70, 80 or 90 percent applied at relatively low incomes (by industrialized nation standards). Even though these top thresholds may represent several multiples of per capita gross domestic product in LDCs, multiples of per capita GDP are not the primary determinant of incentives to work, save, or invest, the factors that drive growth. Individuals with entrepreneurial talent, specialized skills, or capital are aware of the better opportunities that exist for them in other countries. It is critical for developing nations to retain talented people. The loss of this critical minority of potential entrepreneurs, scientists, engineers, professionals, and skilled laborers could grind the entire process of development to a screeching halt. Thus, high marginal tax rates that affect a small minority of the population, and supply less than one-tenth of total revenue, could have severe repercussions out of all proportion to the share of the population in the income tax net and the total amount of revenue collected in individual taxes.

People and human capital are no less internationally tradeable and transferable than commodities and capital. In this light, governments should be more concerned to avoid excessive tax rates than current statutory tables suggest.

The emphasis that marginal tax rates receives in current thinking about fiscal policy and incentives for growth has come under criticism by some students of development. They contend that even if marginal tax rates are important in the development process, the individual income tax is insignificant compared with the wide range of other government policies that discourage growth. In this paper we lable such interferences "implicit taxes" because the tax-like effects of these government interventions in the private sector can be analyzed within the same framework used to analyze explicit statutory tax rates. This is because implicit taxes deny people a rate of return on work, saving or investment that is effectively equivalent to a tax levied on a market rate of return.

Implicit taxes are extremely important; indeed, in many LDCs, they overwhelm the impact of the statutory tax system on levels of economic activity. Accordingly, Chapter III is devoted entirely to analyzing the different kinds of implicit taxes that afflict LDCs and their effects. However, It is a mistake to ignore explicit taxes because they have negative effects all their own, which are separate and distinct from implicit tax effects. Moreover, implicit and explicit taxes tend to go together in developing countries.

Good policies often come in consistent packages. The same holds for bad policies. Nations with heavy government regulation of the economy, misaligned exchange rates, price controls, inflation, and other implicit taxes generally have bad explicit tax systems as well. We know of no case, for example, where a nation has a sensible package of economic policies marred solely by a defective tax system. Nor do we know of any cases where a nation with an excellent tax system imposes significant implicit taxes on the economy.

In short, we believe that the tax system may be viewed as something of a proxy for a range of government policies. This is useful because in many cases it is far easier to obtain data on taxation than on the level of such other important governmental interferences with the market as overvalued exchange rates, farmgate prices and minimum wages, to name a few. There is, in fact, almost no data on many of these important factors--at least none which is publicly available to researchers. On the other hand, statutory tax systems are available with diligent research along with a wealth of data on aggregate levels of taxation published by the IMF.

The plan of this report is as follows:

Chapter II discusses the impact of explicit taxation on development, taking into account recent research on the impact of taxation on the economy and applying, where possible, to the special conditions of the LDCs.

Chapter III explores the impact of what we call implicit taxes--government regulations, controls and other interferences with the free market that reduce the rate of return to work, saving and investment.

Chapter IV examines the relationship between tax structures and tax rates with several indicators of economic performance and democratic institutions based on data obtained from the World Bank, the IMF, Freedom House, and commercial tax services.

Chapter V enumerates a variety of successful tax incentives which have spurred investment, output, and employment in the LDCs.

It has been our goal to accomplish the following:

To define the criteria with which to evaluate tax systems, using the concepts efficiency, equity, and simplicity.

To set forth an empirical illustration of an ideal tax system that meets the foregoing criteria.

To assemble for the first time a comprehensive data file on statutory marginal tax rates in the LDCs. For some countries, we have developed time series data extending back to 1956.

To classify developing countries by type of tax system, level of taxation, and structure of tax rates, including implicit and explicit taxes.

To test the relationship between tax structure, tax rates, economic performance, and several measures of democratic institutions including political freedoms and civil liberties.

To analyze the relationship between tax policy and incentives to see how tax policy either hampers or fosters economic efficiency. From this we have drawn examples of successful tax reforms and unproductive, inefficient tax systems.

And lastly to list some specific individual tax reforms that have been successfully adopted in developing countries.

We have accomplished these objectives within a limited time frame. Additional time would permit more thorough and comprehensive data assembly and analysis. Nonetheless, this report represents an important first step in a reassessment of the role of tax policy in economic development and lays a foundation for future work that other researchers can continue. Despite the need for additional research, this study stands on its own as a significant attempt to catalogue and analyze the tax systems of the LDCs based on the most currently available data in a way which both policymakers and scholars in the field will find of value.

CHAPTER II

EXPLICIT TAXES

The development literature contains relatively little on the impact of taxation on growth. The main reason for this is the belief that since such a small percentage of residents of developing countries participate in the money economy or pay any taxes whatsoever that the explicit tax structure is relatively insignificant compared with a multitude of other factors. Moreover, the goal of fostering growth is generally far down on the list of priorities when designing a tax system. Raising revenue is obviously the overwhelming goal, but forced saving, income redistribution and administrative ease are also major goals.

Until fairly recently, it was generally believed that the major function of the tax system was to regulate aggregate demand, raise taxes when excess demand stimulated inflation and cut taxes to pump up demand and stimulate growth. Little, if any, attention was paid to the structure of tax rates. Only aggregate levels mattered. Hence, almost all previous research on the impact of taxation on developing countries has concentrated on aggregate levels of taxation as a share of national output or on such questions as the proportion [illegible]nue derived from various kinds of taxes.[1]

As long as marginal rates remained relatively low on the vast bulk of the population, changes in the tax structure didn't seem to matter very much. However, when the inflation of the 1970s pushed taxpayers in all industrialized countries up into tax brackets heretofore reserved for the wealthy, many economists began to reexamine the microeconomic foundations of tax policy and attributed the slow growth of the late 1970s to rising marginal tax rates.

Eventually the term "supply-side economics" came to be attached to the view that reductions in marginal tax rates were a necessary prerequisite to economic growth.[2] However, it really describes a more fundamental change in the attitude towards taxation. Whereas previously, taxes were thought to have little effect on the rate of saving[3], it is now widely believed that taxes have a significant impact on the rate of saving.[4] Whereas previously, taxes were not thought to have a significant impact on labor supply[5], taxes are now believed to have a significant impact on both the quantity and quality of work.[6] Whereas previously, there was little attention paid to the economic limits of taxation, it is now recognized that because of such factors as the underground economy tax rates may be so high as to actually reduce government revenues.[7]

This thinking has yet to penetrate the development field, where it is still common to read that a problem with developing countries is an unwillingness to collect sufficient taxes, especially from the wealthy. For example:

Lord Kaldor: "The shortfall in revenue is...largely a reflection of failure to tax the wealthier sectors of the community effectively."[8]

Richard Goode: "An underdeveloped country that is determined to avoid both stagnation and inflation will have to find ways of raising large and growing amounts of tax revenue."[9]

Walter Heller: "A personal income tax with a narrow base but high rates on large incomes, buttressed by administrative efforts concentrated on this area, may be a suitable instrument for achieving some of the ends of economic policy and distributive justice."[10]

Barbara Ward: "One thing...is certain. No nation has even halfway peacefully entered the modern world without a progressive income tax."[11]

W. Arthur Lewis: "If it is desired to accelerate capital formation at a time when profits are still a small proportion of national income there is in practice no other way of doing this than to levy substantially upon agriculture...."[12]

Substitution Effects

One important problem with the imposition of taxes in a developing country, as opposed to an industrialized country, is that the money economy competes with subsistence agriculture. Since direct taxes are seldom ever imposed except in the money economy, high taxes will tend to shift production out of the money economy and into subsistence agriculture.[13] "It is therefore likely," according to Bauer and Yamey, "that in many under-developed countries taxation falling on activity in the money sector will reduce the supply of effort to that sector below what it would be otherwise. This reallocation of resources affects adversely total real income. The lower national income and the retardation of the spread of the exchange economy in turn impede long-term growth."[14]

Bauer and Yamey also note the potentially adverse effects of trying to increase national saving through taxation:

"The proceeds of compulsory saving are not a simple addition to total saving. It is not even certain that total saving will be increased in the process. Even when savings are increased in the short run, the repercussions of the taxation may reduce the flow of savings in the long run by retarding the spread of the exchange economy and the growth of specialization, though conversely, it may also be remembered that the expenditure of the funds may have important beneficial effects promoting economic progress....Whatever the merits of such a transfer, they cannot be assessed rationally unless it is recognized that it is a transfer and not a net increase of resources."[15]

Actually, it is more than likely that total saving will fall sharply if the government attempts to raise saving by increasing taxation. Recent research indicates that this is because saving is far more sensitive to after-tax rates of return than previously thought. Hence, the reduction in total national saving may exceed the increase in government revenue. Even if taxes could be imposed such that national saving would not suffer, the shift of resources from the private to the public sector would still inhibit growth. This is because, as Bauer and Yamey note, the restriction of private saving will restrict the supply and effectiveness of local entrepreneurship and because the savings will be used to expand state undertakings.[16]

Entrepreneurship, we know from recent research, is a critical element in development.[17] High tax rates suppress entrepreneurship more so than other activities because entrepreneurs typically undertake investments with greater risk. Hence they require an above average rate of return. If this return is diminished too much by taxation, entrepreneurship will dry up. As Keynes observed, "The margin which he [the entrepreneur] requires as his necessary incentive to produce may be a very small proportion of the total value of the product. But take this away from him and the whole process stops."[18]

This raises an important issue regarding the impact of taxation on development. Although a tax system may not impact heavily on the vast bulk of citizens -- and therefore appears insignificant as a factor in development -- it may impact particularly on the entrepreneurial class. This class includes those individuals just able to rise above subsistence who may be trying to start a new business or who may be contemplating additional education or training to qualify them for the managerial class. To such people -- who are the economic "sparkplugs" of society -- the marginal rate of taxation may be a significant factor in their decision to start a business, obtain additional education, or leave the country. Thus one cannot assume that simply because a tax is paid by few people that it does not influence their actions and other potential taxpayers.

One reason for confusion on this issue is a misunderstanding about the relative importance of the income and substitution effects of taxation. The income effect suggests that when taxation denies people a portion of their income they will increase their effort in order to maintain the same net income. Thus, imposition of a tax may stimulate, rather than retard, work effort. The substitution effect, on the other hand, determines the trade-off between highly-taxed activities and those which may not be taxed or are taxed at a lower rate. Thus, there is a substitution effect between work and leisure, and savings and consumption, which may be strongly influenced by the tax rate. Consequently, there is always a tension between the income and substitution effects which appears to make it difficult to determine whether imposition of a tax will stimulate or retard effort. This is especially true in the case of some LDCs, where it is assumed that there is already a predisposition toward leisure and consumption.

In fact, there is really no trade-off at all between the income and substitution effects: the substitution effect always predominates. This is due to the impact of relative price changes. When a single price changes, whether due to a tax or some change in supply or demand, it sets in motion two different effects: It alters the real income of those who would have purchased the product at its old price and it stimulates them to search for alternatives. Thus in the case of any individual, it is true that one cannot, as a matter of theory, determine whether the income effect or the substitution effect will predominate.

This is not true for society, however, because as soon as one expands the universe of analysis to include the seller, one can see that the income effects necessarily cancel out: The increased income of the buyer is exactly offset by reduced income of the seller, or vice versa. Thus, the substitution effect will necessarily predominate.

How likely is it that the income effects will cancel out this way? Sir John Hicks answered as follows:

> In equilibrium, supply equals demand; and therefore the initial effect of a fall in price (before any adjustment in supply or

demand is made) is to make buyers better off and the sellers worse off, by an exactly equal amount.... Therefore, if buyers and sellers react to a change in income in the same way, the increased demand from the buyers (due to the income effect) will be matched by an increased supply from the sellers (due to the income effect). The income effect on excess demand will be nil.[19]

The same point is true of taxation. If a tax deprives an individual of income it is exactly offset by the increase in income of whomever receives the government's expenditures. This is obviously true in the case of a pure income transfer. But it is really true of all government taxation. Hence, all that is left is the extent to which the tax rate influences substitution. This includes the shift of work into leisure or the untaxed sector (such as subsistence agriculture or the underground economy) and the reduction of saving and investment into consumption or capital flight.

Taxation and Development in the Industrialized Nations

This framework permits the tax experience of the industrialized countries to be applied to the developing world. Some analysts maintain that there is little in the experience of the industrialized countries which is applicable to the developing nations. This overlooks the important point that the industrialized nations were not always industrialized. Prior to the Industrial Revolution, England, the United States and the European nations were in a position not too dissimilar to many LDCs today. In addition, one might say that the war damage inflicted by World War II destroyed the industrial base of nations like Germany and Japan. For these reasons, it it worth briefly examining the Industrial Revolution and the postwar experience of Germany and Japan to see what role, if any, tax policy may have played.

The Industrial Revolution began in England in the late 1700s. There is still debate about its precise causes, but there is little question that the intellectual climate of laissez-faire contributed greatly in helping to rid the nation of stifling regulations, tariffs and other barriers to economic expansion. As one economist put it, "the laissez-faire ideology... blasted the ideological barriers and institutional barriers to progress and welfare."[20]

The classical economists of that period were not opposed to government per se, attributing an important role to it in protecting property rights and providing necessary roads, harbors and other public works. And they were as concerned about the stifling effect of private monopolies in restraining growth as they were of government.[21] Nevertheless, it is true that the classical economists attributed little positive role to the state in encouraging growth, other than in the dismantling of state barriers to it.[22] As Adam Smith wrote:

> It is the highest impertinence and presumption...in kings and ministers, to pretend to watch over the economy of private people, and to restrain their expence, either by sumptuary laws, or by prohibiting the importation of foreign luxuries. They are themselves always, and without exception, the greatest spendthrifts in the society. Let them look well after their own

expence, and they can safely trust private people with theirs.[23]

Classical economists shared the view that people would invariably find ways of getting around most state barriers to wealth creation, if the state could be restrained from extending its domain into such new areas. "The natural effort of every individual to better his own condition...is so powerful a principle," Smith wrote, "that it is alone, and without assistance, not only capable of carrying on the society to wealth and prosperity, but of surmounting a hundred impertinent obstructions with which the folly of human laws too often incumbers its operations."[24]

The cotton industry is a case in point. As an entirely new industry, it was untouched by existing laws and regulations. As Paul Mantoux notes, by the very fact of its novelty, any recently-created industry was beyond government's hold. And unless it became the object of special laws or regulations it could, therefore, grow up in complete freedom.[25] Indeed, just keeping up with the changes in a rapidly expanding industry like cotton was beyond government to regulate. As Mantoux writes:

> It was hard enough to maintain the old regulations, and it was becoming quite impossible to set up new ones. Thus, from its birth, the cotton industry was free of the heavy yoke which weighed on the older industries. No regulations prescribed the length, the breadth or the quality of its materials, or imposed or forbade the methods of manufacture. There was no control save that of individual interest and of competition. Because of this, machinery quickly came into general use, bold ventures were made and many kinds of goods were manufactured. There was

the same freedom with regard to labor. Neither the trade guild, with its time-honored traditions, nor the system of apprenticeship with its strict rules, ever existed in the cotton industry.[26]

As the scope of the new industries expanded, the share of the economy which was free of restriction expanded as well. And under pressure from the advocates of laissez-faire, many old restrictions were abolished as well. As a result, T.S. Ashton writes, "The State came to play a less active, the individual and the voluntary association a more active, part in affairs. Ideas of innovation and progress undermined traditional sanctions: men began to look forward, rather than backward, and their thoughts as to the nature and purpose of social life were transformed."[27] Thus the concept of freedom went beyond simple freedom from state coercion to freedom from outmoded thinking and cultural restraint as well. And this too helped contribute to the atmosphere of innovation and invention which characterizes the Industrial Revolution.

Hence, there can be little question that economic freedom was a major factor setting the Industrial Revolution in England into motion. This concept carried over into the area of tax policy as well. As David Ricardo wrote, "There are no taxes which have not a tendency to lessen the power to accumulate."[28] Thus the government's policy should be to keep the burden of taxation as low as possible. "It should be the policy of governments," Ricardo said, "never to lay such taxes as will inevitably fall on capital; since by so doing, they impair the funds for the maintenance of labor, and thereby diminish the future production of the country."[29]

Adam Smith put his views on taxation into four famous maxims:

1. "The subjects of every state ought to contribute towards the support of the government, as nearly as possible, in proportion to their respective abilities; that is in proportion to the revenue which they respectively enjoy under the protection of the state."

2. "The tax which each individual is bound to pay ought to be certain, and not arbitrary."

3. "Every tax ought to be levied at the time, or in the manner, in which it is most likely to be convenient for the contributor to pay it."

4. "Every tax ought to be so contrived as both to take out and to keep out of the pockets of the people as little as possible, over and above what it brings into the public treasury of the state."

Smith explained his last maxim as meaning that the actual cost of tax collection, such as the hiring of revenue agents, should be as low as possible; that penalties for tax evasion should not be excessive; that the burden of record keeping and documentation be kept as low as possible; and that taxes should be so structured as to discourage as little industry and production as possible.[30]

These principles were widely adhered to throughout the 19th century in Britain and carried over considerably to Britain's colonies.[31] These principles applied in the United States as well, where state intervention in the economy was largely limited to protecting property rights, national defense, and some public works. In fact, there was no income tax until 1913, except for two brief periods during and after the Civil War. And large-scale taxation and government intervention in the economy did not really begin until the onset of World War II. Thus one might say that for the first 150 years of America's history as an independent nation, government adhered to a limited role in the economy.[32]

Nor is there evidence that government played much of a role in the rejuvenation of the economies of Germany or Japan following World War II. In Germany, for example, economic recovery did not begin until the economics minister, Ludwig Erhard, abolished the system of economic controls imposed by the Nazis and continued by the Allies, which permitted the nation to profit from its latent reservoir of human capital.[33] Erhard also instituted a currency reform which stopped inflation and began a series of tax reforms which sharply reduced tax rates.

Until the Erhard reforms in 1948 the 50 percent marginal tax rate began at 2,400 Reichsmarks (about $600) and the 95 percent bracket started at an income of only 60,000 Reichsmarks (about $15,000). Indeed without a thriving black market outside the reach of tax authorities, combined taxes on income and property might equal or even exceed total income. As a result, almost half of all taxes went unpaid.[34]

Beginning in 1948, however, tax rates were sharply cut. As Table 1 indicates, the personal exemption was increased and the tax brackets stretched-out, so that high rates affected fewer and fewer people. Eventually, the rates themselves were cut, with the top rate falling to 53 percent by 1958, which is close to the current top marginal tax rate.[35]

Table 1

Individual Income Tax Rates in West Germany (in Reichsmarks or Deutchmarks)

Period	Personal Exemption	Income at which 50% Rate Begins	Top Rate	Income Where Top Rate Begins
1946-1948	600	2,401	95%	60,000
1948-1949	750	9,001	95	250,000
1950-1952	750	20,001	95	250,000
1953	750	36,001	82.25	220,000
1954	800	45,001	80	220,000
1955-1957	900	125,001	63.45	605,001
1958-1966	1,710	78,420	53	110,040

Source: Karl Hauser, "West Germany," in Foreign Tax Policies and Economic Growth (New York: Columbia University Press, 1966), p. 147.

A similar experience occurred in postwar Japan. During the initial period of American occupation, the principal problem was spiraling inflation. Unfortunately, the tax policies of the American authorities initially made things worse. These included (1) higher and more steeply graduated individual income tax rates and lower personal exemptions, (2) higher corporate and excess profits taxes with no inflation adjustment for depreciation allowances, (3) a heavy capital levy on wealth, and (4) an increase in the number of sales and excise taxes, including a VAT.[36]

These disastrous tax changes soon led to a breakdown of the tax-payment system. Tax evasion was widespread, tax collectors became as hated as the prewar secret police, businesses were falling apart because they could not replace capital, and revenues seriously lagged. At this point, General Douglas MacArthur, head of the American occupation forces, invited Professor Carl Shoup of Columbia University and a group of other American tax experts to visit Japan and make recommendations for the reform of the Japanese tax system. Their first recommendation was a sharp reduction in tax rates and an increase in personal exemptions. The top tax rate was reduced from 85 to 55 percent, the personal exemption was raised from 15,000 to 24,000 Yen, and a tax credit of 12,000 Yen per dependent was instituted. With regard to business, the Shoup Mission recommended adjustment of depreciation allowances for inflation, abolition of the excess profits tax, and reduction of the corporate tax rate to 35 percent. In addition, numerous technical reforms were recommended and instituted. After its recommendations had been implemented, the Shoup Mission declared that Japan now had one of the best tax systems in the world.[37]

Since then, the Japanese have continued to reduce tax rates and expand incentives for saving and investment.[38] This has helped give Japan one of the highest rates of economic growth in the postwar era and made Japan the third greatest economic power in the world.

The development of industrialization in each case took place in an environment of economic freedom and low taxes. But is this experience really transferable to the present day Third World?

The best example is Hong Kong (see Chapter IV), where there is essentially a 17 percent flat-rate tax system for all citizens. It also has very few government regulations or any other interferences with the free market. Indeed, Hong Kong has the freest economy in the world and one of the most vigorous, especially considering its acute population density and almost total lack of natural resources. Thus Rabushka says:

> Free trade, free markets, low taxes, nonintervention, and personal liberty combine to demonstrate that the free-market model of economic organization can be a living reality and not just a textbook convention. Hong Kong can serve as a model for other developing countries that have thus far relied on a state-directed path of economic development but have failed to complete the transition to a more prosperous modern economy.[39]

Recent evidence suggests -- contrary to conventional wisdom -- that Hong Kong's spectacular postwar growth rate led to a more even distribution of income, despite the lack of redistributionist tax policies.[40] This is important because one frequently cited justification for high tax rates is a fear that lower rates would bring a more uneven income distribution.[41]

Indeed, rapid growth based on free markets and low taxes has narrowed the distribution of income between the highest and lowest income classes in such countries as Singapore, Taiwan and South Korea.[42] In Taiwan, for example, Theodore Schultz notes there is "fairly firm evidence that the extraordinary growth in per capita income has appreciably reduced the inequality, largely from rapid investment in schooling, (that) has made people more available to the jobs out of agriculture into many kinds of industries and willing to migrate."[43] Gary Fields has shown that Brazil is another case where rapid growth based largely on economic freedom led to an evening of the income distribution.[44]

A recent World Bank study by Keith Marsden, who studied a number of high-tax and low-tax LDCs, reported that higher rates of economic growth allowed a substantial rise in real living standards in the low-tax countries, shown by their higher levels of private consumption. At the same time, growth expanded the tax base and generated increased revenues, which financed more rapid expansion of expenditure on government services such as defense, health, and education. As a result, the share of income of the poorest households remained relatively high. Therefore, he says, "available data on income distribution seem to refute the argument that countries with high taxes are more equitable than those with low ones."[45]

Recent evidence suggests that the success of the East Asian countries in obtaining high rates of growth through a low tax policy and the wide publicity given to tax-cutting efforts in the U.S. is causing "supply-side" -- pro-growth -- thinking to penetrate the Third World.[46] India, for example, has sharply cut tax rates in recent years. The top rate, which went as high as 97.75 percent was cut in 1975 to 77 percent, leading to a surge of growth. A year later the top rate was cut to 66 percent, stimulating further growth. Most recently, Prime Minister Rajiv Ghandi instituted a new round of tax cuts and deregulation measures, dropping the top rate to just 50 percent. Again, the impact has been quite positive, with the Indian stock market surging to new records almost immediately.[47]

Other developing countries where tax cuts and free market strategies appear to have had significant positive effects include Sri Lanka[48], Chile[49], the Ivory Coast[50], Indonesia[51], and Botswana[52]. Conversely, tax increases and government intervention have adversely affected the performance of many developing economies.

Notes to Chapter II

1. See Alan A. Tait et. al., "International Comparisons of Taxation for Selected Developing Countries," International Monetary Fund Staff Papers 26(March 1979), pp. 123-56; Raja J. Chelliah et. al., "Tax Ratios and Tax Effort in Developing Countries, 1969-71," International Monetary Fund Staff Papers 22(March 1975), pp. 187-205; Raja J. Chelliah, "Trends in Taxation in Developing Countries," International Monetary Fund Staff Papers 18(July 1971), pp. 254-331; Kilman Shin, "International Differences in Tax Ratio," Review of Economics and Statistics 51(May 1969), pp. 213-20; Jorgen R. Lotz and Elliott R. Morss, "Measuring 'Tax Effort' in Developing Countries," International Monetary Fund Staff Papers 14(November 1967), pp. 478-99; U Tun Wai, "Taxation Problems and Policies of Underdeveloped Countries," International Monetary Fund Staff Papers 9(November 1962), pp. 428-48; Roy Bahl, "A Regression Approach to Tax Effort and Tax Ratio Analysis," International Monetary Fund Staff Papers 18(November 1971), pp. 570-612; Harley Hinrichs, "Determinants of Government Revenue Shares Among Less-Developed Countries," Economic Journal 75(September 1965), pp. 546-56; Richard Thorn "The Evolution of Public Finances During Economic Development," Manchester School of Economic and Social Studies 35(January 1967), pp. 19-53; and Vito Tanzi, "Comparing International Tax 'Burdens': A Suggested Method," Journal of Political Economy 76(Sept.-Oct. 1968), pp. 1078-84; Robert Summers, Irving Kravis, and Alan Heston, "International Comparisons of Real Product and Its Composition: 1950-77,"

Review of Income and Wealth 26(March 1980), pp. 19-66; Alison Martin and W. Arthur Lewis, "Patterns of Public Revenue and Expenditure," *Manchester School of Economic and Social Studies* 24(September 1956), pp. 203-44; Harry T. Oshima, "Share of Government in Gross National Product for Various Countries," *American Economic Review* 47(June 1957), pp. 381-90; and Vito Tanzi, "Quantitative Characteristics of the Tax Systems of Developing Countries," in D. Newbery and N. Stern, eds., *Modern Tax Theory for Developing Countries* (Washington: World Bank, forthcoming). For criticism of this analytical method, see Richard M. Bird, "Assessing Tax Performance in Developing Countries: A Critical Review of the Literature," *Finanzarchiv* 24(1976), pp. 244-65; and M.M. Ansari, "Tax Ratio and Tax Effort Analysis: A Critical Evaluation," *Bulletin for International Fiscal Documentation* 37(August 1983), pp. 345-53.

2. The term was coined by Professor Herbert Stein of the University of Virginia; see Herbert Stein, *Presidential Economics* (New York: Simon and Schuster, 1984), p. 241. For general discussions of supply-side economics, see Victor A. Canto, Douglas H. Joines, and Arthur B. Laffer, *Foundations of Supply-Side Economics* (New York: Academic Press, 1983); Federal Reserve Bank of Atlanta and Emory University Law and Economics Center, *Supply-Side Economics in the 1980s* (Westport, CT: Quorum Books, 1982); George Gilder, *Wealth and Poverty* (New York: Basic Books, 1981); Jude Wanniski, *The Way the World Works* (New York: Basic Books, 1978); Paul Craig Roberts, *The Supply-Side Revolution* (Cambridge, MA: Harvard University Press, 1984);

Michael K. Evans, The Truth About Supply-Side Economics (New York: Basic Books, 1983); Bruce Bartlett and Timothy Roth, eds., The Supply-Side Solution (London: Macmillan, 1983); Richard H. Fink, ed., Supply-Side Economics: A Critical Appraisal (Frederick, MD: University Publications of America, 1982); Thomas J. Hailstones, ed., Viewpoints on Supply-Side Economics (Richmond, VA: Robert F. Dame, 1982); and Laurence H. Meyer, ed., The Supply-Side Effects of Economic Policy (St. Louis, MO: Federal Reserve Bank of St. Louis and Center for the Study of American Business, Washington University, 1981).

3. See, for example, Edward F. Denison, "A Note on Private Saving," Review of Economics and Statistics 40(August 1958), pp. 261-67; Paul A. David and John L. Scadding, "Private Saving, Ultrarationality, Aggregation, and 'Denison's Law,'" Journal of Political Economy 82(March/April 1974), pt. 1, pp. 225-49.

4. Lawrence H. Summers, "The After-Tax Rate of Return Affects Private Savings," American Economic Review 74(May 1984), pp. 249-53.

5. See, for example, George F. Break, "Income Taxes, Wage Rates, and the Incentive to Supply Labor Services," National Tax Journal 6(December 1953), pp. 333-52.

6. Jerry A. Hausman, "Labor Supply," in Henry Aaron and Joseph A. Pechman, eds., How Taxes Affect Economic Behavior (Washington: The Brookings Institution, 1981), pp. 27-64; Harvey S. Rosen, "What Is Labor Supply and Do Taxes Affect It?" American Economic Review 70(May 1980), pp. 171-76.

7. See, for example, James Gwartney and James Long, Income Tax

Avoidance and an Empirical Estimation of the Laffer Curve (Washington: Department of the Treasury, Office of the Assistant Secretary for Economic Policy, 1984); Charles Stuart, "Swedish Tax Rates, Labor Supply, and Tax Revenues," Journal of Political Economy 89(October 1981), pp. 1020-38; Alan Peacock, "The Disaffection of the Taxpayer," Atlantic Economic Journal 11(March 1983), pp. 7-15; Carl Shoup, "Economic Limits to Taxation," Atlantic Economic Journal 9(March 1981), pp. 9-23; Vito Tanzi, ed., The Underground Economy in the United States and Abroad (Lexington, MA: Lexington Books, 1982).

8. Nicholas (Lord) Kaldor, "Will Underdeveloped Countries Learn to Tax?" Foreign Affairs (January 1963), reprinted in Richard M. Bird and Oliver Oldman, eds., Readings on Taxation in Developing Countries, 3rd ed. (Baltimore, MD: The Johns Hopkins Press, 1975), p. 31.

9. Quoted in Stanley Please, "Saving Through Taxation--Reality or Mirage?" Finance and Development 4(March 1967), reprinted in Bird and Oldman, Readings, p. 40. It should be noted that Goode is not unaware of the limits to taxation; see Richard Goode, "Limits to Taxation," in Karl W. Roskamp and Francesco Forte, eds., Reforms of Tax Systems (Detroit, MI: Wayne State University Press, 1981), pp. 41-54; idem, Governmental Finance in Developing Countries (Washington: The Brookings Institution, 1984), pp. 95-98.

10. Walter Heller, "Fiscal Policies for Underdeveloped Countries," in Bird and Oldman, Readings, p. 27.

11. Barbara Ward, "Taxing the Rich Countries to Aid the Poor,"

Washington Post (December 18, 1977).

12. W. Arthur Lewis, The Theory of Economic Growth (Homewood, IL: Richard D. Irwin, 1955), p. 231.

13. P.T. Bauer and B.S. Yamey, The Economics of Under-Developed Countries (Chicago: University of Chicago Press, 1957), pp. 196-7.

14. Ibid., p. 199.

15. Ibid., pp. 199-200.

16. Ibid., pp. 201-3.

17. See, for example, Israel M. Kirzner, "Entrepreneurship and the Market Approach to Development," in Perception, Opportunity, and Profit: Studies in the Theory of Entrepreneurship (Chicago: University of Chicago Press, 1979), pp. 107-19; Harvey Leibenstein, "Entrepreneurship and Development," American Economic Review 58(May 1968), pp. 72-83. For a classic statement, see Joseph Schumpeter, The Theory of Economic Development [1934] (New York: Oxford University Press, 1980).

18. John Maynard Keynes, Essays in Persuasion [1931] (New York: Norton, 1963), pp. 272-3.

19. J.R. Hicks, Value and Capital, 2nd ed. (New York: Oxford University Press, 1946), p. 64. According to Friedman, Alfred Marshall made much the same point; see Milton Friedman, "The Marshallian Demand Curve," Journal of Political Economy 57(December 1949), reprinted in Essays in Positive Economics (Chicago: University of Chicago Press, 1953), pp. 47-99.

20. Ludwig von Mises, Human Action (New Haven, CT: Yale University Press, 1949), p. 616.

21. Thomas Sowell, Classical Economics Reconsidered (Princeton, NJ: Princeton University Press, 1974), pp. 20-4.

22. These were numerous; for details, see Alvin Rabushka, From Adam Smith to the Wealth of America (New Brunswick, NJ: Transaction Books, 1985), pp. 5-15. See also Joseph J. Spengler, "Adam Smith's Theory of Economic Growth--Part I," Southern Economic Journal 25(April 1959), pp. 397-415; idem, "Adam Smith's Theory of Economic Growth--Part II," Southern Economic Journal 26(July 1959), pp. 1-12.

23. Adam Smith, The Wealth of Nations [1776] (New York: Random House, Modern Library, 1937), p. 329.

24. Ibid., p. 508.

25. Paul Mantoux, The Industrial Revolution in the Eighteenth Century [1928] (Chicago: University of Chicago Press, 1983), p. 260.

26. Ibid., pp. 260-1.

27. T.S. Ashton, The Industrial Revolution, 1760-1830 [1947] (New York: Oxford University Press, 1972), p. 4.

28. David Ricardo, The Principles of Political Economy and Taxation [1817] (New York: E.P. Dutton, 1911), p. 95.

29. Ibid., p. 96.

30. Smith, Wealth of Nations, pp. 777-8.

31. Rabushka, From Adam Smith, pp. 38-71. See also Ronald Max Hartwell, "Taxation in England During the Industrial Revolution," Cato Journal 1(Spring 1981), pp. 129-53.

32 In general, see Bernard H. Siegan, Economic Liberties and the Constitution (Chicago: University of Chicago Press, 1980);

Jonathan R.T. Hughes, *The Governmental Habit* (New York: Basic Books, 1977); Douglass C. North, *The Economic Growth of the United States, 1790-1860* (New York: W.W. Norton, 1966); and Sidney Ratner, James H. Soltow, and Richard Sylla, *The Evolution of the American Economy* (New York: Basic Books, 1979).

33. On the continuation of economic controls, see Henry Hazlitt, "The German Paralysis," *Newsweek* (April 21, 1947), p. 82; and John Davenport, "New Chance in Germany," *Fortune* (October 1949), pp. 72-76. On the Erhard reforms, see Ludwig Erhard, *Prosperity Through Competition* (New York: Praeger, 1958), p. 10-20; F.A. Lutz, "The German Currency Reform and the Revival of the German Economy," *Economica* 16(May 1949), pp. 122-42; Walter Heller, "Tax and Monetary Reform in Occupied Germany," *National Tax Journal* 2(September 1949), pp. 215-31; idem, "The Role of Fiscal-Monetary Policy in German Economic Recovery," *American Economic Review: Papers and Proceedings* 40(May 1950), pp. 531-47; and Egon Sohmen, "Competition and Growth: The Lesson of West Germany," *American Economic Review* 49(December 1959), pp. 986-1003.

34. See Karl Hauser, "West Germany," in *Foreign Tax Policies and Economic Growth* (New York: Columbia University Press, 1966), pp. 113-117.

35. *Individual Taxes: A Worldwide Summary* (New York: Price Waterhouse, 1985), pp. 83-85.

36. Martin Bronfenbrenner and Kiichiro Kogiku, "The Aftermath of the Shoup Tax Reforms, Part I," *National Tax Journal* 10(September 1957), pp. 236-54.

37. Ibid.

38. See Joseph A. Pechman and Keimei Kaizuku, "Taxation," in Hugh Patrick and Henry Rosovsky, eds., Asia's New Giant: How the Japanese Economy Works (Washington: The Brookings Institution, 1976), pp. 317-82. See also U.S. Congress, Joint Economic Committee, Japanese Tax Policy, 98th Congress, 2d session (Washington: U.S. Government Printing Office, 1985).

39. Rabushka, From Adam Smith, p. 147. See also Alvin Rabushka, Hong Kong: A Study in Economic Freedom (Chicago: University of Chicago Press, 1979); idem, The Changing Face of Hong Kong (Washington: American Enterprise Institute, 1973); idem, Free Markets and Economic Development in Postwar Developing Countries (Washington: Agency for International Development, 1983), pp. 14-25; P.T. Bauer, Equality, the Third World, and Economic Delusion (Cambridge, MA: Harvard University Press, 1981), pp. 185-90; Mary Lai, "15 Percent Tax -- And Still Taxpayers Grumble," Bulletin for International Fiscal Documentation 36(May 1982), pp. 197-99; and Doing Business in Hong Kong (New York: Price Waterhouse, 1983).

40. Steven C. Chow and Gustav F. Papanek, "Laissez-Faire, Growth and Equity -- Hong Kong," Economic Journal 91(June 1981), pp. 466-85.

41. See, for example, Jacques Lecaillon et. al., Income Distribution and Economic Development (Geneva: International Labour Office, 1984).

42. Rabushka, From Adam Smith, pp. 149-77.

43. Quoted in "Prosperity, Society, and How They Are Linked," New

York Times (May 6, 1984), p. E5. See also S.C. Tsiang, "Taiwan's Economic Miracle: Lessons in Economic Development," in Arnold Harberger, ed., World Economic Growth: Case Studies of Developed and Developing Nations (San Francisco: Institute for Contemporary Studies, 1984), pp. 322-3.

44. See Gary S. Fields, "Who Benefited from Economic Development? -- A Reexamination of Brazilian Growth in the 1960s," American Economic Review 67(September 1977), pp. 570-82; M. Louise Fox, "Income Distribution in Post-1964 Brazil," Journal of Economic History 43(March 1983), pp. 261-71; and Guy Pfeffermann and Richard Webb, "Poverty and Income Distribution in Brazil," Review of Income and Wealth 29(June 1983), pp. 101-24.

45. Keith Marsden, Links Between Taxes and Economic Growth: Some Empirical Evidence (Washington: World Bank, Staff Working Paper No. 605, 1983), pp. 4-5.

46. See, for example, Everett G. Martin, "Some Frustrated Third World Nations Have Found Another Economic Guru," Wall Street Journal (September 24, 1980), p. 34; Richard F. Janssen, "Tomorrow the Third World? American Supply-Siders Looking At Poor Nations," Wall Street Journal (March 25, 1981), p. 32; Fred Barnes, "Third World Counterrevolutionaries," The American Spectator (November 1981), pp. 23-26.

47. See Wanniski, Way the World Works, pp. 249-50; Anil Kumar Jain and Inu Jain, "A Brief Review of the Indian Tax System," Bulletin for International Fiscal Documentation 37(May 1983), pp. 215-21; Steven R. Weisman, "Tax-Cut Proposal in India Budget Recalls Reagan Plan for Stimulus," New York Times (March 25,

1985), pp. A1, D5; Jeffrey B. Johnson, "New Measures In Indian Budget Signal Turn in Economic Policy," _Business America_ (April 15, 1985), pp. 32-33; Anoop Singh, "New Economic Policy Initiatives in India Aim At Spurring Efficiency, Productivity," _IMF Survey_ (June 10, 1985), pp. 178-80; Paul Gigot, "Halfway Across the Ganges," _Wall Street Journal_ (April 10, 1985), p. 28; Catherine Gwin and Lawrence A. Veit, "The Indian Miracle," _Foreign Policy_ (Spring 1985), pp. 79-98; Steven R. Weisman, "India's 'Teji' (Bull) Market," _New York Times_ (August 14, 1985), pp. D1, D5.

48. Alvin Rabushka, _Free Markets and Economic Development_, pp. 97-106; idem, "Sri Lanka's Experiment in Economic Liberalism," _Wall Street Journal_ (May 18, 1981), p. 27; Devinda R. Subasinghe, "Rest of Third World Can Profit From Sri Lanka's Example," _Wall Street Journal_ (August 22, 1983), p. 15; Pranay Gupte, "Third World Success Story," _Forbes_ (June 18, 1984), pp. 62-68; and Devinda R. Subasinghe, _Now, A Sri Lankan Free Market Economic Miracle_ (Washington: Heritage Foundation, Asian Studies Center Backrounder No. 27, 1985).

49. For positive comments on the Chilean situation, see Victor A. Canto, Arthur B. Laffer, and Carol V. Lopilato, _Chile: A Classical Path to Prosperity_ (Los Angeles: A.B. Laffer Assoc., 1981); Peter Dworkin, "Chile's Brave New World of Reaganomics," _Fortune_ (November 2, 1981), pp. 136-44; Claudia Rosett, "Chile's Economic Revolution," _Reason_ (April 1982), pp. 32-39; Sebastian Edwards, _Economic Policy and the Record of Economic Growth in Chile in the 1970's and 1980's_ (Los Angeles: UCLA, Department of

Economics Working Paper No. 283, 1983); Claudia Rosett, "An Aborted Economic Test," New York Times (July 3, 1983); David Gallagher, "Chile After the Fall: Free-Market Policy Gradually Vindicated," Wall Street Journal (May 31, 1985), p. 23. For criticism, see Vincent Parkin, "Economic Liberalism in Chile, 1973-82: A Model for Growth and Development or a Recipe for Stagnation and Impoverishment?" Cambridge Journal of Economics 7(June 1983), pp. 101-24; Alvaro Garcia and John Wells, "Chile: A Laboratory for Failed Experiments in Capitalist Political Economy," Cambridge Journal of Economics 7(September-December 1983), pp. 287-304; and Ricardo Ffrench-Davis, "The Monetarist Experiment in Chile: A Critical Survey," World Development 11(November 1983), pp. 905-26. See also Rabushka, Free Markets and Economic Development, pp. 83-96; Alejandro Foxley, Latin American Experiments in Neo-Conservative Economics (Berkely: University of California Press, 1983); and Nicholas Ardito Barletta, Mario I. Blejer, and Luis Landau, eds., Economic Liberalization and Stabilization Policies in Argentina, Chile, and Uruguay (Washington: World Bank, 1983).

50. Rabushka, Free Markets and Economic Development, pp. 70-82; and Wanniski, Way the World Works, pp. 251-55.

51. Malcolm Gillis, "Episodes in Indonesian Economic Growth," in Harberger, ed., World Economic Growth, pp. 263-4.

52. Alan Reynolds, The Urgency of International Tax Relief (Morristown, NJ: Polyconomics, 1985), pp. 12-13; and Stephen R. Lewis, Jr., "Democracy Enables Botswana to Cope With Drought," Wall Street Journal (August 28, 1985), p. 19.

CHAPTER III

IMPLICIT TAXES

While explicit taxes are important, implicit taxes also have significant -- perhaps more significant -- effects on the economies of less developed countries. These implicit taxes include a whole range of governmental regulations, controls, subsidies, tariffs, and exchange rate policies, which impact on incentives in much the same way that marginal tax rates do. This chapter reviews some of these implicit taxes and their effect on incentives.

The most important implicit taxes in the developing world consist of price controls, especially in agriculture. They exist for many reasons, including misguided efforts to control inflation resulting from incorrect monetary and fiscal policies, the desire by politicians to curry favor with urban voters by maintaining artificially low food prices, and because governments frequently derive significant revenues from reselling commodities obtained at below market prices at higher prices on the international market.

Whatever the motive, however, the effects and pervasiveness of price controls have come to be recognized as a significant deterrent to growth in the LDCs.[1] This is because price controls constitute an implicit tax. If a farmer must sell his produce to a state procurement agency at a price which is 25 or 50 percent below the world market price, it is the same as if he had paid a 25 or 50 percent tax on his production at the free-market price.

As a recent World Bank study notes, "when governments intervene in the pricing mechanism it usually is not a marginal intervention but a very large one that has serious efficiency implications."[2] A typical example is Jamaica, as the following table demonstrates:

Table 1

Border Price and Domestic Price for Major Commodities in Jamaica, 1979 ($J/ton)

Product	Farmgate Price	Export Price	Implicit Tax Rate
Sugar	190	396	52%
Bananas	145	763	81%
Cocoa	2,404	5,226	54%
Coffee	812	1,249	35%

Source: Malcolm D. Bale, <u>Agricultural Trade and Food Policy: The Experience of Five Developing Countries</u> (Washington: World Bank, Staff Working Paper No. 724, 1985), p. 18.

In other cases, domestic prices are subsidized in order to reduce imports of substitutes. In this case, the implicit tax on domestic producers is simply replaced by an implicit tax on importers. An example of this is Columbia, as in Table 2.

Table 2

Border Price and Domestic Price for Major Commodities in Columbia, 1979 (pesos/100 kg)

Product	Market Price	Border Price	Implicit Tax
Wheat	1,978	1,036	48%
Corn	2,015	1,126	44%
Sorghum	1,728	823	52%
Soybeans	3,280	1,773	46%

Source: Bale, Agricultural Trade, p. 18

Efforts have been made to measure the efficiency loss from agricultural price distortions. While methodologies vary, virtually all research estimates the losses to be significant, amounting to hundreds of millions of dollars and several percentage points of GNP in some cases.[3] One study estimated that elimination of below-market pricing policies could increase agricultural output as much as 60 percent and increase national income growth more than 3 percent per year.[4]

Such estimates are often disputed for the same reason that the supply response to tax cuts has often been disputed in the U.S. It is often claimed that the "income effect" will outweigh the "substitution effect," thereby causing output to fall, rather than rise, in response to higher prices.

The rationale claims that, first, the subsistence sector is risk averse and values leisure and other activities highly.

Second, it assumes that farmers in developing countries have income targets. Thus if the producer price is increased, the production of a smaller amount of the commodity will provide the necessary income; i.e., a backward-sloping supply curve for labor.

This hypothesis has been thoroughly examined by Marian Bond of the IMF. She found that "for both individual crops and aggregate production, supply responses are positive." The existence of a backward-sloping supply curve for labor "is not supported by the evidence."[5] In short, residents of LDCs react to prices and incentives the same way those in the industrialized countries do. As a recent World Bank study put it:

> The greater the importance in farm output of the products for which official prices are set artificially low, the greater the tendency for farmers to return to subsistence farming, to smuggle crops to neighboring countries where controls are less rigorous or where prices are higher, and/or to leave the land for the city in the pursuit of relatively higher income. The result is a decline in aggregate production.[6]

Moreover, the production loss in the long-run is greater than in the short-run, because the loss of income to farmers reduces their ability to save and invest in agriculture. It also reduces their credit-worthiness, making it difficult to obtain inputs and equipment which would increase their yield. As investment in agriculture declines, so will output.[7]

Implicit Taxes on Labor

Interference with the price system in developing countries is not limited to the agricultural sector. Many LDCs employ minimum wage laws and other policies which artificially raise the price of labor.[8] This, too, is an implicit tax. If an employer must pay 50 percent more for labor than the free-market would command, this is equivalent to a 50 percent payroll tax. The result is that less employment is created.[9] A recent World Bank study suggests that such labor market distortions may reduce economic growth in the LDCs by as much as 10 percent.[10] The estimates are summarized in Table 3.

Table 3

Distortions in Labor Costs and Growth Performance (percent)

	Distortions		
	High	Medium	Low
GDP Growth Rate	4.5	4.7	5.9
Domestic Savings Ratio	12.5	17.5	20.4
Return on Investment	20.2	21.3	26.5
Growth Rate of Industry	4.3	6.1	7.3
Growth Rate of Agriculture	2.7	2.5	3.4
Growth Rate of Exports	-0.3	2.7	6.5

Source: Ramgopal Agarwala, Price Distortions and Growth in Developing Countries (Washington: World Bank, Staff Working Paper No. 575, 1983), p. 27.

Implicit Taxes on Trade

Foreign exchange and investment policies constitute further areas of price distortion and implicit taxation in most LDCs. Exchange controls are common in LDCs.[11] The goal is usually to maintain overvaluation, which subsidizes imports and penalizes exports. As Ronald McKinnon puts it: "Since exporters sell in foreign markets at this less than favorable 'real' exchange rate, they are caught in a profit squeeze, which reduces traditional exports and blocks new export development -- particularly of manufacturers."[12]

Exchange controls are frequently combined with restrictions on foreign direct investment. As a result, LDCs have relied heavily on bank loans in recent years to finance domestic investment. This proved to be a tragic mistake. Unlike direct investments, which only repatriate earnings if there is a profit, bank loans come with up-front fees and semi-annual interest payments (in hard currency) which must be made regardless of whether the investment yields a profit. Moreover, since such interest payments generally float at the U.S. prime rate, any increase in U.S. interest rates increases Third World debt payments.

The problem is complicated not merely by the unprofitability of many of the investments made by Third World countries, which often take the form of government enterprises or parastatals, but the fact that even profitable investments are required to yield foreign exchange. Thus any investment in a non-export industry or one which increases imports is necessarily bad, even if it yields large profits or other benefits.

Of course, the number of government-directed LDC investments which yield any benefits whatsoever is exceedingly small. As a recent World Bank report notes, such investments invariably become politicized, there are seldom any skilled managers available to run such enterprises, and the availability of government subsidies, trade protection, and grants of monopoly status not only eliminate any incentive to be efficient but also eliminate much of the critical market information generated by the price system. Thus the World Bank has strongly urged developing nations to move away from intervention and allow market forces to operate more freely.[13]

As long as bank loans were easily available there was little incentive for Third World countries to heed such advice. The improvement in investment opportunities in the U.S. and the Third World debt crisis, resulting from high real interest rates and the rising dollar, however, led to a very sharp cutback in foreign loans by U.S. banks. In 1982 U.S. banks's claims on foreigners increased by over $111 billion. By 1984 this fell to $8.5 billion. Bank loans to Mexico, for example, which were over $7 billion in 1982, became a net flow of $200 million from Mexico to the U.S. in 1984.[14]

Implicit Taxes on Capital

It is widely believed that LDCs can do little to raise capital on their own through saving, since many of them are so poverty-striken that they cannot feed themselves. In fact, many LDCs have substantial amounts of capital. The problem is that their own citizens invest abroad, rather than at home. As a result, capital flight is a major problem, with capital outflows exceeding inflows in some countries. (See Table 4.)

Table 4

Capital Flight and Gross Capital Inflows in Selected Countries, 1979-82 (billions of dollars)

Country	Capital Flight	Gross Capital Inflows
Venezuela	22.0	16.1
Argentina	19.2	29.5
Mexico	26.5	55.4
Uruguay	0.6	2.2
Portugal	1.8	8.6
Brazil	3.5	43.9
Turkey	0.4	7.9
Korea	0.9	18.7

Source: World Development Report 1985, p. 64.

The World Bank blames capital fight primarily on overvalued exchanges rates, which make foreign assets seem cheap and also incite fears of devaluation; high and variable rates of inflation, which create uncertainty and reduce real interest rates; repressive financial policies, which maintain real interest rates at low or negative levels; and high levels of domestic protection, which make foreign debt harder to service.[15] Moreover, the assets acquired abroad do not play the same constructive role played by the foreign investment of the industrialized nations. Whereas the repatriated earnings of U.S. assets abroad, for example, play a significant role in reducing the current account deficit, assets invested abroad by LDC residents are unlikely to be repatriated. Therefore, these foreign assets are unlikely to produce either tax revenue or foreign exchange with which to strengthen the domestic economy. However, this stock of capital could return to the developing countries if they provided a secure environment and an adequate after-tax rate of return. Sound policies can convert capital outflow into capital inflow.

Much the same can be said for foreign capital as well, which is discouraged by many of the same policies which encourage capital flight. In addition, however, most LDCs impose special burdens on foreign direct investment. Such policies flow from the colonial experience and a desire to remain free of foreign domination. As a recent World Bank report notes, "Attitudes in developing countries toward private foreign investment have...ranged from cautious to prohibitive."[16]

A recent International Monetary Fund study outlined a variety of restrictions on foreign investment in LDCs.[17] These include politically sensitive industries, such as public utilities, broadcasting, publishing, banking and petroleum. Some reserve to locals those industries with relatively simple technical and financial requirements, such as wholesale and retail trade.

The permitted degree of foreign ownership of all enterprises is limited in many countries and the takeover of existing local firms is prohibited except in special circumstances. A number of countries (including India, Mexico, the Philippines and Yugoslavia) generally require that foreign investors hold only a minority equity position in local enterprises. In some cases, foreign companies are required to gradually relinquish ownership and control to local residents over a specified period (Venezuela, Columbia, Ecuador, Peru, and Bolivia).

Remittances of interest and dividends on direct investment, as well as fees for technology transfers, are subject to restriction in various developing countries. Some (such as Greece) limit remittances to a certain percentage of invested capital, while others make overseas dividend transfers subject to additional taxation or limit them to a proportion of the firm's foreign exchange earnings. The IMF notes that such restrictions often backfire because they encourage disguised remittances through artificial transfer prices which may deny the host country its share of profits or tax receipts, such as having a foreign subsidiary sell products to the home office at artificially low prices, thereby capturing the profit where it is not subject to restriction. Moreover, dividend remittances are sometimes subject to greater restrictions than interest payments on loans. This may encourage an excessive debt/equity leverage in an affiliate's capital structure.

A growing number of countries impose specific performance obligations on foreign-owned firms, most frequently in the form of requirements for either a minimum level of exports or a given share of domestic content in total output (such as in the auto industry in most Latin American countries). Access to local capital markets is restricted in many developing countries (including Argentina, Kenya, Nigeria, Peru, the Philippines and Turkey). Many developing countries have also imposed restrictions that hinder foreign portfolio investment. These include outright prohibition, restrictions on the types of shares in which foreign investment is allowed, limits on capital repatriation, lengthy minimum investment periods, and above-average taxes on dividends and capital gains.

Some developing countries are slowly moving toward liberalization of restrictions on foreign investment.[18] Egypt, Jamaica, the Philippines, and Turkey, for example, have shifted from detailed control of direct investment to much more flexible arrangements, while more gradual policy changes have taken place in Korea, Mexico, Morocco, and Pakistan. However, they are paying a heavy price for past actions because multinational companies are reluctant to risk their capital locally. They fear that current policy changes may be only temporary or cosmetic. Moreover, the very lack of capital which has contributed to slow growth in many developing countries discourages new foreign capital investments, thus further retarding growth.[19]

Rising protectionism in the industrialized nations is another factor. As the IMF notes, although the average level of tariffs in the OECD countries has fallen to just 5 percent on imports of manufactured products, tariffs remain much higher on precisely those products most significant to developing countries. Tariffs average 19 percent on clothing, 13.5 percent on footwear, and 12.5 percent on textile fabrics. Moreover, although most industrialized nations give special preferences to developing countries, such preferences are often limited in important ways, so that only half of eligible imports received preferential treatment in 1980.[20]

Protection against developing nations' imports by industrialized countries discourages investment in LDCs, since those sectors where they have demonstrated a comparative advantage are exactly those where protection is the greatest. Thus the greatest pressure for increased protectionism in the U.S. comes in the footwear and textile industries where developing nations excel. Obviously, therefore, enactment of protectionist legislation against such imports will reduce the opportunities for profitable investment in the LDCs.

Tariffs

Tariffs are another tax. When imposed by industrialized nations on the products of LDCs, they are especially cruel. Developing countries are also guilty of imposing high tariffs on imports from other developing countries. Unfortunately, given the difficulty of raising adequate revenues through direct taxation in most LDCs, due to administrative problems, they are often forced to rely excessively on tariffs and export taxes for revenue-raising. Export taxes have economic effects similar to tariffs.[21]

This is tragic because much recent research indicates that exports are a powerful engine of development, as in the case of South Korea.[22] Bela Belassa, for example, has estimated that between 1966 and 1973 Chile, Mexico and India, which all had inward-looking policies, would have had per capita incomes between 17 and 22 percent higher had they achieved higher export growth.[23] Other research has also confirmed the positive impact of outward-oriented policies on growth and adjustment to external shocks.[24]

Inflation

No discussion of barriers to investment and implicit taxes would be complete without reference to the pervasive problem of inflation. Inflation has two important tax-effects. First, it acts as a tax on cash balances and financial assets. As Bela Belassa notes:

> High and unstable -- and hence unanticipated -- rates of inflation discourage the holding of financial assets unless these assets are fully indexed, which is not the case in any developing country. In particular, the lack of indexing of demand deposits in the face of inflation represents a tax on non-interest-bearing money holdings. This implicit tax, as well as uncertainties pertaining to the real rate of interest on financial assets, encourages people to substitute real assets for financial assets.[25]

This situation is aggravated by the tendency in most LDCs to hold nominal interest rates down administratively, creating low and even negative real interest rates. This produces lower rates of saving and investment and, hence, economic growth. Negative real interest rates also have a destabilizing effect throughout the economy. Excessive demand for credit puts pressure on central banks to increase the money supply and this feeds inflation.[26]

Inflation's second major tax effect is in its interaction with the tax system itself. Inflation pushes people into higher tax brackets in graduated rate systems, and erodes the value of exemptions and credits, thereby raising the real burden of taxation. It also forces taxes to be paid on illusory capital gains, reduces the value of capital consumption allowances based on historical cost, and reduces the return on saving, when the interest earned merely reflects an inflation premium. While many of these problems can be relieved with indexing, few countries fully index for inflation, index in a timely manner, or have adequate indexes to entirely prevent inflation from increasing the real tax burden.[27]

Inflation's causes are no different in the LDCs than in the industrialized countries: excessive money creation. However, there does appear to be a closer link between budget deficits and inflation in LDCs than in the industrialized countries. This is because of the wide existence of state industries, which almost invariably run losses, requiring government subsidies. At least in Argentina, such subsidies appear to have had a significant impact on money and credit creation and, therefore, inflation.[28]

Statistical analysis indicates that inflation distortions explain about 15 percent of the difference in growth rates between countries, as Table 5 demonstrates.

Table 5

Inflation and Growth Performance in Selected Developing Countries (percent)

	Distortions		
	High	Medium	Low
GDP Growth Rate	3.1	5.8	5.3
Domestic Savings Ratio	15.9	17.5	19.0
Return on Investment	15.8	26.0	26.6
Growth Rate of Industry	3.6	7.1	7.4
Growth Rate of Agriculture	1.8	3.2	3.9
Growth Rate of Exports	2.1	3.5	5.2

Source: Agarwala, Price Distortions, p. 33.

One last implicit tax which is mainly confined to the developing countries is a pervasive problem with corruption. Bribes must frequently be paid to obtain even the most routine governmental and nongovernmental services in many LDCs. Since, in many cases, such corruption is, for all intents and purposes, officially sanctioned as a way of paying workers, bribery comes close to constituting an explicit tax.[29]

Summary

In conclusion, there are a whole range of governmental actions which can be categorized as implicit taxes, in that they increase the prices of goods, the cost of doing business, or lower the rate of return. While it is extremely difficult to calculate the precise level of such "taxes," they impact on incentives in the same way that explicit taxes do. Since such implicit may be of significantly more importance than explicit taxes in determining a developing country's growth prospects, further research in this area should be a high priority, in order to quantify and catagorize such "taxes" and, hopefully, lead to their reform.

Notes to Chapter III

1. The World Bank made this point a major theme of its 1983 report. See World Development Report 1983 (New York: Oxford University Press, for the World Bank, 1983), pp. 57-63.

2. Malcolm D. Bale, Agricultural Trade and Food Policy: The Experience of Five Developing Countries (Washington: World Bank, Staff Working Paper No. 724, 1985), p. 17.

3. Many of these studies are summarized in Ernst Lutz and Pasquale L. Scandizzo, "Price Distortions in Developing Countries: A Bias Against Agriculture," European Review of Agricultural Economics 7(No. 1, 1980), pp. 5-27. Recent estimates for several countries may be found in Bale, Agricultural Trade, p. 20. See also Malcolm D. Bale and Ernst Lutz, Price Distortions in Agriculture and Their Effects: An International Comparison (Washington: World Bank, Staff Working Paper No. 359, 1979); Pasquale L. Scandizzo and Colin Bruce, Methodologies for Measuring Agricultural Price Intervention Effects (Washington: World Bank, Staff Working Paper No. 394, 1980); T.W. Schultz, ed., Distortions of Agricultural Incentives (Bloomington: Indiana University Press, 1978); and George S. Tolley, Vinod Thomas, and Chung Ming Wong, Agricultural Price Policies and the Developing Countries (Baltimore: The Johns Hopkins Press, for the World Bank, 1982).

4. Willis L. Peterson, "International Farm Prices and the Social Cost of Cheap Food Policies," American Journal of Agricultural Economics 61(February 1979), pp. 12-21.

5. Marian E. Bond, "Agricultural Responses to Prices in Sub-Saharan African Countries," International Monetary Fund Staff Papers

30(December 1983), pp. 703-26.

6. Kevin M. Cleaver, _The Impact of Price and Exchange Rate Policies on Agriculture in Sub-Saharan Africa_ (Washington: World Bank, Staff Working Paper No. 728, 1985), p. 6.

7. Ibid., p. 7.

8. See P.T. Bauer, "Regulated Wages in Under-developed Countries," in Philip D. Bradley, ed., _The Public Stake in Union Power_ (Charlottsville: University of Virginia Press, 1959), pp. 324-49; Simon Rottenberg, "Minimum Wages in Puerto Rico," in Simon Rottenberg, ed., _The Economics of Legal Minimum Wages_ (Washington: American Enterprise Institute, 1981), pp. 327-339; Vittorio Corbo, "The Impact of Minimum Wages on Industrial Employment in Chile," ibid., pp. 340-56; Peter Gregory, "Legal Minimum Wages as an Instrument of Social Policy in Less Developed Countries, with Special Reference to Costa Rica," ibid., pp. 377-402.

9. See, for example, George J. Stigler, "The Economics of Minimum Wage Legislation," _American Economic Review_ 36(June 1946), pp. 358-65; Jacob Mincer, "Unemployment Effects of Minimum Wages," _Journal of Political Economy_ 84(August 1976), part 2, pp. S87-S104.

10. Ramgopal Agarwala, _Price Distortions and Growth in Developing Countries_ (Washington: World Bank, Staff Working Paper No. 575, 1983), pp. 24-27.

11. _Annual Report on Exchange Arrangements and Exchange Restrictions 1983_ (Washington: International Monetary Fund, 1984).

12. Ronald I. McKinnon, _Money and Capital in Economic Development_

(Washington: Brookings Institution, 1973), p. 134.

13. See Armeane M. Choksi, *State Intervention in the Industrialization of Developing Countries: Selected Issues* (Washington: World Bank, Staff Working Paper No. 341, 1979); and *World Development Report 1983*, pp. 47-87. Of course, this is the main reason why economists like Peter Bauer have argued that foreign aid, because it is a government-to- government transfer, does so little to encourage development. See, for example, Bauer's *Dissent on Development* (Cambridge, MA: Harvard University Press, 1972). And the point about the essential information generated by a competitive price system has long been associated with F.A. Hayek and other members of the Austrian School. See, for example, F.A. Hayek, "The Use of Knowledge in Society," *American Economic Review* 35(September 1945), pp. 519-30.

14. See Russell C. Krueger, "U.S. International Transactions, First Quarter 1985," *Survey of Current Business* 65(June 1985), pp. 34-71.

15. *World Development Report 1985* (New York: Oxford University Press, for the World Bank, 1985), pp. 63-4.

16. K. Billerbeck and Y. Yasugi, *Private Foreign Investment in Developing Countries* (Washington: World Bank, Staff Working Paper No. 348, 1979), p. 1.

17. *Foreign Private Investment in Developing Countries* (Washington: International Monetary Fund, Occasional Paper 33, 1985).

18. Nicholas D. Kristof, "Curbs Give Way to Welcome For Multinational Companies," *New York Times* (May 11, 1985), pp. 1,

33.

19. Everett G. Martin, "U.S. Business Firms Don't Care to Provide What Latins Need Most: Private Capital," Wall Street Journal (June 25, 1985), p. 35.

20. Shailendra J. Anjaria, Naheed Kirmani, and Arne B. Petersen, Trade Policy Issues and Developments (Washington: International Monetary Fund, Occasional Paper 38, 1985), p. 79.

21. Donald B. Keesing, Trade Policy for Developing Countries (Washington: World Bank, Staff Working Paper No. 353, 1979), pp. 15-22.

22. Yung Whee Rhee, Bruce Ross-Larson, and Garry Pursell, Korea's Competitive Edge (Baltimore: The Johns Hopkins Press, 1984).

23. Bela Belassa, "Exports and Economic Growth: Further Evidence," Journal of Development Economics 5(June 1978), pp. 181-89.

24. Michael Michaely, "Exports and Growth: An Empirical Investigation," Journal of Development Economics 4(March 1977), pp. 49-54; William Tyler, "Growth and Export Expansion in Developing Countries: Some Empirical Evidence," Journal of Development Economics 9(August 1981), pp. 121-30; and Bela Belassa, "Adjustment Policies in Developing Countries: A Reassessment," World Development 12(September 1984), pp. 955-72. For a contrary view, see James Riedel, Trade as the Engine of Growth in Developing Countries: A Reappraisal (Washington: World Bank, Staff Working Paper No. 555, 1983).

25. Bela Belassa et. al., Developing Strategies in Semi-Industrial Economies (Baltimore: The Johns Hopkins Press, for the World Bank, 1982), p. 64.

26. See Interest Rate Policies in Developing Countries (Washington: International Monetary Fund, Occasional Paper 22, 1983),

27. Vito Tanzi, Inflation and the Personal Income Tax: An International Perspective (New York: Cambridge University Press, 1980). See also Vito Tanzi, ed., Taxation, Inflation, and Interest Rates (Washington: International Monetary Fund, 1984).

28. Ke-Young Chu and Andrew Feltenstein, "Relative Price Distortions and Inflation: The Case of Argentina, 1963-76," International Monetary Fund Staff Papers 25(September 1978), pp. 452-93.

29. See David J. Gould and Jose A. Amaro-Reyes, The Effects of Corruption on Administrative Performance (Washington: World Bank, Staff Working Paper No. 580, 1983). See also World Development Report 1983, p. 117.

CHAPTER IV

TAXATION, ECONOMIC GROWTH, AND DEMOCRACY

The object of this chapter is to set forth (1) the principles by which tax systems are evaluated, (2) describe an ideal tax system that maximizes incentives to work, save, and invest, thereby fostering growth, (3) examine the relationships between the composition and rates of taxation with macroeconomic measures of growth, democracy, and civil liberties, and (4) provide a detailed description of changes in marginal tax rates and thresholds for a sample of developing countries, which reveals the distinction between pro-growth and anti-growth systems.

Principles of Taxation

Economists generally agree that sound tax policy should aim at certain goals. First, taxes should distort as little as possible the prices resulting from the interaction of supply and demand in the market. Tax policy should strive for neutrality between investment and consumption and among products and industries. Government should not use its power to alter prices to favor any one industry or producer. To give but one example, import duties protect domestic producers from competition, penalize consumers, and raise the costs of inputs for exporters.

To achieve the goal of minimum price distortion, it is imperative to avoid high rates of taxation. Historically, high customs duties have fostered smuggling. Today, high tax rates have brought a proliferation of tax shelters to avoid taxation in both developed and developing countries as well as outright evasion of taxes. High tax rates also erode incentives to work, save, and invest.

A tax is efficient if it brings minimal price distortions. An efficient system of taxation would collect money without seriously influencing individual decisions on how much to work and to save and where to invest. It would not discourage people who put in longer hours to earn more income. It would not reward borrowing and penalize savings. It would not tax savings twice--once when the money is earned and again when the money earns a return. An efficient system would not be riddled with exemptions, deductions, and credits that direct money to investments with lower tax liabilities instead of to investments that increase real output at the highest rates of return.

A second important standard against which to evaluate systems of taxation is equity or fairness. Historically, equity has always meant equal treatment of equals. To discriminate against equal classes of taxpayers would be regarded as arbitrary, capricious, and generally wrong. So, for example, if two families earn identical incomes, this doctrine of equity would imply that each should contribute identical shares in taxation.

Of course, unusual circumstances might dictate different treatment of the two families in this example. A wise tax system might want to reduce the tax burden of the family that incurred heavy medical expenditures, suffered the ravages of storm damage, bore costs to move to a new job, and so on. But the idea that different rates of taxation would be applied to taxpayers in similar circumstances violates the norm of equity.

Until recent times, equity meant "horizontal equity," that is, people in similar economic circumstances should bear similar tax burdens. A uniform, or proportional, tax meets the norm of horizontal equity. Every taxpayer bears taxes in direct proportion to his income. As incomes double, triple, or grow tenfold, tax obligations increase at the same rate. In short, equity meant that all income should be treated equally as part of the tax base, and people with the same income should pay the same tax.

The advent of the Great Depression and the accompanying dramatic growth of social programs in the Western industrial democracies brought a new dimension to the concept of equity. "Ability to pay," or "vertical equity," gradually became regarded as a hallmark of sound tax policy. Underpinning vertical equity was the idea that fiscal policy could be a tool for redistributing income. Taxing incomes at progressively higher rates would enable the government to bring about greater equality in the distribution of after-tax income.

In developing countries, taxing higher incomes at steeper rates also meant that the government could tap its more prosperous subjects to finance national development projects. High rates of taxation are believed to be one means of financing government directed capital formation.

In the view of vertical equity, fairness means that high-income earners should pay higher fractions of their incomes in taxes than low-income earners. The most aggressive application of this principles typically uses of system of graduated tax rates applied to an individual income tax, in which additional chunks of income are taxed at steadily higher and higher rates.

But the vertical equity norm has often failed in practice. In most countries with graduated tax rate schemes, wealthy citizens often utilize tax avoidance or evasion techniques that reduce total income to a very modest level of taxable income. These loopholes have sprung up because wealthy taxpayers are reluctant to hand over 70, 80, or even more than 90 percent of their additional earnings beyond a certain level. Application of a pure vertical equity norm would preclude such loopholes to insure that those who can afford to pay more do so.

The explosive growth of tax expenditure items, tax shelters, and outright evasion in the United States and other advanced countries has introduced serious inefficiencies into these economies. Over the past two decades, it would appear that opinion has shifted toward less progressivity in tax rates and more concern with the disincentives of high taxes. Another way of putting this is that considerations of efficiency have begun to take on higher priority than the vertical equity notion of fairness and concerns over the distribution of the tax burden; as well, economists and international lending institutions have reported that state-directed efforts at capital formation have often produced politically-motivated "white elephants" which make little or no economic sense. The original concept of horizontal equity is increasingly recognized as more consonant with the tax policy goal of minimizing price distortions and maximizing efficiency than is the post-depression concept of vertical equity or ability to pay. This transformation in thinking reflects the increasing influence of the supply-side revolution.

Efficiency and equity are only two of the standards by which we can evaluate tax systems. Yet another is simplicity. The notion of simplicity encompasses the comprehensibility of the system, the ease with which taxpayers can figure out how much they owe, and how much time and effort it takes to comply with the system. Woven into simplicity, especially in the less developed countries, is administrative workability, which includes the need for trained, honest personnel, literate taxpayers, and the costs of collecting revenue. It does little good for any government's revenue agents to spend $1.01 to collect $1.00 in taxes. It is a lot cheaper to increase compliance and tax collections by adopting a simple system than by hiring thousands of revenue officials to enforce a complicated or cumbersome system. In general, low rates minimize the incentives to engage in tax avoidance or evasion schemes; high rates foster tax-reducing behavior, thereby reducing efficiency.

To summarize, we can evaluate tax systems on the basis of their efficiency, equity, simplicity, and administrative workability. Efficiency is a tried and tested concept in economics. It means maximizing the satisfaction that citizens derived from the economy. It requires neutrality between production and consumption, and among products and industries. It means that government should remove as few resources from the economy as possible to pay for the legitimate activities of government. The reason is that resources in private hands are used more efficiently in producing goods and services than the same resources placed in public hands. In general, governments do not stress profit-maximizing activity nor do government enterprises have to meet the competitive test of the market to stay in business. Thus tax burdens shoud be as low as possible.

Equity is a normative standard that stipulates the appropriate distribution of the tax burden by income classes, with the recent emphasis on vertical equity coming under growing disenchantment due to the disincentive effects of high rates of taxation. Simplicity is an intuitive notion that encompasses the comprehensibility of the tax system, the taxpayers' certainty of the amount of taxes owed, the costs of compliance, the public's willingness to pay, and the ability to meet tax obligations without costly, expert assistance.

An Ideal Tax System

An ideal tax system would be designed to meet six requirements that are compatible with maintaining an externally competitive orientation and free-enterprise economy.

The _first_ requirement is to generate sufficient revenue to finance a major part of overall public expenditure and maintain fiscal reserves at a satisfactory level. (Deficits and public debt should be shunned in favor of surpluses and accumulated reserves.)

The _second_ requirement is that the tax system remain neutral towards the internal cost/price structure, the supply of human effort, and private investment decisions (which means, in effect, that the emphasis should be on proportionality apart from a modest degree of progressivity on personal taxation to leave the poorest classes untouched by direct taxation).

The _third_ requirement is that the laws governing the tax system be revised from time to time to make them consistent with changing commercial practices.

The _fourth_ requirement is that each and every levy--direct or indirect--be simple and easy (and, therefore, inexpensive) to administer and does not encourage evasion. A tax system with low rates of charge cannot afford to finance costly overheads.

The _fifth_ requirement is that the tax system be equitable (which, in practice, means setting relatively high thresholds for personal taxation, which exempts those on the lower end of the income spectrum, leaving them virtually untouched by direct taxation).

The _sixth_ requirement is that the tax system be only exceptionally used to achieve non-fiscal objectives. Such policy objectives should be pursued directly through public expenditure programs and by appropriate legislative measures, and not indirectly by adjustments to tax rates and amendments to tax laws. Once a government starts to tread the path of using the tax system to pursue economic and social policies, the consequences are unpredictable, usually irreversible, and the costs unquantifiable.

The Case of Hong Kong as an Ideal Tax System

To begin with, Hong Kong is a duty-free port. There is no general tariff on goods entering Hong Kong but duties are charged on four groups of commodities--alcoholic liquors, tobacco, certain hydrocarbon oils and methyl alcohol--irrespective of whether they are imported or manufactured locally. Duties are set at either percentage ad valorem rates (on Western beverages) or item-specific rates per litre or kilogram.

Rates are levied on the occupation of landed property at a percentage of the assessed rateable value, which is defined as the annual rent at which the property might reasonably be expected to be rented. New valuation lists are prepared periodically. General rates approximate 5.5 percent of rateable values, which covers both general and specifically urban service rates. Educational, charitable, and welfare organizations may be exempted.

Apart from general rates, indirect taxes include excise duties, bets and sweeps taxes, stamp duties, entertainment tax and hotel accommodation tax, motor vehicle taxes, franchises and airport concessions. Betting duty is imposed on bets on authorized totalizators (horse racing) at 15 percent and lotteries at 30 percent. Entertainment tax on the price of admission to cinemas averages 9 percent and 30 percent for race meetings. The hotel accommodation tax is 5 percent of the expenditure on accommodation by hotel guests. The stamp duties are fixed or ad valorem on different classes of documents relating to assignments of immovable property, leases, and share transfers.

Direct taxes are defined as earnings and profits taxes and estate taxes. These are levied under the Inland Revenue Ordinance. Hong Kong has a schedular system of taxation whereby persons liable are assessed and required to account for tax on four separate and distinct sources of income: business profits, salaries, property, and interest. At the taxpayers option, all income can be aggregated to take account of a substantial personal allowance. The standard rate of tax, viz., the top applicable rate on the last dollar earned, was increased from 15 to 17 percent on April 1, 1984. (The rate stood at 12.5 percent until 1966, when it was raised to 15 percent.)

Profits tax is charged only on profits arising in, or derived from, Hong Kong from a trade, profession or business carried on in Hong Kong. Profits of unincorporated businesses are taxed at 17 percent whereas profits of corporations are taxed at 18.5 percent. Profits assessable to profits tax are net profits, which permits the deduction of all expenses incurred in the production of assessable profits, along with charitable donations equivalent to 10 percent of net assessable profits. There is no withholding tax on dividends paid by corporations, and dividends received from corporations are exempt.

There is no capital gains tax in Hong Kong.

Salaries tax is charged on payments arising in, or derived from, Hong Kong. Tax payment is calculated on a sliding scale which varies from 5 to 25 percent on HK$10,000 segments of income (that is, income after deduction of substantial personal allowances. These allowances are so substantial that a family of four does not pay income tax unless it earns more than US$11,000. Moreover, 13,000 taxpayers, about 6 percent of the total number in the tax net, contributed over half the total yields from the salary tax in 1982, despite the low rate). But the overall effective rate is restricted to a maximum of 17 percent of gross income.

Property tax is charged on the owner of land or buildings in Hong Kong at the standard rate of 17 percent on the actual rent received, less an allowance of 20 percent for repairs and maintenance.

To maintain external competitiveness with Singapore's growing financial center, interest tax on foreign currency deposits was repealed on February 24, 1982. The rate of tax on interest in Hong Kong currency was reduced from 15 to 10 percent in 1982, and repealed on October 16, 1983.

Estate duty tax ranges from 10-18 percent, with an exemption on the first HK$2 million.

Business registration fees consist of an annual registration charge of HK$350, but small businesses may be exempted.

Other revenue arises from taxes on the registration of motor vehicles, fines, forfeitures and penalties, royalties and concessions (e.g., rental sites at the airport), government utilities, and a wide range of fees and charges (marriage licenses, birth records, passports, etc.)

Sales of long-term leases on Crown land (all land in Hong Kong is owned by the Crown) provide a modest proportion of overall revenue. Land sales have varied enormously over Hong Kong's postwar history, reflecting relative swings in the business cycle and political confidence. Ordinarily, they supply less than 10 percent of total receipts, but the boom years of the late 1970s generated receipts that constituted as much as one-third of overall revenue, thus contributing to the territory's large reserves during 1976-1981.

Direct taxes have played an increasingly important role in financing government outlays as Hong Kong's economy has matured. There will be a tendency for the relative importance of earnings and profits taxes to increase because there is a greater scope for altering the structure of the direct tax system and the applicable rates. In the case of indirect taxes and fees and charges, there are obvious constraints. As earnings and profits taxes are roughly proportional to incomes, yields are related to the growth rate of the economy, which, if sustained at high rates, generates high yields. In other words, yields from earnings and profits taxes are fairly income-sensitive, while yields from indirect taxes, fees and charges are relatively income-insensitive.

To illustrate this point, yields from earnings and profits taxes grew from HK$52 million in 1951-52 to $929 million in 1971-72, to HK$5,880 in 1979-80, to HK$13,343 million for 1984-85. The yield has increased at a much greater rate than the gross domestic product, despite a relatively constant flat rate on both individual (15 percent) and corporate earnings (which was increased from 15 to 17 percent in the late 1970s). During the 1970s, the tax yield increased seven and a half times while the gross domestic product increased four and a half times. The reason is that sustained high rates of economic growth have sharply increased the tax base and the number of individuals and firms liable to direct taxation. In the fledgling state of its economic transformation, the earnings and profits taxes generated small sums; however, the maintenance of low tax rates stimulated investment and growth which has repaid the public sector with a positively elastic supply of receipts. During the 1970s, for example, the yields from earnings and profits taxes grew at an average annual rate of 25 percent, while the annual growth in indirect taxes was 15 percent and that from fees and charges only 17 percent. Thus during the 1970s, the contribution from indirect taxes fell from 39 to 28 percent, fees and charges fell from 31 to 27 percent, while that from direct taxes rose from 30 to 45 percent.

No distinction is made between residents and non-residents for purposes of taxation. Hong Kong citizens and foreigners are subject to the same rates and types of taxation.

Nor does Hong Kong offer any special concessions to overseas investors that are unavailable to local residents. Hong Kong does not provide specific investment incentives by type of industry or level of investment; rather, it tries to maintain an attractive overall investment climate.

The Hong Kong government is concerned to minimize dependence on any one source of revenue and thus tries to maintain yields from indirect taxes and fees and charges, lest upward pressure be put on direct tax rates to the detriment of incentives to work, save and invest. In particular, the government adheres to the principle that general taxation should not assist in the financing of services which can be related to individual needs except in unusual circumstances. In general, fees and charges should be designed to cover the full cost (including the cost of capital) of the services provided, though, on occasion, some are pitched deliberately at a level to deter usage for policy reasons. Especially in the case of public utility undertakings (railroads, waterworks, postal services, the airport, tunnels, etc.) the basic principle of pricing policy must be that consumers should be charged the full cost of the resources consumed by each undertaking, unless <u>conscious</u> policy decisions dictate otherwise on social or political grounds.

The Hong Kong government does not employ any means of compulsory procurement of agricultural or industrial goods at below-market prices and thus imposes no implicit tax on Hong Kong producers.

Since the territory maintains a monetary system that is linked to the U.S. dollar at a fixed rate of US$1=HK$7.80, in which the issue of domestic banknotes requires one hundred percent cover in U.S. currency, the Hong Kong dollar is literally the U.S. dollar one step removed at a denomination of 7.80. Since the United States is Hong Kong's chief trading partner, it makes sense for a small externally-dependent territory like Hong Kong to link its currency with that of its main trading partner. The Hong Kong money supply expands and contracts in consequence of the overall balance of payments, which reflects the competitive of Hong Kong goods on world markets and capital inflows, and is thus neither over- nor undervalued for any substantial period of time. Neither exporters nor importers are taxed or subsidized through an incorrectly-valued exchange rate.

The Relationship between Taxation, Growth, and Democracy

Analysts of American and European taxation and economic activities confront a wealth of generally reliable data on national income accounts, tax systems, labor force participation, industrial and agricultural output, and so forth. The same is not true for analysts of less developed countries (LDCs). Students of LDCs have to patch together data, often incomplete, unreliable, or downright inaccurate, from a variety of private and public international sources. The two most helpful, and frequently consulted, sources are "World Development Indicators," published annually by the World Bank, and "Government Finance Statistics" and "International Financial Statistics," published monthly and annually by the International Monetary Fund. But mixing and matching these two sources into one unified data file is not entirely straightforward. The IMF roster of countries numbers 104, but the World Bank indicators are available for only 98. The gap of 6 is compounded by some non-overlapping; the British Crown Colony of Hong Kong, for example, is not a member of the IMF and its financial statistics are not published in IMF bulletins, whereas Hong Kong's development indicators appear in World Bank publications. Only a few basic indicators appear in World Bank tables for small countries with populations under one million.

Even this picture overdramatizes the availability of data on LDCs. Among the 104 countries for which the IMF publishes financial statistics, complete national income accounts exist for only 57 of these.[1] While the percent of public receipts collected in the different forms of taxation is available for 104 countries, analyzing taxation as a share of gross national product is confined to 57. But the timing of IMF financial statistics ranges from as recent as last year to as far back as

1978 or 1979 for some countries. Many African nations are slow to get their financial statistical houses in order.

Neither the World Bank or the IMF releases detailed information on the structures of their member countries' tax systems. Thus, details on the rates of direct and indirect taxation, along with exemptions, deductions, credits, special incentives, and other features of taxation, must be culled from other sources. For information dating from 1975, the most readily accessible data appear in the publications of two commerical international tax service organizations. Beginning in 1975, with updates in 1977, 1979, 1981, 1982, 1984, and 1985, Price Waterhouse has published the structure of tax rates and tax brackets for individual income taxes in those countries in which it maintains offices. The list has expanded from 80 to 94 countries during the past decade. Price Waterhouse also publishes an extensive series of "Information Guides" about many countries that are periodically updated, which contain information about other aspects of taxation, business regulations, and economic conditions. In 1982, with revisions in 1984, Coopers & Lybrand published a competitive volume. When colonies and dependent territories from the joint listing of 104 separate taxing entities are eliminated, only 77 countries remain, many of which are mini-states of little consequence. Quite a few of the 77 are oil-exporting nations that rely solely on oil proceeds for revenue, imposing no individual income taxes.

Data on individual and corporate income taxes are much more inaccessible before 1975. The best source is an annual series published by Great Britain's Inland Revenue Department between 1958 and 1973 that contains annual tax specifics for approximately 40 countries between 1956 and 1973. The early volumes were titled Income Taxes in the Commonwealth and Income Taxes Outside the Commonwealth (1958-1966), and the successor series combined both into one annual volume titled Income Taxes Outside the United Kingdom (1966-1973).[2] Comparable data on overseas French and Dutch territories are not readily available. Nor are data on Latin American nations before 1975 suitably published in one convenient source. To assemble these data requires the scrutiny of legislation on a country-by-country basis, which no clearing house has yet assembled on a historical basis. The International Bureau of Fiscal Documentation in Amsterdam publishes current information on explicit taxes for all regions of the world and maintains an extensive library, but its historical collections are sporadic and incomplete. As a result, attempts to link long-run changes in effective marginal tax rates on individuals, and effective rates of tax on businesses, industries, and economic sectors to indicators of economic performance cannot encompass the entire developing world and are severely restricted by the paucity of longitudinal data to the most recent decade (1975-85).

More data is available for economically important and heavily populated countries. But several of the poorest nations in the world are economically unimportant and lightly populated.

Neither Price Waterhouse nor Coopers & Lybrand maintain an overseas office or local correspondent in those developing countries with the least attractive business opportunities. The absence of data on these countries systematically biasses the available data in favor of the better performing economies. We are simply unable to analyze the countries with the least attractive business climates. Thus attempts at fully comprehensive studies of the developing world systematically exclude the least well off nations that may be most in need of policy reform to stimulate economic growth.

No study of the political economy of development would be complete without an attempt to link economic and tax policies and various measures of economic performance to measures of individual freedom and political systems. Apart from recognizing that political stability is important to the process of economic development, since investors are scared away by chronic instability, development economists possess neither the training nor inclination to investigate the relationships between those purely economic factors influencing developing (investment ratios, exchange rates, important restrictions, tax incentives, price controls, etc.) and political factors or the political consequences of success or failure of development. Conversely, political scientists and other non-economists often overlook the economic dimensions of the processes of development.

If sustained economic growth has no effect on the evolution of democratic institutions or civil liberties, or indeed if overly rapid rates of growth engendered totalitarian regimes that repressed individual freedoms, then the political consequences of growth policies would require serious reconsideration. On the other hand, if a necessary condition of democracy and improving individual liberties was high growth, policies that fostered prosperity would also nurture free institutions and individual rights. Fortunately, data on political freedoms, civil rights, and democratic institutions are routinely published in the annual January-February issue of Freedom House, thereby allowing us to test the relationship between political and economic liberties. Freedom House ranks virtually all nations of the world by civil liberties and political rights on a seven-point scale from "most free," a score of 1, to "partly free," (3-5) to "not free," a score of 7. Political rights range from the presence of a fully competitive electoral process, to a limited role for opposition parties within a predominantly one-party state, to the complete absence of free elections where despots rule unconstrained by public opinion or popular tradition. Civil liberties encompass freedom of the press, court protection of the individual, free expression of personal opinion, and free choice in occupation, education, religion, residence, and so on, to the other extreme of pervading fear, little independent expression even in private, and swift imprisonment and execution by a police-state.

Freedom House also displays a continuum of political systems, in which it classifies countries as multiparty, dominant party, one-party, military non-party, and nonmilitary non-party.

However, the organization provides no comparable concept, measure, or ranking of economic liberties that might be compared with political rights or civil liberties. Thus, the analyst would have to develop indicators (absence of wage and price controls, free movement of labor and capital, lack of exchange controls, monetary stability, proprietary rights, free entry and exit in every industry, absence of state monopolies for procurement or distribution, neutral tax systems, etc.) and assemble the requisite data to score each country on overall economic liberty.

A complete analysis of developing countries must, therefore, encompass both economic and political determinants as well as the political consequences. Economic development does not occur in a political vacuum; rather, it does or does not take place within a sovereign political entity that maintains specific institutions of government that foster or suppress political freedoms and civil liberties. It is important to know whether growth, the chief indicator of development, is correlated with the spread of democratic institutions and individual freedoms.

Within the four-month time frame in which this report has been prepared, we have assembled information on a large number of economic and political variables (see the list attached to the end of this chapter). These includes such standard measures as tax shares of gross national product, the composition of taxes, top marginal rates and thresholds of the individual income tax, long-term annual average changes in exports, imports, investment, public and private consumption, industrial and agricultural output, public and external debt, and several political indicators. A full list of significant bivariate relationships is presented, and several of the most important scatterplots are reproduced in the text. To glean those that remain significant in multivariate analysis, the stepwise method of multiple regression was employed.

It is important to mention that the kinds of data on implicit taxes that we have argued are important, perhaps more important than explicit, direct taxes, in affecting growth and development are even more difficult to obtain than evidence on changing tax rates over time. Precise, statistical information on farmgate prices is available only on a sporadic, case-by-case basis (see the data in Chapter III). Therefore, it is not possible to test in a cross-sectional regression the relative importance of the farmgate-price tax compared with the personal or corporate profits tax. Another crucial implicit tax on exporters (and subsidy, or tax expenditure, for importers) is the extent of exchange-rate overvaluation, for which quantitative estimates may be available only in the confidential files of the International Monetary Fund. The World Bank's preliminary study of exchange rate distortions for 31 countries show only 12 with medium or high distortions, which limits the ability to include these data in multivariate analyses encompassing between 50-100 developing countries. Limitations of time precluded assembling comprehensive data on tax incentives for foreign and/or domestic investors that could have been entered into a comprehensive model for testing. (See Chapter V for selected illustrations of tax incentives that have proven successful in LDCs.)

Two other potentially important variables are the extent to which the tax laws are enforced (compliance) and the extent to which the presence of an underground economy vitiates the disincentive effects of statutory systems of taxation. Data on these are virtually non-existant. Indeed, the overriding difficulty in analyzing taxation and development is the lack of data by which hypotheses can be tested. Thus, much future work remains to augment the preliminary start we have made in assessing the quantitative relationships between the different elements of taxation and development. An important aspect of future work must be the extent to which one counterproductive dimension in a tax code is a proxy for an entire system of explicit and implicit taxation that retards growth. It is also important to know to what extent a policy reform in one dimension of taxation, e.g., lowering high marginal rates and increasing thesholds, might have an effect on growth with no concurrent changes in other dimensions of tax or overall economic policy. To this end, we have made some preliminary attempts to relate individual income tax rates with a variety of macroeconomic indicators.

All tables appear at the end of this chapter. The presentations include a legend describing the variables used in the analyses, a summary list of statistically significant bivariate relationships (with correlation coefficients), selected scatterplots of interesting results, a list of multiple regression tables, and a list of every LDC in the analysis file.

Findings

As previously mentioned, the absence of national income accounts limits any analysis of aggregate tax burdens as a share of national income with other variables to half or fewer of the LDCs, which may misrepresent the total pattern in the developing world. The more sophisticated countries are most likely to be able to assemble the data required for a system of national income accounts. Thus any conclusions about overall levels of taxation exclude about half of all LDCs, especially the least well off. For theoretical reasons, we would expect that the structure and rates of taxation would be more important than aggregate burdens of taxation in affecting develoment. A low tax rate that generated a high level of aggregate receipts, for example, would be more conducive to growth than a high tax rate system that produced little actual revenue, but discouraged a considerable economic activity.

The analysis shows that taxation as a share of gross national product positively influences the level of government expenditure (r=.408). This is because taxes and borrowing are the foundations of public spending. Aggregate tax levels negatively affect the annual growth rate of agricultural output (r=-.49). Figure 1 displays the plot of taxation as a share of GNP with the prior 22 years average annual economic growth rate (on a per capita basis). The simple correlation is .274 at a significance level of .028 for 49 plotted values, just less than half of the countries in the data file. High growth countries, whose sustained growth has brought a measure of prosperity, have relatively larger aggregate tax burdens than slow growth countries. They depend more on industry than on agriculture. It would be unwarranted to infer growth from high aggregate taxation. Rather, as countries prosper, their governments succeed in taking away a higher percentage of national income in taxes, which has been the experience of the Western industrial democracies. Greater prosperity and larger public sectors go hand in hand in the developed world; the same finding applies among the developing countries. But in the developing world, larger public sectors may reflect larger aggregate tax burdens, not necessarily higher rates of tax on individuals, corporations, and commodities. For example, Hong Kong's aggregate tax burden is higher than many LDCs, even thoughts its rates of tax are the lowest.

The overall level of taxation is not significantly linked with high or low rankings on political or civil liberties, although a slightly higher fraction of high-tax countries rank better on political rights. This, too, reflects the slight positive association between growth, prosperity, and the gradual unfolding of political rights in better performing economies.

Remember, the previous analysis applies to the fewer than half of LDCs for which full national income accounts are available. The universe of LDCs expands to over 100 when the analysis moves from aggregate tax levels to the composition of taxes. Looking first at the share of receipts collected from direct taxes, greater dependence on direct taxes (individual income taxes, corporate taxes, social insurance contributions, and property taxes) is positively related to overall economic growth (see Figure 2), the growth of private consumption, per capita income, and the level of public spending. Rich, high-growth countries collect a higher share of receipts in the form of direct taxes than poor countries. They have developed an urbanized, industrial, commercial economy on which direct taxes can be imposed (though, as shown later, the tax rates matter).[3]

Indeed, as dependence on indirect taxes rises, countries fare less well in their annual growth rates of imports (see Figure 3), investment, industry, overall economic growth (see Figure 4), and, consequently, private consumption and per capita income. Most of this adverse effect is due to the application of international trade taxes, not domestic excises or sales taxes. Most LDCs are heavily dependent on exports and imports. The correlation between per capita income and international trade taxes, for example, is -.415. What is lacking in our analysis is data, on a country-by-country basis, that would enable us to examine the specifics of indirect taxes and their impact on the separate agricultural and export sectors. One hypothesis is that overreliance on indirect taxes may retard export-led growth from either the industrial or agricultural sectors. It is possible to simultaneously have an overall low aggregate tax burden that relies disproportionately on indirect levies which takes the form of very high customs or export duties on a few key inputs, crops or commodities, thus retarding the advance of those sectors. This situation aptly describes the experience of many African nations with predominantly rural economies.

To the extent that the system of taxation and the structures of tax rates influence economic growth, taxation indirectly affects the prospects for individual liberty in the LDCs. In general, countries with sustained low growth earn negative ratings on political rights and civil liberties; high growth countries, especially above 4 percent, show an even distribution (see Tables 1 and 2). High growth is not a sufficient condition of individual liberties, but appears to be a necessary condition for the gradual emergence of political and civil rights. Similarly, Tables 3 and 4 show that countries with low per capita incomes, the results of decades of slow growth (not necessarily low starting points, since even the high-growth Pacific Rim economies began their postwar ascent with per capita incomes below $200), fare badly on political rights and civil liberties. The leaders of the economic basket cases of the world inflict the greatest political deprivations on their subjects.

Growth profoundly affects living standards and the prospects that countries will evolve democratic institutions and a concern for individual rights. Growth correlates positively with greater dependence on direct taxation and negatively with indirect taxation (as shares of total receipts, not as rates of taxation applied to different economic activities). When growth is regressed against eight potentially influential variables, those that surface as statistically significant are the annual growth rate of investment and the level of direct taxation (see Table 5). The growth of imports, exports, the level of indirect taxation, and the size of externally-held public debt are insignificant.

Before leaving the theme of direct taxation, it is worthwhile to remember the supply-side thesis that incentives, especially the level of marginal tax rates, influence decisions on work, saving, and investment. Table 6 groups countries by top marginal rates and tax brackets at which these rates apply. Countries fall within nine possible classifications, from high to medium to low top marginal rate, and similarly for high, medium, or low thresholds of income at which the top rate takes hold. Only one country, Hong Kong, maintains a low top marginal tax rate. It also enjoys the highest growth rate in per capita income. Countries with high thresholds enjoy consistently higher growth than those with low thresholds. For medium tax rate, high threshold countries, the average is 4.5 percent; for high tax rate, high threshold countries, the average is 3.9 percent. Even the high rate, medium threshhold countries average 3.1 percent.

This point is worth belaboring. So long as high top marginal rates do not apply to more than 99 percent of a country's population, it does not inhibit human endeavor on a wide scale. No individual is deterred from moving out of the subsistence sector into the cash economy by the disincentive of high marginal rates of tax on low cash incomes. The effective marginal tax rate for the overwhelming majority of the economically active population remains low. Even at the medium thes-hold, between $20,000 and $50,000, most taxpayers face effective low rates. It is the low threshold countries, where the top marginal rates take hold at very low incomes for professional, skilled, mobile, middle and upper-middle class populations, that show the worst performance. Even if only a small proportion of a country's population are caught in the income tax net, that small fraction is the human engine that drives growth through decisions to invest, work, save, or shift money and human capital abroad and substitute leisure for effort.

People, like commodities and capital, can be viewed as internationally tradeable or transferable. Individuals export their talents as well as their capital. For those residents of developing countries who possess highly valued skills in demand in other countries, they may be tempted to migrate to earn higher aftertax returns on their human capital. Therefore, to compare the earnings of this small, but important, minority of individuals who provide entrepreneurial, technical, professional, and other skills and services as a multiple of per capita income in their own countries is potentially misleading as an indicator of their economic well-being and incentives. Even if a Pakistani, Indian, Jamaican, Briton, or other foreign resident enjoys a relatively high income in his own country, he may still migrate to another country in which the application of his skills or talent provides a sharply higher aftertax real income, and, equally important, a lower top marginal rate on incremental units of output.

Bangladesh, Ghana, Jamaica, and several East African nations show especially dismal economic performance. The high rate, low threshold average for 21 countries is 1.9 percent, and this grouping includes many of the economic basket cases of the world. Even moderate top marginal rates that take effect at relatively low incomes have a stultifying effect on growth.

When the last category is further refined to include all those with thresholds below $10,000, or with marginal tax rates exceeding 70% when the thresholds falls between $10,000 and $20,000, the average growth rate falls to 0.8 percent. The fourteen countries that remain in that refined classification includes four with negative growth and only three with average annual growth rates exceeding 2 percent.

Per capita income for 63 developing countries is negatively correlated with increases in top marginal tax rates (r=-.443, significance=.000). In other words, the poorest countries of the world consistenly show systems of individual income taxes with the highest marginal rates. A consistent pattern emerges for per capita income and tax thresholds for the top rate: the lower the threshold at which the top rate takes effect, the smaller is per capita income (r=.26, sig.=.026).

Finally, the marginal tax rate correlates negatively with the size of the budget surplus/deficit as a percentage of gross national product. Countries with lower rates have balanced budgets or modest deficits; countries with the highest top rates also run the largest deficits. The correct inference to be drawn is that budget deficits persist because of high tax rates, not despite them. Attempts to reduce budget deficits by imposing higher tax rates seems counterproductive.

A cursory examination of corporate tax rates shows a large measure of uniformity throughout the developing world. The analysis reveals no statistically significant patterns relating corporate tax rates with per capita income, economic growth, macroeconomic trends, or political variables. A more complete analysis of the effect of corporate taxes on development would have to take into account depreciation schedules, investment credits, provisions for special deductions against foreign exchange losses, bad debts, and so forth. Given the widespread variability of these factors affecting actual corporate tax liabilities, it is somewhat surprising that statutory rates are so uniform. The relatively greater mobility of capital (compared with property or labor) may induce uniformity in treatment of corporate taxes.

To what extent do the relative shares of receipts collected in the form of direct and indirect taxes affect the growth rates of imports, exports, private consumption, government spending, and external public debt? The regressions separate significant from insignificant factors in examining these trends (see Tables

7-11). Imports are dominated by the growth rate of investments and exports; the level of public spending is largely affected by the size of tax receipts (though the overall R square is only .166); taxes have no apparent effect on the size of external public debt; the growth of industry affects the growth rate of exports; and, overall economic growth dictates the rise in public consumption. It is important to keep in mind that these statistical relationships measure the shares of receipts collected in the specific forms of direct or indirect taxation; they do not reflect the rates of taxation that may apply to any form of economic activity, any specific sector of the economy, or on particular exports or imports. Knowledge of rates, which determine after-tax rates of return to economic activity, is the key to understanding the impact of direct and indirect taxation on economic performance.

Apart from the overall rate of economic growth, other indicators of macroeconomic performance are not significantly correlated with political rights or civil liberties. However, the structure of the political system, as might be expected, influences the presence of political rights and/or civil liberties (see Tables 12 and 13). Multiparty democracies foster liberty; one-party states and non-party authoritarian regimes inhibit liberty. Competitive democracies do somewhat better on growth rates and levels of per capita income (See Tables 14 and 15). Or, put differently, high-growth, high-income nations are more likely to evolve competitive party, democratic systems of government. Growth, which leads to rising prosperity, is a necessary but not sufficient condition of democratic institutions and individual freedoms. Stagnation, which breeds poverty, is almost a sufficient condition for authoritarian governments, political repression, and the denial of civil liberties. A humanist view of the developing world absolutely dictates the application of growth-oriented economic policies.

Trends in Individual Income Taxes

Richard Goode has noted that in many developing countries the top marginal rate may be too high.[4] He favors an initial statutoory marginal rate of at least 6 to 10 percent to repay the cost of assessment and collection. The presence of personal exemptions in virtually every system of individual income taxes means that the effective tax rate will be much lower for those subject only to the initial statutory rate.

Low tax rates introduce minimal distortions into an economy. High tax rates, on the other hand, seriously distort allocative decisions and erode incentives to work, save, and invest. Goode observes that top rates often are unrealistically high, occasionally exceeding 90 percent.[5] Excessive rates, in his words, "are likely to discourage effort and investment and to provoke avoidance and evasion."[6] Goode demurs on the issue of just how high the top rate should be, insisting that no general answer can be given. One reason is that, for him, equity requires a progressive system, in which those earning higher incomes pay higher proportions of their income in taxes, even though "a pronounced degree of progressivity. . . in practice has seldom been achieved."[7]

Individual income taxes contribute varying shares of total revenue in developing countries. Excluding the oil-exporting countries, in Africa, 23 countries receive less than 10 percent of total revenue from individual income taxes, 11 from 10-20 percent, and only Liberia, South Africa, and Zimbabwe collect over 20 percent. In Asia, the individual income tax is a more significant source of revenue: 4 countries collect less than 10 percent, 5 collect from 10-20 percent, and 2 more than 20 percent. Outside Israel, virtually no Middle-Eastern country depends on the individual income tax. Among developing countries in the Western Hemisphere, the highest take is 17.5 percent. For IMF reported data, 10 countries collect less than 10 percent, and 10 collect from 10 to 17.5 percent. These relatively small proportions are often compared with the industrial countries in which individual income taxes range from as low as 8.4 to as high as 57.2 percent, with the average running well over 20 percent.

These figures give many analysts of less developed countries concern that attempts to link the structure of marginal tax rates and the income tax base with the determinants of economic growth is misdirected. But the economic damage caused by a tax that raises little revenue can be substantial. For example, a 100 percent tax on any import may raise little to no revenue, but completely retard an industry dependent on imported inputs. Similarly, high export taxes on agricultural goods collect little revenue, yet discourage commercial production in favor of subsistence agriculture. Likewise, a system of high marginal tax rates may raise little revenue, yet prevent the emergence of equity markets, discourage prospective entrepreneurs, drive people into the underground economy, foster tax shelters, and so on. Thus any system of high rates of tax has the potential to wreak economic havoc far out of proportion to any revenue it generates.

A neutral, efficient, equitable tax system is usually a proxy for an overall set of sound economic policies. Governments that pursue sensible regulatory, monetary, trade, and budgetary policies are unlikely to maintain tax systems with excessively high rates.

Table 6 clusters countries by the level of top marginal rate and the threshold at which the top rate takes hold. These clusters reinforce the notion that sound, growth-oriented policies cohere in packages. The low top rate/high threshold countries have enjoyed consistently higher average rates of growth than countries with high rates and/or low thresholds.

To supplement this cross-sectional comparison, we have assembled time series data on changing rates and thresholds of taxation.

The conclusion of this report contains plots of the annual changes in top marginal tax rates and thresholds for nineteen developing countries. Depending on the availability of data, the periods under investigation for some countries encompass 1956-85; others include only the years 1963-85, 1974-85, or 1979-85. The ready availability of tax information published by Great Britain's Inland Revenue Department on British commonwealth countries permits 30-year trend lines to be drawn for those countries. The combined commercial reports of Price Waterhouse and Coopers & Lybrand omits tax information for the years 1975, 1977, 1978, 1980, and 1983. Missing data appear in the trend lines as dots connecting reported observations.

The nineteen plots illustrate three radically different experiences with developing country policy towards the individual income tax. Four countries (Hong Kong, India since 1974, Indonesia, and Singapore) show a commitment to supply-side policies. One (Phillipines) briefly attempted marginal rate reductions with little success. The remaining fourteen countries (one in Europe, four in the Western Hemisphere and nine in Africa) show excessive concern with equity, "soaking the rich," and a general disregard for the adverse effects of eroding incentives due to high rates of tax.

Pro-Growth Individual Income Taxes

The British Crown Colony of Hong Kong, as previously described, is the quintessential neutral, low-tax, supply-side revenue system. Throughout its entire postwar development, public officials have emphasized the need for low rates of tax, stability in the rates, and preventing inflation from pushing taxpayers into higher brackets by adjusting, when necessary, the thresholds on which tax rates are applied. Hong Kong's low-tax system goes hand-in-hand with budgetary balance, free trade, sound money, and reasonable regulatory requirements.

Along with Hong Kong, Singapore has enjoyed high rates of growth for several decades. Shortly after independence, Singapore's leaders stretched the top rate from 30 to 55 percent by 1961 on taxable income exceeding US$30,000. Since per capita income in Singapore was below US$1,000, only a handful of the population paid high rates. But Singapore's leaders have remained conscious of the disincentve effects that would confront its citizens as growth pushed the middle class into high tax brackets; accordingly, they raised the threshold for the top rate from US$30,000 in 1970 beyond US$100,000 by 1977. Moreover, in 1979 the government announced a series of rate reductions that slashed the top rate to 40 percent in 1985. With per capita income of $6,800 in 1985, most Singaporeans face an effective tax rate (disregarding personal allowances) 10 percent. But even millionaries get to keep 60 cents of each additional dollar.

The nineteen graphs display changing thresholds in nominal U.S. dollars that do not take inflation into account. Between 1967 and 1984, the domestic price level in the United States tripled. If thresholds were expressed in constant dollars, $10,000 income in 1967 would represent the same purchasing power as $30,000 in 1984. A falling threshold trend line expressed in nominal or current dollars thus grossly understates the true extent of bracket creep. It would be necessary to triple thresholds between 1967 and 1984 to reflect changes in the price level. A modest upward trend line may not fully offset the effect of inflation on purchasing power.

Examine the plots for India. The first phase of tax policy consists of increases in the top marginal rate from 73.5 percent to the incredible level of 97.75 percent in 1973. Up through 1969, the government partly offset the effects of higher rates by raising the threshold from approximately $14,000 to $33,000. But as tax rates peaked, the threshold was slashed to a mere $7,500, thus exposing greater numbers of Indians to the top rate. The final phase of income tax policy has consisted of maintaining a relatively constant threshold in nominal terms (thus falling in real terms), while systematically reducing the top marginal rate of tax. A declining threshold has offset some beneficial effects of lowering the top rate. Compared with its initial post-independence high tax policies, India has embarked on a supply-side path in recent years.

Since 1979, Indonesia has undertaken a concerted effort to inject incentives into the economy, minimize tax avoidance and evasion, and reduce dependence on oil receipts in the face of declining oil prices. Indonesia has reduced its top marginal rate from 50 to 35 percent, and raised the threshold from US$15,000 to US$50,000. Receipts from the income tax have risen in 1985, both in absolute terms and as a share of total revenue. Cutting tax rates and increasing thresholds have had a positive effect on revenue and growth was a healthy 4.5 percent in 1984.

The Importance of Threshold

The Phillipines illustrates wild swings in fiscal policy. In the early 1970s, a top marginal rate of 55 percent applied to taxable incomes exceeding US$90,000. By 1979, the government raised the top rate to a prohibitive 70 percent, at the same time the threshold fell to $60,000. Recognizing that these trends lines were counterproductive of efficiency and revenue, the fiscal authorities cut the top rate to 35 percent in 1982. Any efficiency gains that might have ensued were suppressed by the international recession that affected the Phillipines and its trading partners. Additionally, a portion of the supply-side gains was dissipated by the sharp fall in the threshold. By 1985, the worst of both trends had materialized: the top marginal rate stood at 60 percent and the threshold fell to $25,000. Adjusting for inflation, $25,000 in 1985 is worth about $10,000 in 1974. The Phillipines in 1985 possessed a high-rate, low-threshold tax system.

Anti-Growth Tax Systems

The socialist revolution in Portugal was accompanied by a dramatic transformation of the individual income tax system. The new rulers raised the top marginal tax rate of 45 percent in 1969 to 90 percent by 1976; it was slightly rolled back to the mid-70s by 1984. Not only were marginal rates sharply increased, the threshold was reduced from over $100,000 in 1969 to a $20,000 in 1979. The middle classes faced confiscatory rates of personal taxation on modest levels of taxabale income. These changes seriously eroded incentives to work and invest.

Four countries in the Western Hemisphere illustrate the same pattern: Brazil, Chile, Jamaica, and St. Vincent. Brazil evinces a rise of 10 percentage points in the top marginal rate from 50 to 60 percent, at the same time that its threshold declined by nearly two-thirds from $76,000 to $28,000. In Chile, the statutory top rate was reduced from 70 to 55 percent, but dramatic inflation eroded the applicable threshold from a high exceeding $100,000 in 1975 to a meager $3,000 by 1984. This meant that the entire economically active population faced the top marginal tax rate--a flat tax of 55 percent--on almost all taxable income.

Through virtually its entire post-independence era, Jamaicans have faced a top, stiff tax rate of 75 percent, ranging as high as 80 to as low as 57.5 percent since 1981. As the lower rates have come into effect during the 1980s, the threshold has collapsed from a comfortable $20,000, thus excluding the overwhelming majority of the population, to a low, low $2,800. Small wonder that Jamaica exports talented people. Any skilled or rate from about 50 percent in the early 1960s to 80 percent.

Kenya, Malawi, and Pakistan have enjoyed higher growth than the preceding five nations. Although Kenya sustains a 65 percent top rate, the threshold, until 1984, remained well above $20,000, thus exempting all but the upper-middle classes. Between 1970 and 1980, Malawi enjoyed a relatively low-tax regime by African standards, hovering in the 40-percent range. Malawi's slower progress since 1980 may be partly attributable to its rising top rate and declining threshold, which has now fallen beneath $10,000. Pakistan illustrates the hazards of failing to adjust thresholds to offset inflation and changes in exchange rates. The effective marginal tax rate faced by successful Pakistanis has sharply increased since 1979, as the threshold has eroded [illegible] nearly $40,000 to under $10,000. Finally, Tanzania is a [illegible]osterous case, with a top marginal rate of 95 percent coupled [illegible] rapidly shrinking threshold.

The majority of poorly-performing developing countries reveal the same pattern of high and often rising tax rates applied to lower and lower thresholds of income. It is no accident that individual income taxes contribute small proportions of revenue in many of these countries. High tax rates have frustrated the efficient use of labor and capital and discouraged entrepreneurship, thus holding down growth. The Indonesians and Indians, have recently discovered, as Hong Kong's leaders have always maintained, that reducing rates and increasing thresholds both stimulates growth and increases revenue.

Notes to Chapter IV

1. Kuwait, Oman, and the United Arab Emirates have been eliminated from the data file since all receipts are derived from oil exports and their various, high-score development indicators are solely due to the interplay of high oil receipts and small populations. These three cases constituted serious outlyers and they were removed to eliminate unnecessary distortion in the analysis.

2. The precursor to this series is Income Taxes in the British Dominions (London: Inland Revenue Department, 1923) with revised editions in 1928 and 1938. Theses volumes were originally published to provide concise information on taxation in the colonies and dominions to cope with problems of double taxation confronting British expatriates.

3. An essay by Sohrab Abizadeh and J.B. Wyckoff, "Tax System Components and Economic Development: An International Perspective," Bulletin, International Bureau of Fiscal Documentation, 1982, pp. 483-91, reports on an international study of direct and indirect tax revenues in different countries at different stages of economic development. In the majority of case studies, of which 22 were LDCs and 19 were advanced natioons, the tax system changes towards more intensive use of direct taxes as the nation's economy develops. The findings did not hold up for the period 1950-59, but fit the period 1960-72. However, the general conclusion doesn't apply to the LDCs very well. The authors conclude that "There is no hard evidence, based on the result

obtained, that the group of [22] underdeveloped countries has increased its relative reliance on direct taxes as their economy developed." Indeed, since the direct tax ratio decreased for this group of countries, it was concluded that the imposition and collection of direct taxes are practically impossible and encounter numerous administrative as well as political and social obstacles. The authors also note that direct taxes have been losing their relative importance in the budgets of the governments in developed countries. We should note that our results encompass growth between 1960-82 and apply to 92 LDCs.

Somewhat troubling is the authors' premise that a "better tax system" is one that results in higher taxes as a proportion of GNP as a result of development, regardless of its source as direct or indirect taxation. The notion that "better" transfers a growing proportion of development into public hands for spending, rather than leaving funds in private hands for investment or consumption, must cast serious doubt on this generally accepted view of better taxation, especially since the evidence that developing nations' public sectors are highly inefficient is now widely acknowledged.

4. Richard Goode, Government Finance in Developing Countries (Washington, D.C.: The Brookings Institution, 1984), p. 106.

5. Ibid.

6. Ibid.

7. Ibid., p. 79.

LEGEND OF VARIABLES USED IN THE ANALYSES

Variable	Identification
TXPCGNP	Taxes as percent of gross national product
DIRECTTX	Direct taxes as percent of total revenue (Income tax, social security tax, payroll tax, property tax)
MR84	Top Marginal Tax Rate, 1984
TB84	Top Tax Bracket, 1984
INDIRTAX	Indirect taxes as percent of total revenue (Domestic excises, international trade taxes, other taxes)
PERCPGNP	GNP per capita in U.S.$
GROWTH	Average annual economic growth rate, %, 1960-82
POLRTIDX	Political rights index (1-most free; 7-not free)
CIVRTIDX	Civil rights index (1-most free; 7-not free)
COPOLSYS	Political System
EXPGRO1	Average annual growth of exports, %, 1960-70
EXPGRO2	Average annual growth of exports, %, 1970-82
IMPGRO1	Average annual growth of imports, %, 1960-70
IMPGRO2	Average annual growth of imports, %, 1970-82
PUBCONG1	Average annual growth of public consumption, %, 1960-70
PUBCONG2	Average annual growth of public consumption, %, 1970-82
PRICONG1	Average annual growth of private consumption, %, 1960-70
PRICONG2	Average annual growth of private consumption, %, 1970-82
INVGRO1	Average annual gross domestic investment growth, %, 1960-70
INVGRO2	Average annual gross domestic investment growth, %, 1970-82
BUDGSD	Budget Surplus/Deficit, % GNP
EXTPUBDB	External public debt as percent of GNP
INFLRT	Average annual rate of inflation, %, 1970-82
AGGRRT	Average annual growth rate of agriculture, %, 1970-82
INDGRRT	Average annual growth rate of industry, %, 1970-82

SIGNIFICANT BIVARIATE RELATIONSHIPS

Variable	with	Variable	Correlation	Significance
TXPCGNP		AGGRRT	-.49	.006
		GOVEXP	.408	.009
DIRECTTX		PRICONG2	.229	.028
		GOVEXP	.298	.009
		PERCPGNP	.312	.001
MR84		PERCPGNP	-.444	.000
		BUDGSD	-.272	.039
TB84		PERCPGNP	.260	.026
INDIRTAX		IMPGRO2	-.34	.002
		PRICONG2	-.329	.003
		INVGRO2	-.206	.042
		INDGRRT	-.226	.03
		GOVEXP	-.398	.001
		PERCPGNP	-.502	.000
PERCPGNP		PRICONG2	.30	.006
		EXTPUBDB	-.22	.03
		INFLRT	.186	.038
		DIRECTTX	.312	.001
		INDIRTAX	-.502	.000
		TB84	.26	.026
		MR84	-.444	.000
GROWTH		EXPGRO2	.34	.003
		IMPGRO1	.23	.028
		IMPGRO2	.496	.000
		PUBCONG2	.587	.000
		PRICONG2	.68	.000
		INVGRO1	.456	.000
		INVGRO2	.552	.000
		EXTPUBDB	-.27	.01
		AGGRRT	.33	.002
		INDGRRT	.68	.000
		DIRECTTX	.261	.006
		INDIRTAX	-.425	.000
EXPGRO2		GROWTH	.34	.003
		INDGRRT	.57	.000
		PRICONG2	.27	.008
		PUBCONG2	.30	.03
		INVGRO2	.35	.002
IMPGRO2		INDIRTAX	-.34	.002
		GROWTH	.496	.000
PUBCONG2		GROWTH	.587	.000

Variable	with	Variable	Correlation	Significance
PRICONG2		DIRECTTX	.229	.028
		INDIRTAX	-.329	.003
		GROWTH	.68	.000
		PERCPGNP	.30	.006
INVGRO2		INDIRTAX	-.206	.042
		GROWTH	.552	.000
EXTPUBDB		GROWTH	-.27	.01
		PERCPGNP	-.22	.03
INFLRT		PERCPGNP	.186	.038
AGGRRT		TXPCGNP	-.49	.038
		GROWTH	.33	.002
INDGRRT		INDIRTAX	-.226	.03
		GROWTH	.68	.000
GOVEXP		TXPCGNP	.408	.009
		DIRECTTX	.298	.009
		INDIRTAX	-.398	.001
BUDGSD		MR84	-.272	.039

FIGURE 1 (N=49)

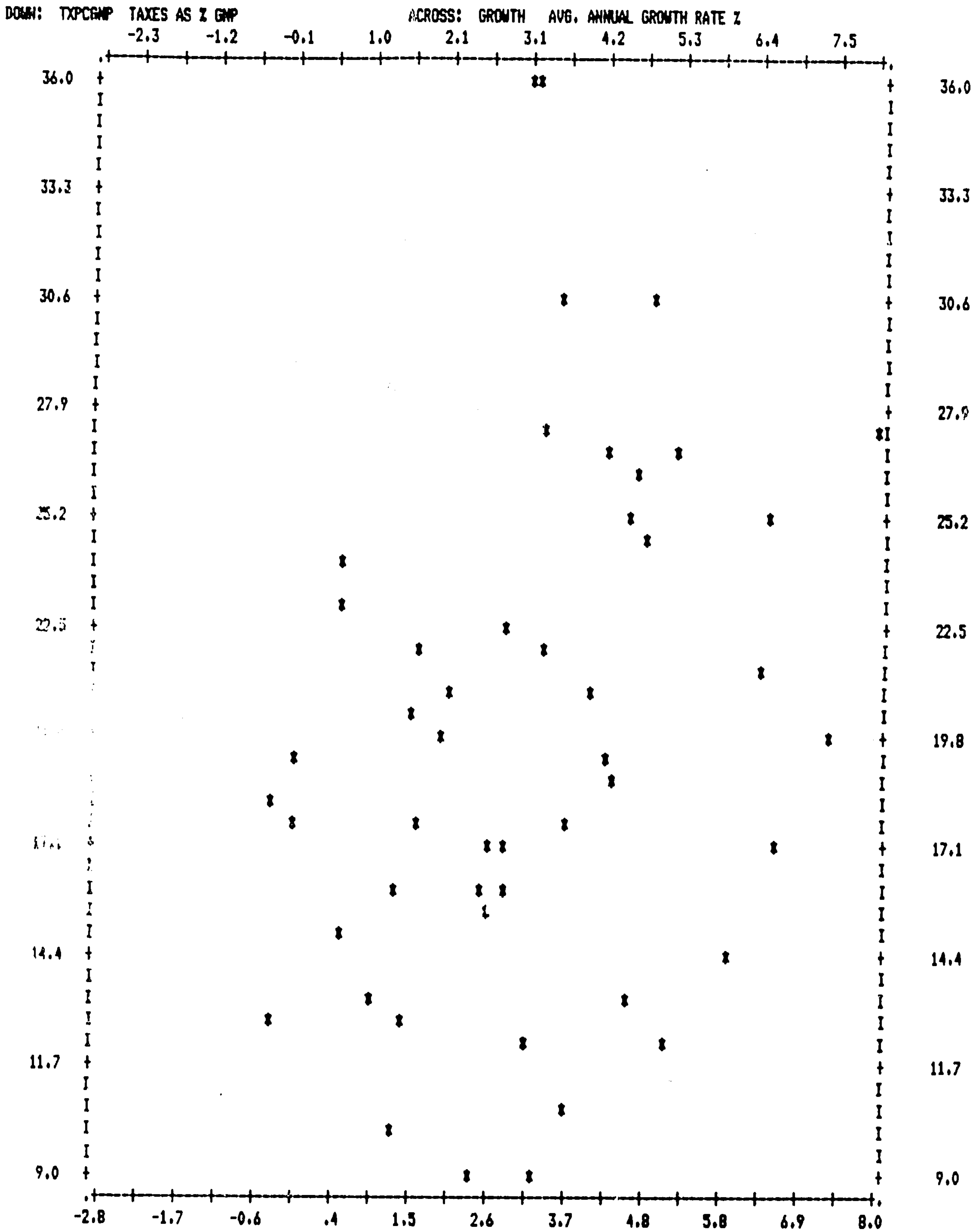

DOWN: TXPCGNP TAXES AS % GNP
ACROSS: GROWTH AVG. ANNUAL GROWTH RATE %
-2.3 -1.2 -0.1 1.0 2.1 3.1 4.2 5.3 6.4 7.5
36.0 33.3 30.6 27.9 25.2 22.5 19.8 17.1 14.4 11.7 9.0
-2.8 -1.7 -0.6 .4 1.5 2.6 3.7 4.8 5.8 6.9 8.0

FIGURE 2 (N=92)

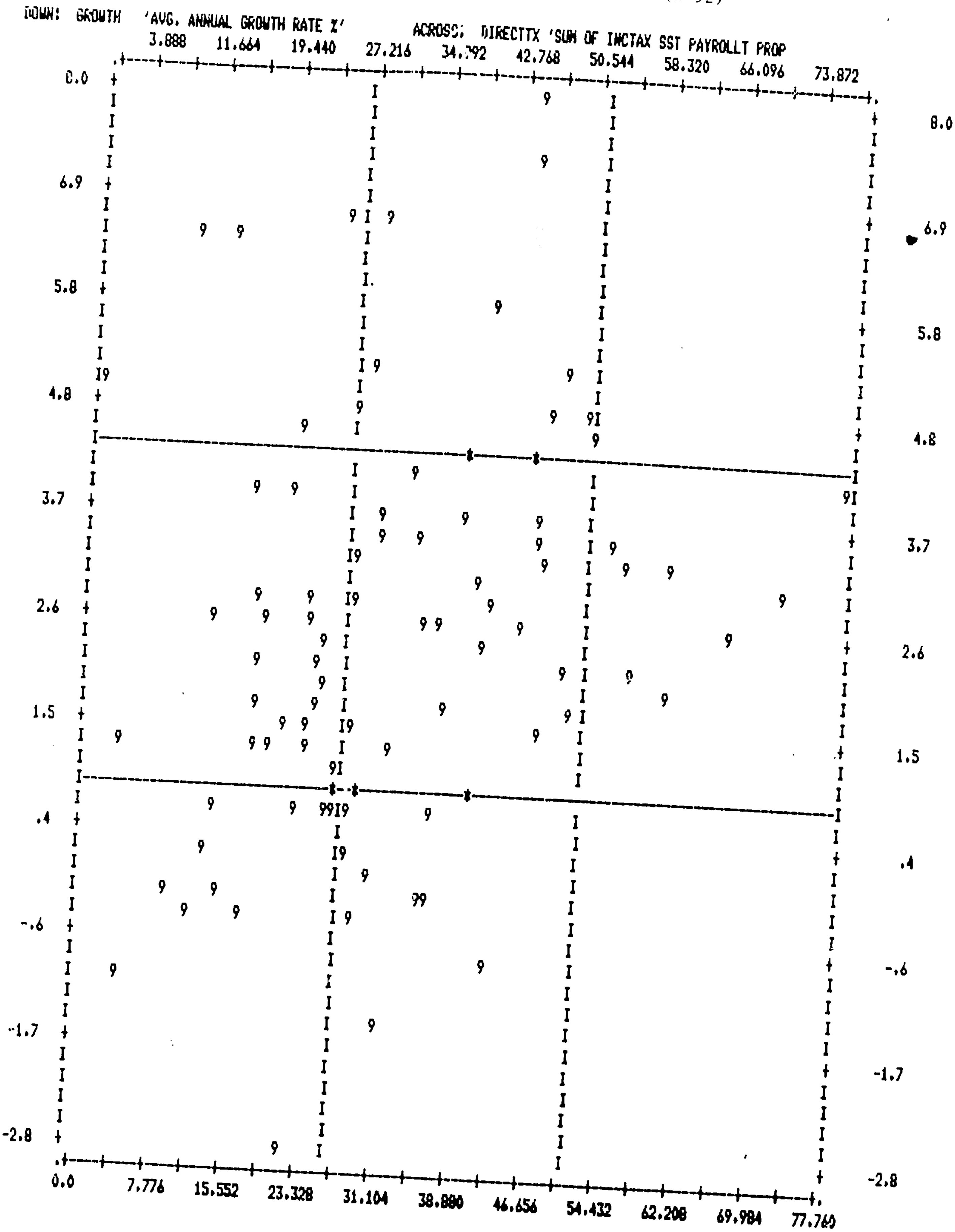

DOWN: GROWTH 'AVG. ANNUAL GROWTH RATE %'
ACROSS: DIRECTTX 'SUM OF INCTAX SST PAYROLLT PROP
3.888 11.664 19.440 27.216 34.992 42.768 50.544 58.320 66.096 73.872
8.0 6.9 5.8 4.8 3.7 2.6 1.5 .4 -.6 -1.7 -2.8
0.0 7.776 15.552 23.328 31.104 38.880 46.656 54.432 62.208 69.984 77.760

FIGURE 3 (N=65)

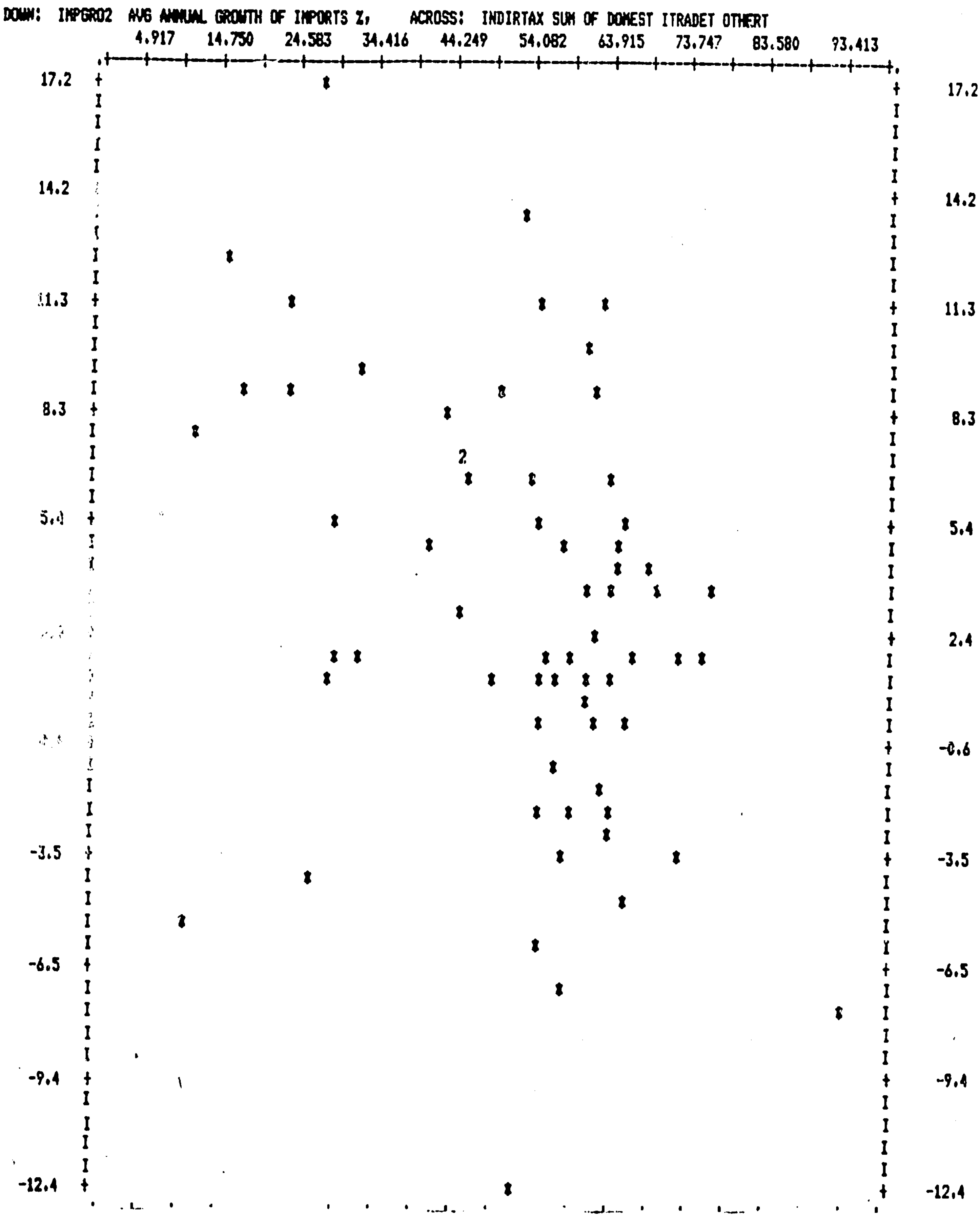

DOWN: IMPGRO2 AVG ANNUAL GROWTH OF IMPORTS %, ACROSS: INDIRTAX SUM OF DOMEST ITRADET OTHERT
4.917
14.750
24.583
34.416
44.249
54.082
63.915
73.747
83.580
93.413
17.2
14.2
11.3
8.3
5.4
2.4
-0.6
-3.5
-6.5
-9.4
-12.4
2

FIGURE 4 (N=92)

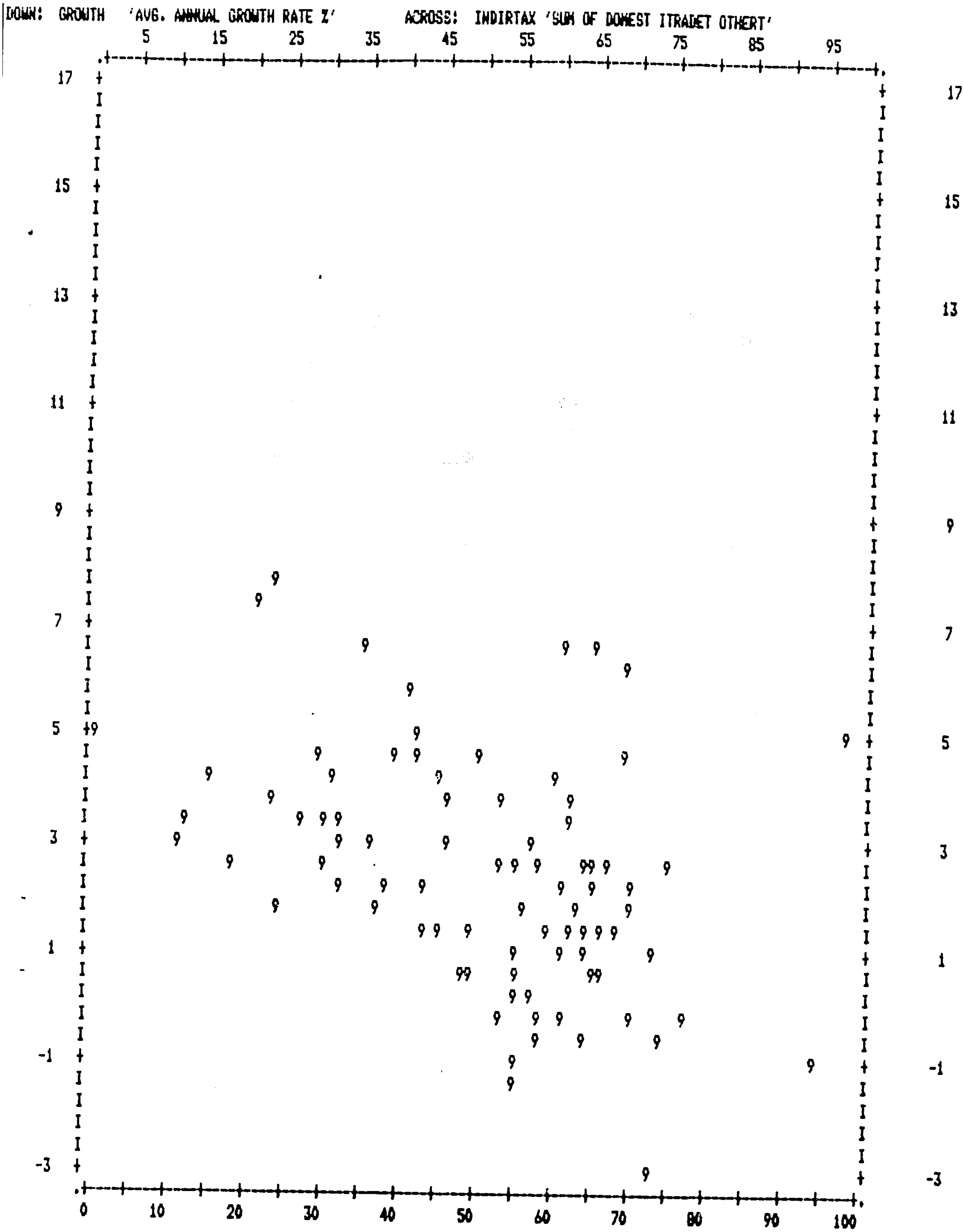

DOWN: GROWTH 'AVG. ANNUAL GROWTH RATE %' ACROSS: INDIRTAX 'SUM OF DOMEST ITRADET OTHERT'
5 15 25 35 45 55 65 75 85 95
17 15 13 11 9 7 5 3 1 -1 -3
0 10 20 30 40 50 60 70 80 90 100

TABLE 1

- - - - - - - - - - - - - - - - - - C R O S S T A B U L A T I O N   O F -

CODEG 'GROUPED GROWTH RATE' BY POLRTIDX 'POLITICAL RIGHTS INDEX'

- -

CODEG	POLRTIDX COUNT ROW PCT COL PCT	1	2	3	4	5	6	7	ROW TOTAL
-2.0-0.0	1		1 8.3 5.6	2 16.7 20.0	1 8.3 12.5	3 25.0 17.6	2 16.7 13.3	3 25.0 18.8	12 12.9
0.1-1.0	2		4 30.8 22.2	1 7.7 10.0	1 7.7 12.5	1 7.7 5.9	3 23.1 20.0	3 23.1 18.0	13 14.0
1.1-2.0	3	1 6.3 11.1	4 25.0 22.2		1 6.3 12.5	3 18.8 17.6	2 12.5 13.3	5 31.3 31.3	16 17.2
[illegible]-3.0	4	1 5.9 11.1	2 11.8 11.1	2 11.8 20.0	2 11.8 25.0	2 11.8 11.8	5 29.4 33.3	3 17.6 18.8	17 18.3
[illegible]	5	3 20.0 33.3	4 26.7 22.2	2 13.3 20.0	2 13.3 25.0	2 13.3 11.8	1 6.7 6.7	1 6.7 6.3	15 16.1
[illegible]	6	2 18.2 22.2	1 9.1 5.6	3 27.3 30.0		3 27.3 17.6	2 18.2 13.3		11 11.8
[illegible]	7	2 66.7 22.2						1 33.3 6.3	3 3.2
6.1-7.0	8		1 25.0 5.6			3 75.0 17.6			4 4.3
7.0+	9		1 50.0 5.6		1 50.0 12.5				2 2.2
	COLUMN TOTAL	9 9.7	18 19.4	10 10.8	8 8.6	17 18.3	15 16.1	16 17.2	93 100.0

TABLE 2

---------------------- C R O S S T A B U L A T I O N O F ----------------------

CODEG 'GROUPED GROWTH RATE' BY CIVRTIDX 'CIVIL RIGHTS INDEX'

CIVRTIDX: COUNT / ROW PCT / COL PCT

CODEG		1	2	3	4	5	6	7	ROW TOTAL
-2.0-0.0	1		2 16.7 12.5		2 16.7 20.0	2 16.7 8.0	3 25.0 16.7	3 25.0 30.0	12 12.9
0.1-1.0	2		1 7.7 6.3	3 23.1 25.0		6 46.2 24.0	2 15.4 11.1	1 7.7 10.0	13 14.0
1.1-2.0	3		2 12.5 12.5	4 25.0 33.3	1 6.3 10.0	2 12.5 8.0	5 31.3 27.8	2 12.5 20.0	16 17.2
2.1-3.0	4	1 5.9 50.0	2 11.8 12.5		3 17.6 30.0	4 23.5 16.0	5 29.4 27.8	2 11.8 20.0	17 18.3
3.1-4.0	5	1 6.7 50.0	4 26.7 25.0	3 20.0 25.0	2 13.3 20.0	4 26.7 16.0		1 6.7 10.0	15 16.1
4.1-5.0	6		3 27.3 18.8	1 9.1 8.3	1 9.1 10.0	3 27.3 12.0	3 27.3 16.7		11 11.8
5.1-6.0	7		2 66.7 12.5					1 33.3 10.0	3 3.2
6.1-7.0	8			1 25.0 8.3		3 75.0 12.0			4 4.3
7.0+	9				1 50.0 10.0	1 50.0 4.0			2 2.2
COLUMN TOTAL		2 2.2	16 17.2	12 12.9	10 10.8	25 26.9	18 19.4	10 10.8	93 100.0

TABLE 3

CROSSTABULATION OF

CODEPCG 'GROUPED PERCPGNP' BY POLRTIDX 'POLITICAL RIGHTS INDEX'

CODEPCG		COUNT / ROW PCT / COL PCT	POLRTIDX 1	2	3	4	5	6	7	ROW TOTAL
$0-200	1	COUNT			1			2	4	7
		ROW PCT			14.3			28.6	57.1	7.4
		COL PCT			10.0			13.3	25.0	
$201-400	2	COUNT		1	2	2		5	8	18
		ROW PCT		5.6	11.1	11.1		27.8	44.4	19.1
		COL PCT		5.6	20.0	25.0		33.3	50.0	
$401-700	3	COUNT		4	2	1	6	2	1	16
		ROW PCT		25.0	12.5	6.3	37.5	12.5	6.3	17.0
		COL PCT		22.2	20.0	12.5	33.3	13.3	6.3	
$701-1000	4	COUNT	1	2	1	3	4	2	1	14
		ROW PCT	7.1	14.3	7.1	21.4	28.6	14.3	7.1	14.9
		COL PCT	11.1	11.1	10.0	37.5	22.2	13.3	6.3	
$1001-1500	5	COUNT	2	6	1		2		1	12
		ROW PCT	16.7	50.0	8.3		16.7		8.3	12.8
		COL PCT	22.2	33.3	10.0		11.1		6.3	
$1501-2000	6	COUNT		1	1		3	1		6
		ROW PCT		16.7	16.7		50.0	16.7		6.4
		COL PCT		5.6	10.0		16.7	6.7		
$2001-4000	7	COUNT	3	3	2	1	2	3	1	15
		ROW PCT	20.0	20.0	13.3	6.7	13.3	20.0	6.7	16.0
		COL PCT	33.3	16.7	20.0	12.5	11.1	20.0	6.3	
$4001-6000	8	COUNT	2	1		1				4
		ROW PCT	50.0	25.0		25.0				4.3
		COL PCT	22.2	5.6		12.5				
$6000+	9	COUNT	1				1			2
		ROW PCT	50.0				50.0			2.1
		COL PCT	11.1				5.6			
COLUMN TOTAL			9	18	10	8	18	15	16	94
			9.6	19.1	10.6	8.5	19.1	16.0	17.0	100.0

TABLE 4

CROSSTABULATION OF CODEPCG 'GROUPED PERCPGNP' BY CIVRTIDX 'CIVIL RIGHTS INDEX'

CIVRTIDX: COUNT / ROW PCT / COL PCT

CODEPCG		1	2	3	4	5	6	7	ROW TOTAL
$0-200	1				1 14.3 10.0	1 14.3 3.8	1 14.3 5.6	4 57.1 40.0	7 7.4
$201-400	2			1 5.6 8.3	2 11.1 20.0	4 22.2 15.4	8 44.4 44.4	3 16.7 30.0	18 19.1
$401-700	3		1 6.3 6.3	3 18.8 25.0	2 12.5 20.0	6 37.5 23.1	4 25.0 22.2		16 17.0
$701-1000	4		3 21.4 18.8	2 14.3 16.7	2 14.3 20.0	5 35.7 19.2	1 7.1 5.6	1 7.1 10.0	14 14.9
$1001-1500	5	2 16.7 100.0	2 16.7 12.5	4 33.3 33.3		2 16.7 7.7	2 16.7 11.1		12 12.8
$1501-2000	6		1 16.7 6.3			4 66.7 15.4		1 16.7 10.0	6 6.4
$2001-4000	7		5 33.3 31.3	2 13.3 16.7	3 20.0 30.0	2 13.3 7.7	2 13.3 11.1	1 6.7 10.0	15 16.0
$4001-6000	8		3 75.0 18.8			1 25.0 3.8			4 4.3
$6000+	9		1 50.0 6.3			1 50.0 3.8			2 2.1
COLUMN TOTAL		[illegible] 2.1	16 17.0	12 12.8	10 10.6	26 27.7	18 19.1	10 10.6	94 100.0

TABLE 5

Dependent Variable: GROWTH

Indep. Var.	B	SE B	T	Sig T
1. INVGRO2	.1283	.0286	4.491	.000
2. INVGRO1	.1387	.0346	4.013	.000
3. DIRECTTX	.0377	.0117	3.231	.002

Constant	-0.7569
R Square	.4998
F=	17.6541
Signif. F=	.0000
Durbin-Watson:	1.6147
N=	56

Variables Not Included

1. EXPGRO2
2. IMPGRO1
3. IMPGRO2
4. EXTPUBDB
5. INDIRTAX

TABLE 6

CURRENT MARGINAL TAX RATES AND AVERAGE ANNUAL ECONOMIC GROWTH IN LDCs, 1960-1982

Low Tax Rates - All Thesholds (MTR: 0 - 24%)

Country	Growth Rate	Mean
Hong Kong	7.0%	7.0

Medium Tax Rates - Low and Medium Thesholds (MTR: 25- 49%; T: $ 0 - 50,000)

Country	Growth Rate	Mean
Argentina	1.6	
Bolivia	1.7	
Ivory Coast	2.1	2.1
Paraguay	3.7	
Solomon Islands	1.3	

Medium Tax Rates - High Thesholds (MTR: 25-49%; T: $50,001+)

Country	Growth Rate	Mean
Indonesia	4.2	
Singapore	7.4	4.5
Venezuela	1.9	

High Tax Rates - Medium Thesholds (MTR: 50%+; T: $20,001-50,000)

Country	Growth Rate	Mean
Belize	3.4	
Botswana	6.8	
Brazil	4.8	
Cyprus	5.9	
Dominica	-0.8	
Malaysia	4.3	
Morocco	2.6	3.1
Nigeria	3.3	
Phillipines	2.8	
Senegal	0.0	
South Africa	2.1	
Trinidad & Tobago	3.1	
Zimbabwe	1.5	

High Tax Rates - High Thresholds (MTR: 50%+; T: $50,001+)

Country	Growth Rate	Mean
Dominican Republic	3.2	
Ecuador	4.8	
Egypt	3.6	
Korea	6.6	
Liberia	0.9	
Mexico	3.7	3.9
Nicaragua	0.2	
Panama	3.4	
Taiwan	7.0	
Thailand	4.5	
Tunisia	4.7	

High Tax Rates - Low Thesholds (MTR: 50%+; T: $ 0 - 20,000)

Country	Growth Rate	Mean
Bangladesh	0.3	
Barbados	4.5	
Chile	0.6	
Costa Rica	2.8	
Fiji	3.2	
Ghana	-1.3	
India	1.3	
Jamaica	0.7	
Kenya	2.8	1.9
Malawi	2.6	
Malta	8.0	
Pakistan	2.8	
St. Lucia	3.4	
St. Vincent	0.6	
Sudan	-0.4	
Swaziland	4.2	
Tanzania	1.9	
Turkey	3.4	
Uganda	-1.1	
Zaire	-0.3	
Zambia	-0.1	

TABLE 7

Dependent Variable: EXPGRO2

Indep. Var.	B	SE B	T	Sig T
1. INDGRRT	.7959	.1491	5.337	.000

Constant	-1.3377
R Square	.3371
F=	28.4789
Signif. F=	.0000
Durbin-Watson:	2.1270
N=	57

Variables Not Included

1. INVGRO2
2. IMPGRO1
3. IMPGRO2

TABLE 8

Dependent Variable: IMPGRO2

Indep. Var.	B	SE B	T	Sig T
1. INVGRO2	.4586	.0930	4.931	.000
2. EXPGRO2	.2841	.0912	3.114	.003

Constant	-0.2426
R Square	.5018
F=	27.6929
Signif. F=	.0000
Durbin-Watson:	1.7322
N=	57

Variables Not Included

1. INDIRTAX
2. AGGRRT
3. INDGRRT

TABLE 9

Dependent Variable: GOVEXP

Indep. Var.	B	SE B	T	Sig T
1. TXPCGNP	.8479	.3408	2.488	.0184

Constant	10.3025
R Square	.1664
F=	6.1894
Signif. F=	.0184
Durbin-Watson:	1.8365
N=	32

Variables Not Included

1. DIRECTTX
2. INDIRTAX

TABLE 10

Dependent Variable: EXTPUBDB

Indep. Var.	B	SE B	T	Sig T
1. GROWTH	-3.5614	1.8190	-1.958	.0580

Constant	45.0326
R Square	.0962
F=	3.8333
Signif. F=	.0580
Durbin-Watson:	1.6819
N=	37

Variables Not Included

TXPCGNP

TABLE 11

Dependent Variable: PRICONG2

Indep. Var.	B	SE B	T	Sig T
1. GROWTH	.9654	.1292	7.470	.000

Constant	1.9150
R Square	.4544
F=	55.8046
Signif. F=	.0000
Durbin-Watson:	1.8937
N=	68

Variables Not Included

1. DIRECTTX
2. INDIRTAX
3. PERCPGNP

TABLE 12

C R O S S T A B U L A T I O N O F

CDPOLSYS 'POLITICAL SYSTEM' BY POLRTIDX 'POLITICAL RIGHTS INDEX'

CDPOLSYS	COUNT / ROW PCT / COL PCT	POLRTIDX 1	2	3	4	5	6	7	ROW TOTAL
1 MULTIPARTY	COUNT	9	18	6	2	3			38
	ROW PCT	23.7	47.4	15.8	5.3	7.9			38.0
	COL PCT	100.0	100.0	60.0	25.0	14.3			
2 DOMINANT PARTY	COUNT			3	5	8	1	1	18
	ROW PCT			16.7	27.8	44.4	5.6	5.6	18.0
	COL PCT			30.0	62.5	38.1	6.3	5.6	
3 ONE PARTY	COUNT				1	4	12	8	25
	ROW PCT				4.0	16.0	48.0	32.0	25.0
	COL PCT				12.5	19.0	75.0	44.4	
4 NON-PARTY MILITA	COUNT					2	3	9	14
	ROW PCT					14.3	21.4	64.3	14.0
	COL PCT					9.5	18.8	50.0	
5 NON-PARTY NON-MI	COUNT			1		4			5
	ROW PCT			20.0		80.0			5.0
	COL PCT			10.0		19.0			
COLUMN TOTAL		9	18	10	8	21	16	18	100
		9.0	18.0	10.0	8.0	21.0	16.0	18.0	100.0

TABLE 13

CROSSTABULATION OF CDPOLSYS 'POLITICAL SYSTEM' BY CIVRTIDX 'CIVIL RIGHTS INDEX'

CDPOLSYS	CIVRTIDX: COUNT / ROW PCT / COL PCT	1	2	3	4	5	6	7	ROW TOTAL
1 MULTIPARTY	COUNT	2	16	10	4	5	1		38
	ROW PCT	5.3	42.1	26.3	10.5	13.2	2.6		38.0
	COL PCT	100.0	100.0	83.3	40.0	17.9	4.5		
2 DOMINANT PARTY	COUNT			2	4	8	3	1	18
	ROW PCT			11.1	22.2	44.4	16.7	5.6	18.0
	COL PCT			16.7	40.0	28.6	13.6	10.0	
3 ONE PARTY	COUNT					6	11	8	25
	ROW PCT					24.0	44.0	32.0	25.0
	COL PCT					21.4	50.0	80.0	
4 NON-PARTY MILITA	COUNT				1	6	6	1	14
	ROW PCT				7.1	42.9	42.9	7.1	14.0
	COL PCT				10.0	21.4	27.3	10.0	
5 NON-PARTY NON-MI	COUNT				1	3	1		5
	ROW PCT				20.0	60.0	20.0		5.0
	COL PCT				10.0	10.7	4.5		
COLUMN TOTAL		2	16	12	10	28	22	10	100
		2.0	16.0	12.0	10.0	28.0	22.0	10.0	100.0

TABLE 14

C R O S S T A B U L A T I O N   O F

CDPOLSYS 'POLITICAL SYSTEM' BY CODEG 'GROUPED GROWTH RATE'

CDPOLSYS	CODEG COUNT ROW PCT COL PCT	-2.0-0.0 1	0.1-1.0 2	1.1-2.0 3	2.1-3.0 4	3.1-4.0 5	4.1-5.0 6	5.1-6.0 7	6.1-7.0 8	7.0+ 9	ROW TOTAL
MULTIPARTY	1	3	5	5	7	8	5	2	2	1	38
		7.9	13.2	13.2	18.4	21.1	13.2	5.3	5.3	2.6	40.9
		25.0	38.5	31.3	41.2	53.3	45.5	66.7	50.0	50.0	
DOMINANT PARTY	2	2	2	3	1	5	3		1	1	18
		11.1	11.1	16.7	5.6	27.8	16.7		5.6	5.6	19.4
		16.7	15.4	18.8	5.9	33.3	27.3		25.0	50.0	
[illegible]	3	4	2	5	7		2	1	1		22
		18.2	9.1	22.7	31.8		9.1	4.5	4.5		23.7
		33.3	15.4	31.3	41.2		18.2	33.3	25.0		
[illegible] MILITA	4	2	4	3	2	1					12
		16.7	33.3	25.0	16.7	8.3					12.9
		16.7	30.8	18.8	11.8	6.7					
NON-PARTY NON-MI	5	1				1	1				3
		33.3				33.3	33.3				3.2
		8.3				6.7	9.1				
COLUMN TOTAL		12	13	16	17	15	11	3	4	2	93
		12.9	14.0	17.2	18.3	16.1	11.8	3.2	4.3	2.2	100.0

TABLE 15

CROSSTABULATION OF
CDPOLSYS 'POLITICAL SYSTEM' BY CODEPC8 'GROUPED PERCPGNP'

CDPOLSYS \ CODEPC8 COUNT ROW PCT COL PCT	$0-200 1	$201-400 2	$401-700 3	$701-1000 4	$1001-1500 5	$1501-2000 6	$2001-4000 7	$4001-6000 8	$6000+ 9	ROW TOTAL
1 MULTIPARTY		4 10.5 22.2	5 13.2 31.3	6 15.8 42.9	9 23.7 75.0	2 5.3 33.3	8 21.1 53.3	3 7.9 75.0	1 2.6 50.0	38 40.4
2 DOMINANT PARTY		1 5.6 5.6	6 33.3 37.5	4 22.2 28.6	1 5.6 8.3	3 16.7 50.0	2 11.1 13.3	1 5.6 25.0		18 19.1
3 ONE PARTY	4 18.2 57.1	9 40.9 50.0	3 13.6 18.8	2 9.1 14.3	1 4.5 8.3		3 13.6 20.0			22 23.4
4 NON-PARTY MILITA	2 16.7 28.6	4 33.3 22.2	2 16.7 12.5	1 8.3 7.1	1 8.3 8.3		2 16.7 13.3			12 12.8
5 NON-PARTY NON-MI	1 25.0 14.3			1 25.0 7.1		1 25.0 16.7			1 25.0 50.0	4 4.3
COLUMN TOTAL	7 7.4	18 19.1	16 17.0	14 14.9	12 12.8	6 6.4	15 16.0	4 4.3	2 2.1	94 100.0

INTERNATIONAL MONETARY FUND LIST OF TAX AND NONTAX REVENUE

TAX REVENUE

Taxes on Income, Profits and Capital Gains

- Individual
- Corporate
- Other Unallocable Taxes on Income

Social Security Contributions

- Employees
- Employers
- Self-Employed or Nonemployed

Employers Payroll or Manpower Taxes

Taxes on Property

- Recurrent Taxes on Immovable Property
- Recurrent Taxes on Net Wealth
  - Individual
  - Corporate
- Estate, Inheritance and Gift Taxes
- Taxes on Financial and Capital Transactions
- Nonrecurrent Taxes
- Other Recurrent Taxes on Property

Domestic Taxes on Goods and Services

- General Sales, Turnover or Value-Added Taxes
- Excises
- Profits of Fiscal Monopolies
- Taxes on Specific Services
- Taxes on Use of, or Permission to Use, Goods or to Perform Activities
  - Business and Professional Licenses
  - Motor Vehicle Taxes
  - Other Taxes on Use of Goods
- Other Taxes on Goods and Services

Taxes on International Trade and Transactions

- Import Duties
  - Customs Charges
  - Other Import Charges

Export Duties
Profits of Export or Import Marketing Boards
Exchange Profits
Exchange Taxes
Other Taxes on International Trade and Transactions

Other Taxes

Poll Taxes
Stamp Taxes
Other Taxes n.e.c.

NONTAX REVENUE

Operating Surpluses of Departmental Enterprises

Property Income

From Nonfinancial Public Enterprises and Public Financial Institutions
Other Property Income

Administrative Fees and Charges and Nonindustrial Sales

Fines and Forfeits

Contributions to Government Employee Pension Funds within Government

Other Nontax Revenue

CAPITAL REVENUE

Sales of Fixed Capital Assets

Sales of Stocks

Sales of Land and Intangible Assets

GRANTS

From Abroad Excluding Supranational Authorities

From Other Levels of National Government

From Supranational Authorities

LIST OF DEVELOPING COUNTRIES IN ANALYSIS FILE

AFRICA

Benin
Botswana
Burkina Faso
Burundi
Cameroon
Central African Republic
Chad
Congo
Djibouti
Ethiopia
Gabon
The Gambia
Ghana
Ivory Coast
Kenya
Lesotho
Liberia
Madagascar
Malawi
Mali
Mauritania
Mauritius
Morocco
Niger
Nigeria
Rwanda
Senegal
Seychelles
Sierra Leone
Somalia
South Africa
Sudan
Swaziland
Tanzania
Togo
Tunisia
Uganda
Zaire
Zambia
Zimbabwe

ASIA

Bangladesh
Burma
China
Fiji
Hong Kong
India

Indonesia
Korea
Malaysia
Maldives
Nepal
Pakistan
Papua New Guinea
Phillipines
Singapore
Solomon Islands
Sri Lanka
Taiwan
Thailand

EUROPE

Cyprus
Greece
Malta
Portugal
Romania
Turkey
Yugoslavia

MIDDLE EAST

Bahrain
Egypt
Iran
Israel
Jordan
Syrian Arab Republic
Yemen Arab Republic

LATIN AMERICA

Argentina
Bahamas
Barbados
Belize
Bolivia
Brazil
Chile
Colombia
Costa Rica
Dominica
Dominican Republic
Ecuador
El Salvador
Grenada
Guatemala
Guyana
Haiti
Honduras

Jamaica
Mexico
Netherlands Antilles
Nicaragua
Panama
Paraguay
Peru
St. Lucia
St. Vincent
Suriname
Trinidad & Tobago
Uruguay
Venezuela

CHAPTER V

SUCCESSFUL TAX INCENTIVES

Tax concessions and reductions on a piecemeal basis have become an important tool in attracting domestic and foreign investment. The experience of Sri Lanka is especially noteworthy of the wholesale use of different tax incentive instruments to move its economy in the direction of higher growth through stimulating the development of manufactured export goods. Since the election of Junius Jayewardene in Sri Lanka in 1978, the government immediately created the Greater Colombo Economic Commission (GCEC), which exercises jurisdiction over 160 square miles of land extending north from the capital, Colombo, to the airport. Within this territory, the GCEC has established several free trade zones that offer investors a variety of incentives, with no limit on foreign equity participation. These include (a) up to ten years of full tax holiday on salaries, profits, dividends, with a potential extension of fifteen more years; (b) no income tax on the salaries of foreign personnel; (c) free remittance of dividends, no exchange controls, and tax free status for non-resident shareholder dividends; (d) free transfer of shares; (e) no import duty on raw materials, machinery, and so on. The GCEC goes out of its way to eliminate "red tape" to tall investors.

By December 1982, the GCEC hads approved 174 projects, representing investors for 21 different countries. Providing employment for 25,000 people, the full developed zone will employ 50,000 people. To see the importance of this figure, total industrial employment in the entire country in 1979 stood at about 150,000. In the first five years of operation of the GCEC, total foreign investment in the free trade zone came to US$250-300 million. As a result of this economic program, industrial exports rose substantially.

In addition to GCEC investments, a Foreign Investment Advisory Committee (FIAC) also authorizes joint ventures between foreign businessmen and local equity participants. Five-to-ten-year tax holidays on profits, dividends, and non-resident management fees are granted in a variety of approved investment or business areas including hotels, urban development projects, companies that construct power and irrigation projects, pioneer industries, gem exports, and so on. Total approved investments by 1982 came to over $500 million and envisaged new jobs from these approvals are estimated at 67,000.

To complement the investment opportunities, Sri Lanka has established offshore banking in form of Foreign Currency Banking Units, which offer offshore banking facilities to all non-residents and GCEC enterprises. Permissible currencies include French and Swiss francs, Japanese yen, Dutch guilders, English pounds sterling, German deutschmarks, and US dollars. Profits from the operation of offshore banking are tax free. Total assets and liabilities rose twenty times between 1979 and 1982 to $650 million.

Tax holidays to encourage investment have been accompanied by a variety of other fiscal relief measures. Included are such measures as exemption for interest earnings up to Rupees 2,000 on deposit with the National Savings Bank (a measure to spur savings), and exemption of up to one-third of assessable income if such income was spent on purchase of shares in new approved businesses, a contribution to a retirement fund, the purchase or construction of a house, or was classified as a research and development expenditure.

In 1980, both individual and corporate tax rates were cut. The maximum tax rate of 70 percent on individuals' income was lowered to 55 percent. Corporate rates were cut to 40 percent for companies with publicly quoted shares. Capital gains on publicly quoted companies are exempt from tax. Facilitating the capital markets was the establishment of a stock exchange, set up on September 29, 1982.

These tax incentive measures have boosted growth, output, and employment. Since 1977, real rates of economic growth have doubled and increases in per capita income between 1977 and 1981 have tripled compared with the prior regime of Mrs. Bandaranaike. These higher growth rates have been achieved despite the worse cyclone in decades, a worldwide economic slowdown, oil price hikes, and a severe drought.

Sri Lanka illustrates a list of possible tax incentives and concessions that are designed to spur growth. A detailed list of kinds of tax incentives includes:

1. Establishment of a duty-free port without import duties or export taxes.

2. The maintenance of low direct rates of taxation, and the systematic reduction of steeply graduated individual tax rates or high business tax rates.

3. An emphasis on consumption taxes to promote savings.

4. Granting of specific tax holidays to certain classes of long-term investments.

5. Permitting accelerated depreciation to improve business cash-flow.

6. Provision for loss carryforward.

7. Overall movement in the direction of greater tax neutralilty.

Additional Illustrations

The island-nation of Singapore vividly illustrates the use of tax concessions to promote export-oriented industries. When Singapore was expelled from Malaysia in 1965, the newly independent country was faced with a sharply contracted domestic market. Singapore shifted quickly to the strategy of export-oriented industrialization. The government turned to experienced foreign companies to invest and manufacture for export. Companies were given a number of incentives to export. In 1965, they were permitted to deduct double the expenses of developing world markets from their taxable income. A 1967 act granted tax concessions on profits earned from exports. The consolidated Economic Incentives Act of 1967 remitted 90 percent of the profits tax if export performance was above a base level for eligible industries. Existing industries seeking to expand could obtain accelerated depreciation allowances and extension of pioneer status, conferring 100 percent for an additional ten years. The government treated foreigners and foreign capital equally with the local citizenry. 100 percent foreign ownership of Singapore firms was allowed. Immigration of necessary business personnel was freely allowed. Remittance of profits was freely allowed. No controls were imposed on capital movements. In the 1980s, new incentives were granted to encourage research and development work in high technology industries, and the maximum personal income tax rate was lowered from 55 to 40 percent (similar to the company tax rate) to insure that Singaporeans did not view high tax rates as a serious disincentive to continued hard work.

To summarize, the Singapore government installed a raft of economic incentives to woo foreign investors. Tax holidays, "pioneer status," accelerated depreciation allowances, export incentives, unrestricted repatriation of capital and profits, relief from double taxation, readily available factory sites accompanied by many amenities, and subsidies for manpower training programs. Many of the tax incentives were appropriate devices to compensate exporters for the excess costs they previously endured due to a brief experiment with protectionism that prevailed prior to 1965. One can construe the offsetting effects of these export incentives as moving the tax system in the direction of greater neutrality.

The Republic of China on Taiwan also adopted a series of tax incentives to facilitate a shift from import substitution to export orientation policies. When the United States government in the late 1950s announced plans to phase out its massive economic assistance, the government sought massive infusions of private foreign capital and technology.

In 1958, the government promulgated a Program for Improvement of Foreign Exchange and Trade Control. Accompanying a devaluation of the New Taiwan dollar from a previously overvalued rate, the government undertook a number of concrete tax steps to compensate for distortions imposed on exporters during the prior import substitution regime. It gradually liberalized and finally abolished the commodity import quota system. Tariffs were reduced. Import controls were liberalized. It granted three-year income tax exemptions to certain categories of industries to stimulate investment. It revised the Income Tax Law and the Company Law.

In 1960, the government promulgated the Statute for the Encouragement of Investment. Key elements in the 1960 financial reform package granted those export-oriented productive enterprises, which met the statute's criteria, a five-year income tax holiday, set the maximum rate of profits tax (including surtax)J at 18 percent, compared with the ordinary 32.5 percent rate, allowed all reinvested undistributed profits to remain free of tax, give a tax deduction for exports equal to 2 percent of annual export proceeds, exempted or reduced productive enterprises from stamp taxes, and permitted 7 percent of profits before taxation to be set aside as a reserve against losses due to exchange rate revisions. Annual tax refunds due to these new incentives, as a percentage of total income, stamp, customs, and commodity taxes, ranged from a low of 19 percent in 1963 to a high of 52.4 percent in 1972, with the annual average in the 30-percent range. Taiwan's remarkable economic growth, in part, is directly linked linked to these sharp reductions in taxes.

Adding more of a good thing, the government revised and expanded the scope of the investment statute in 1965, authorizing the creation of duty-free export processing zones. Three zones grew so fast that by 1970 they provided 7 percent of all jobs in manufacturing and turned out a tenth of all exports. In some years, the entire balance of merchandise trade could be traced wholly to the trade balance within the zones. A necessary accompaniment to an export strategy was the steady reduction in the rate of protection provided by tariffs throughout the 1960s and 1970s.

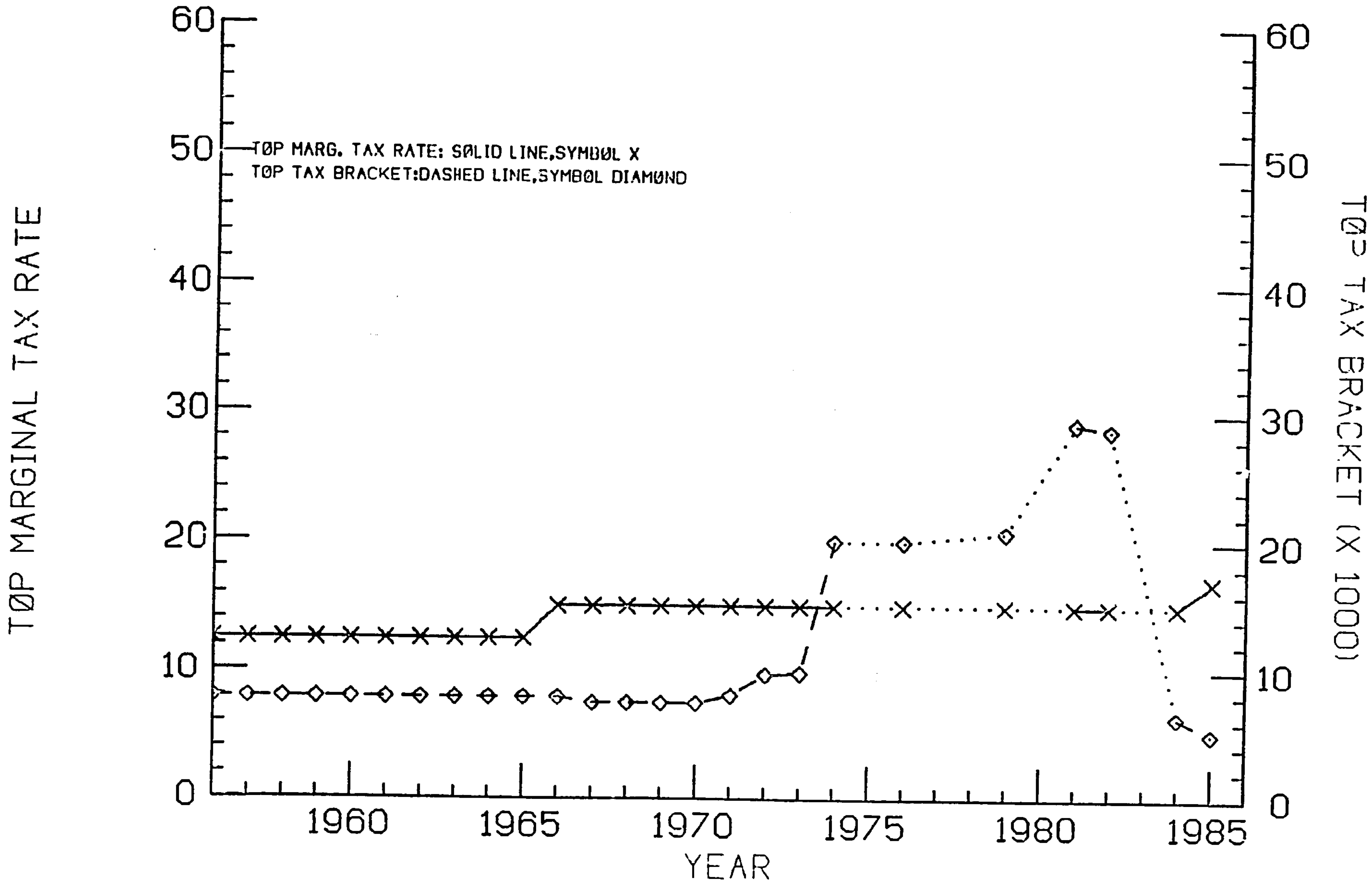
Additional incentives included reimbursement of customs duties and harbor dues imposed on imported contents of export products, refund of the commodity tax on products for export, extension of foreign exchange loans for the import of raw materials for export processing, extension of low-interest export loans, exemption of income tax and business tax on export transactions, cash bonuses for exports, establishment of bonded warehouses, and export processing zones. In total, these tax concessions for exports neutralized the prior bias of Taiwan's import substitution period between 1949-1960.

Another set of incentives is found in the rapid industrialization of South Korea (hereafter Korea). Apart from maintaining an effective free trade exchange rate through using export incentives to offset domestic inflation, the Korean government implemented a series of trade liberalization and tariff reform measures. Exporters were granted preferential credit. Other steps included indirect tax exemption on inputs into export promotion and export sales, a 50 percent reduction on income taxes from export earnings, tariff exemption on imported raw materials and equipment for export production, and a "wastage allowance" on imported raw materials for production of exports. Following the example of the successful Kaohsiung Export Processing Zone in Taiwan, the Korean authorities passed legislation creating several tax-exempt and duty-free zones of their own in the late 1960s, which generated tens of thousands of jobs in a few short years. These measures should be viewed as moving Korea's overall tax system in the direction of greater neutrality to compensate for the bias imposed during the import-substitution phase of postwar Korean development.

A final example is the case of Brazil (1958-1964), which for a brief period of six years outgrew each year the four Asian hyper-growth economies of Hong Kong, Taiwan, Singapore, and Korea. Incentives were improved by eliminating the tax discrimination against exports of manufactured goods, and the introduction of various export subsidies. Second, rates of import protection were reduced steadily between 1968-1973. By 1973, the average tariff on manufactured goods stood at about 57 percent of its 1966 level. Exemption from federal indirect taxes enhanced the profitability of exports. Exports were then exempted from state indirect taxes, taxes on financial operations, and the special tax on fuel and oil. These measures were largely aimed at eliminating prior tax discrimination against exports, thus moving the system towards greater neutrality. From 1968 on, export subsidies were granted in the form of federal and state tax credits, exempting export profits from income taxes, and preferential credits for imported inputs. To repeat, subsidizing exports involved superimposing a system of export incentives on a system of import protection, which tried to neutralize the adverse effects of an overvalued currency and the higher costs of domestic inputs into the manufacture of export goods.

These case studies of tax incentives demonstrate a wide variety of successful reforms that have been employed to stimulate foreign and domestic investment, spur growth through more efficient allocation of resources, and enhance the supply of labor and capital by increasing aftertax returns.

HØNG KØNG



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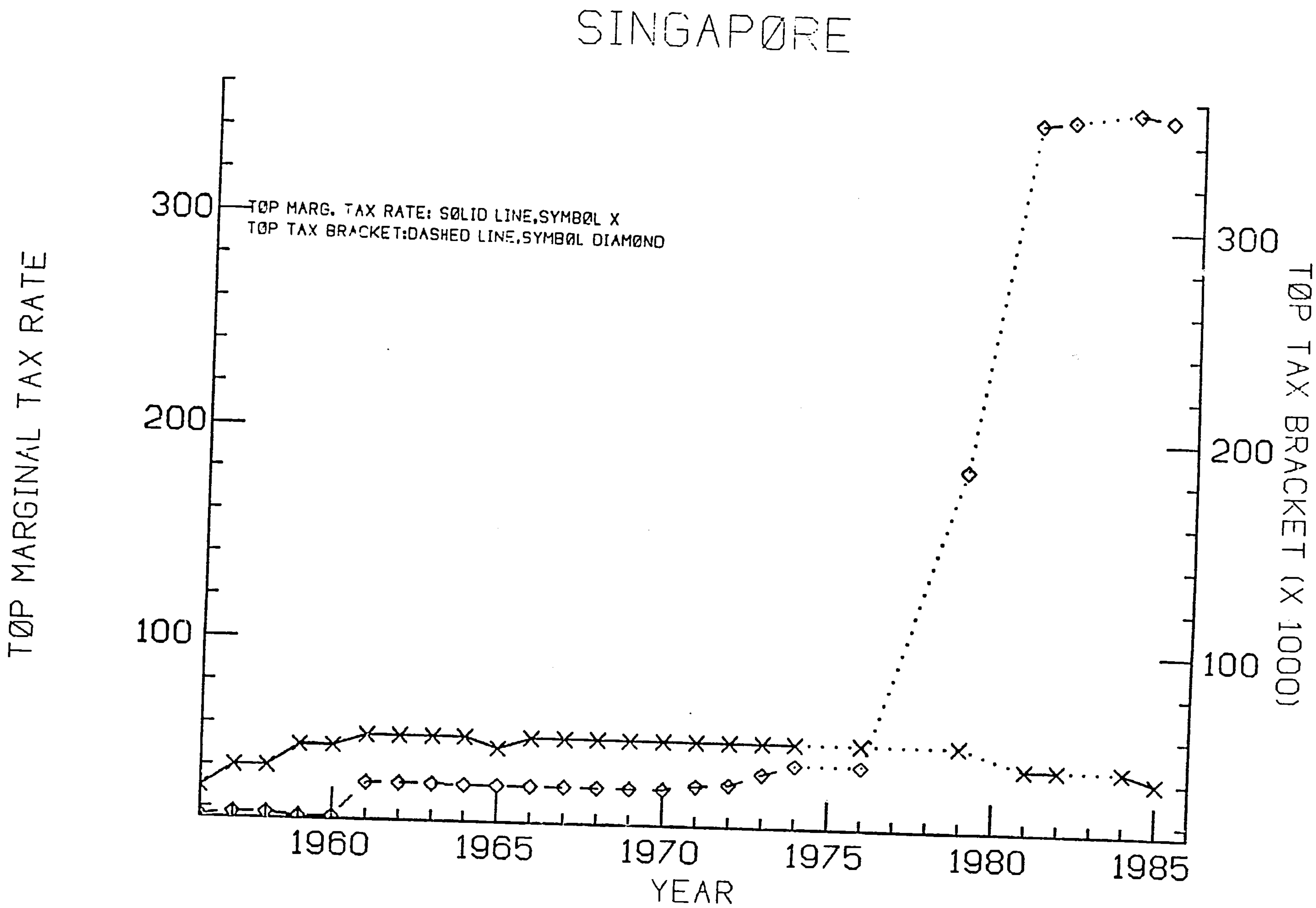
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TØP TAX BRACKET:DASHED LINE,SYMBØL DIAMØND
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300
200
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1960
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YEAR

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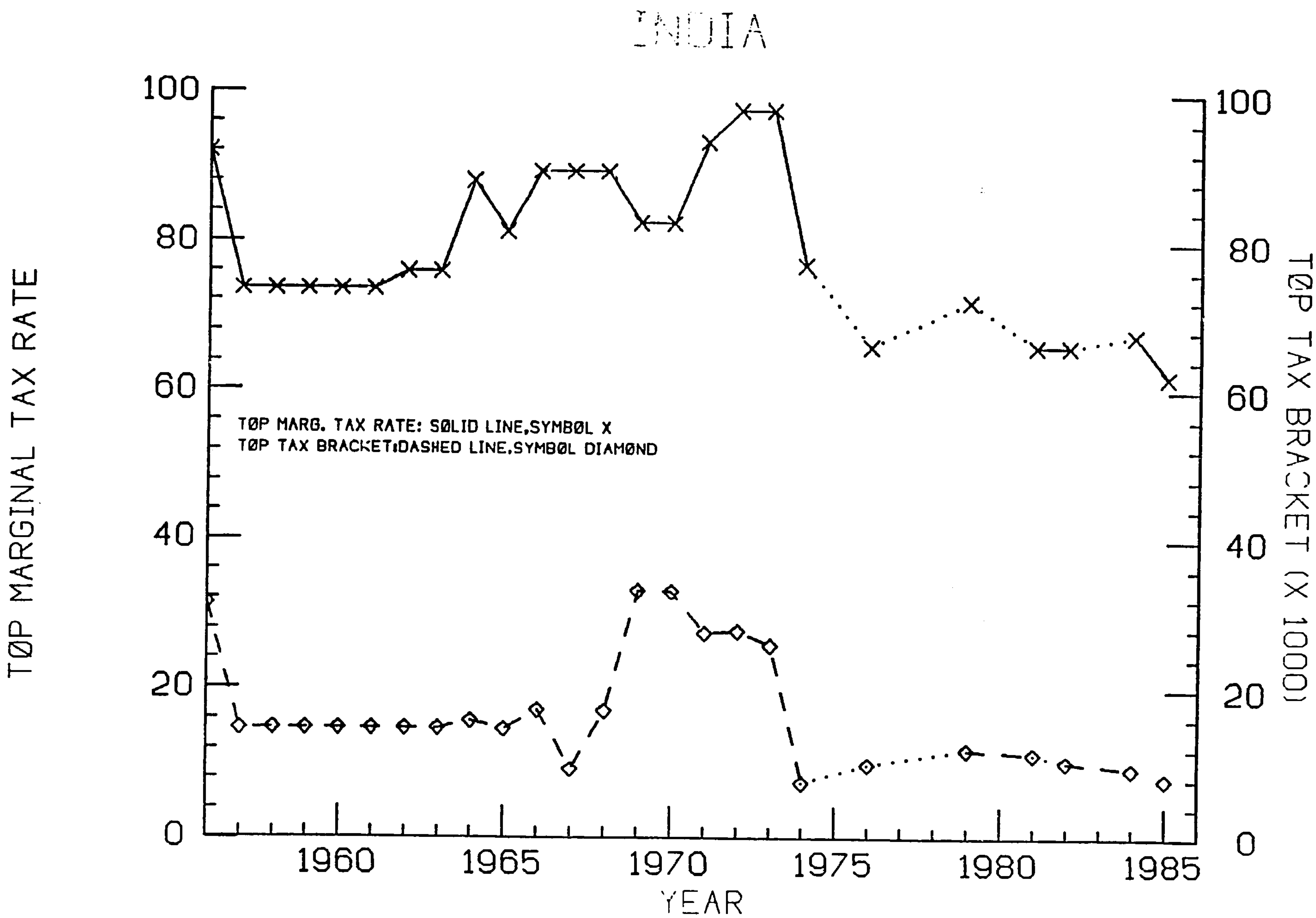
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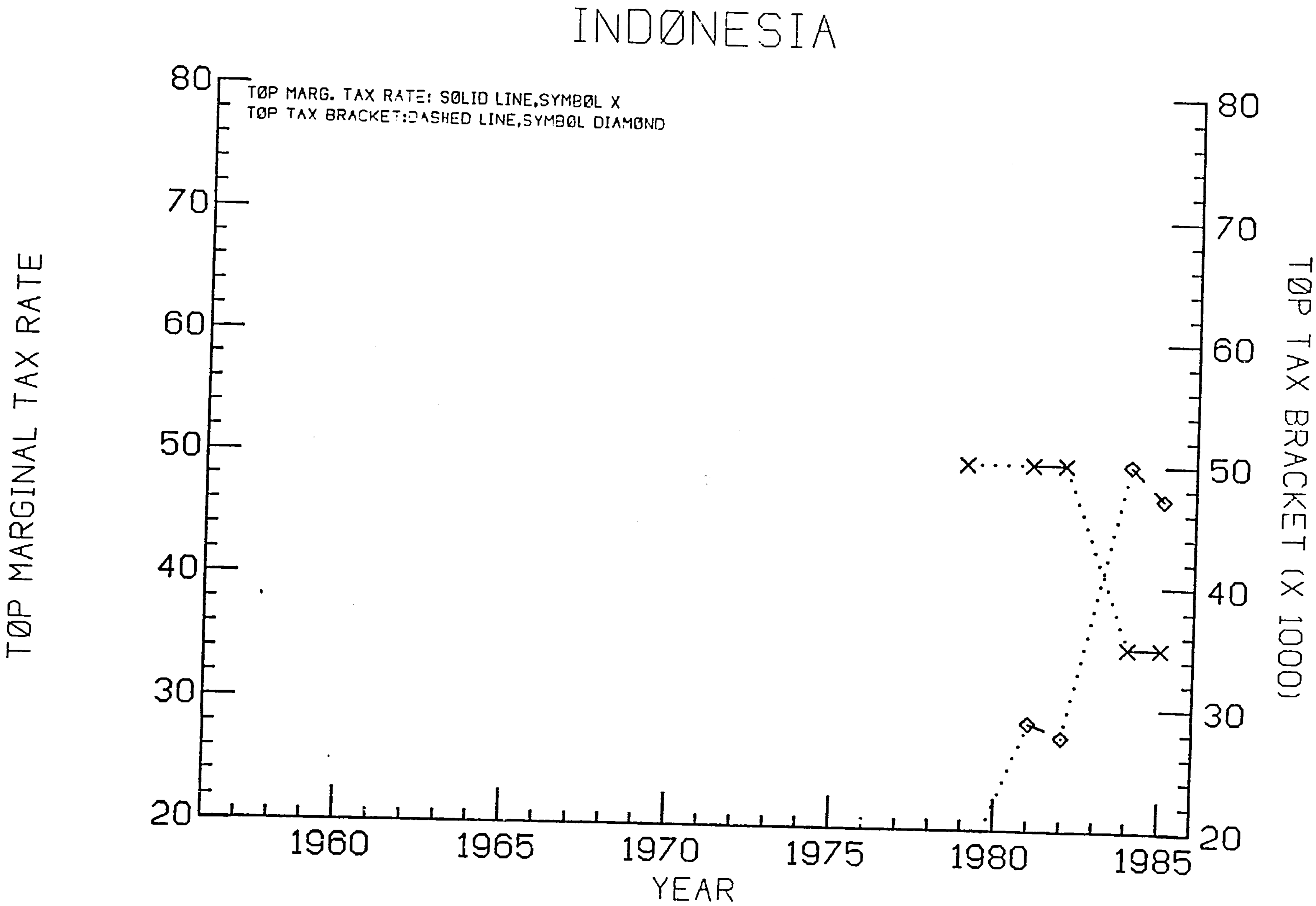
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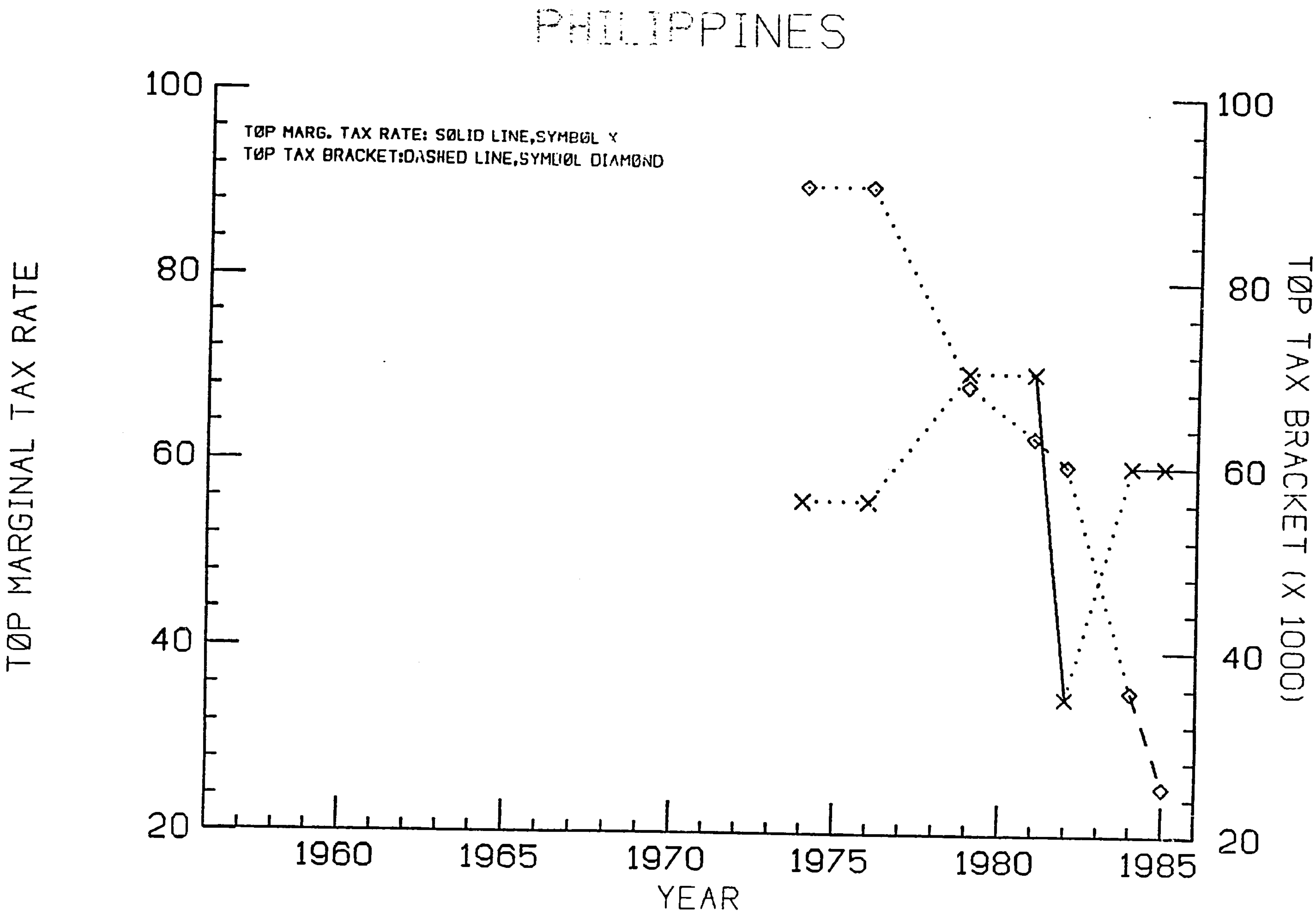
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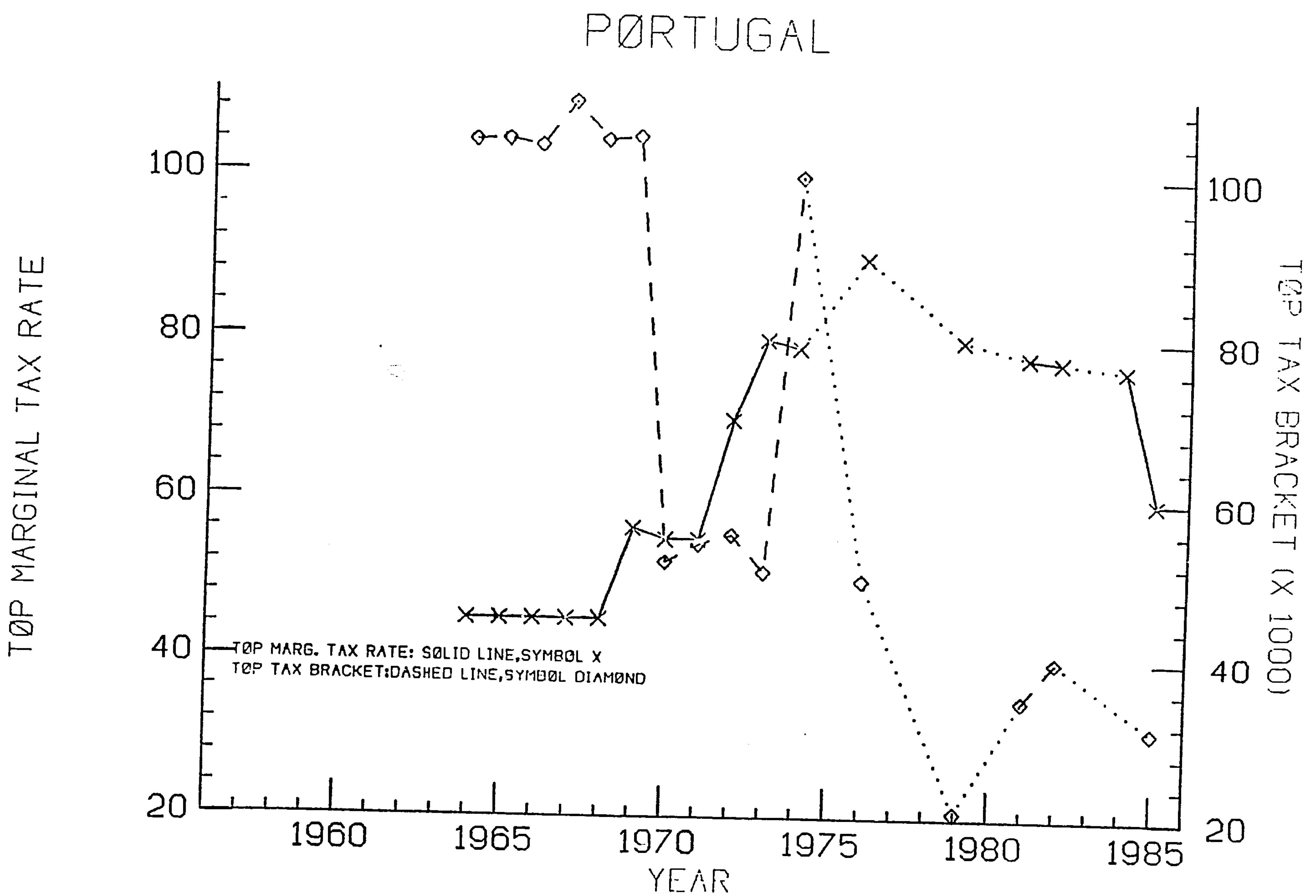
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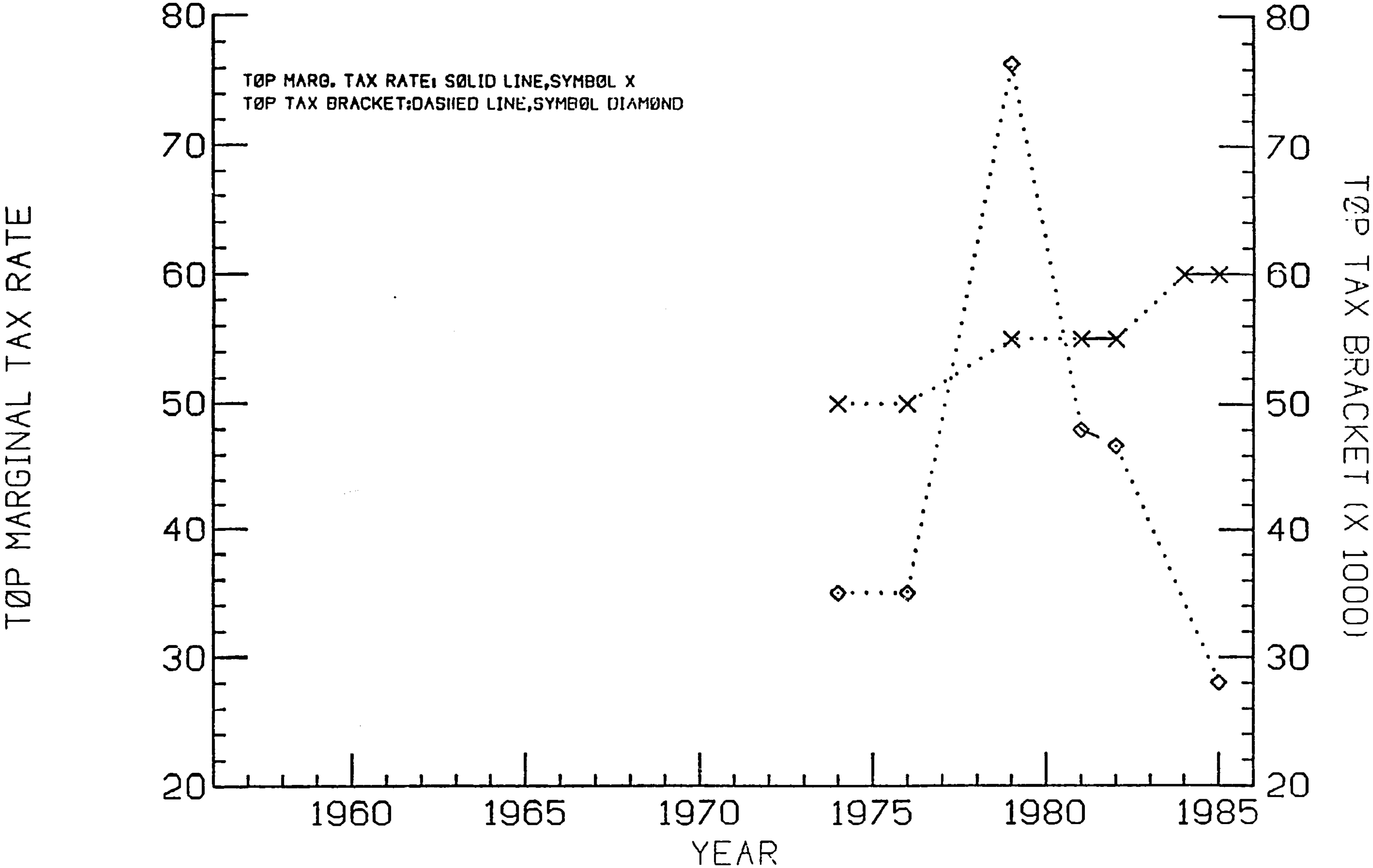
TØP TAX BRACKET:DASHED LINE,SYMBØL DIAMØND

BRAZIL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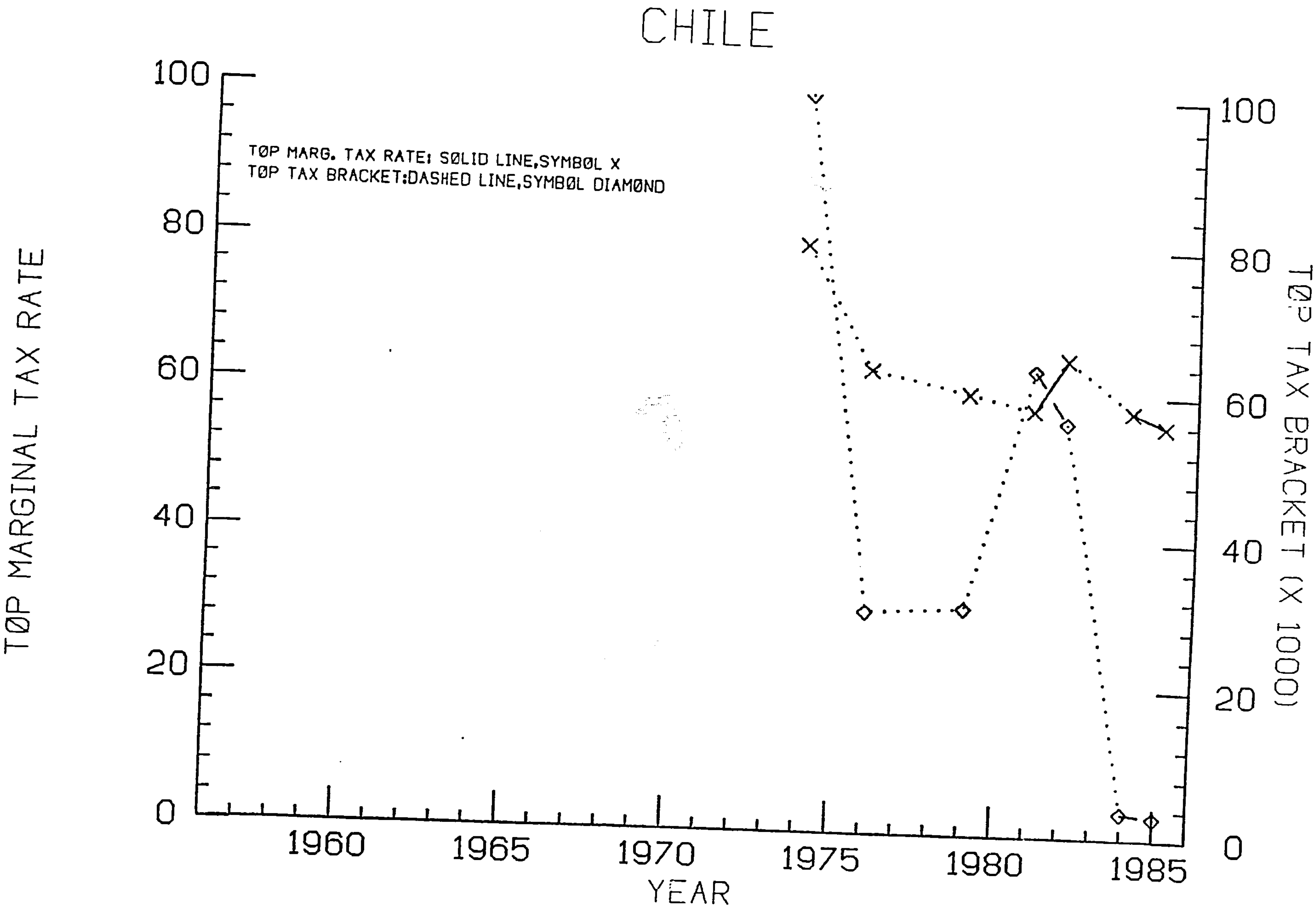
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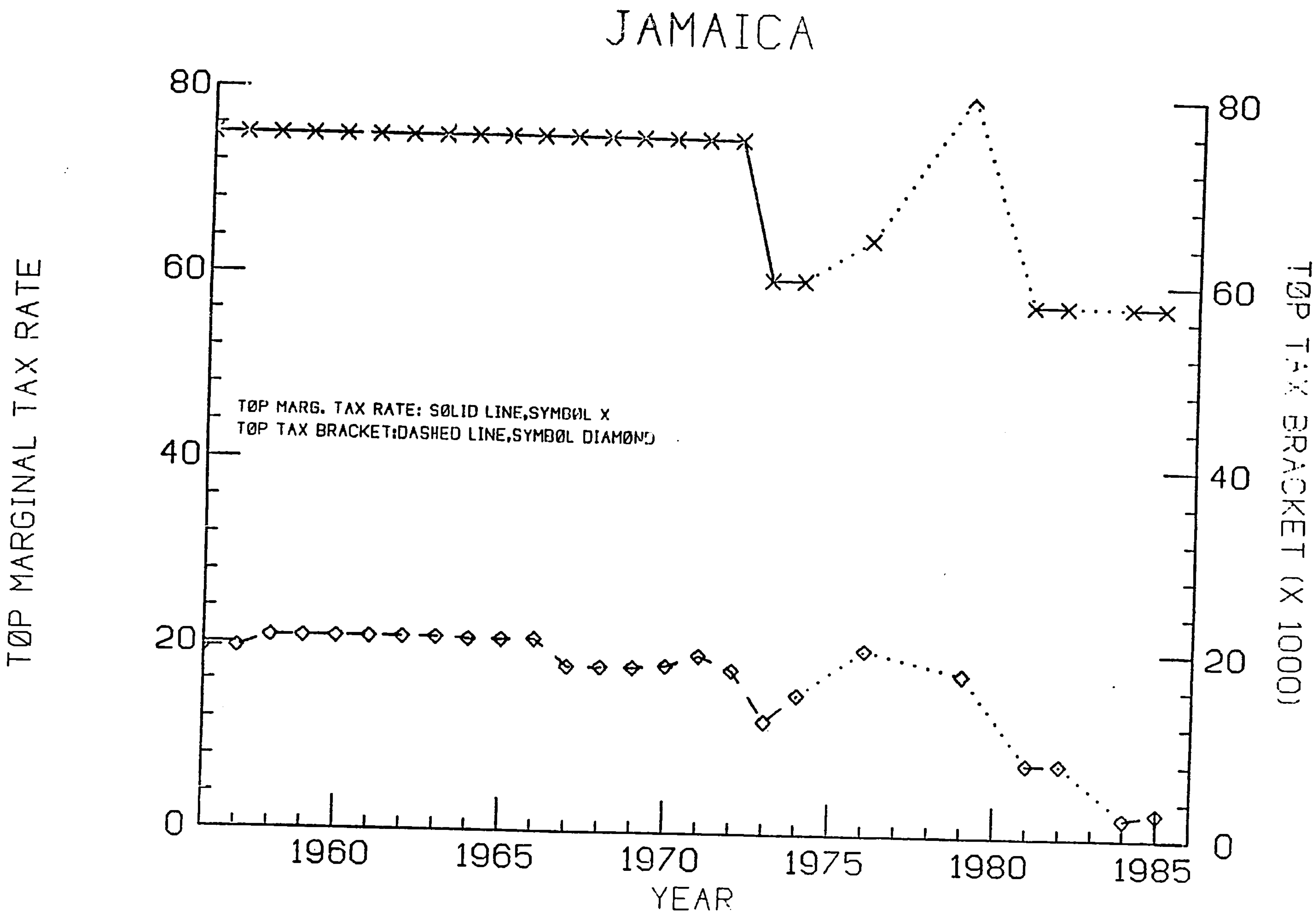
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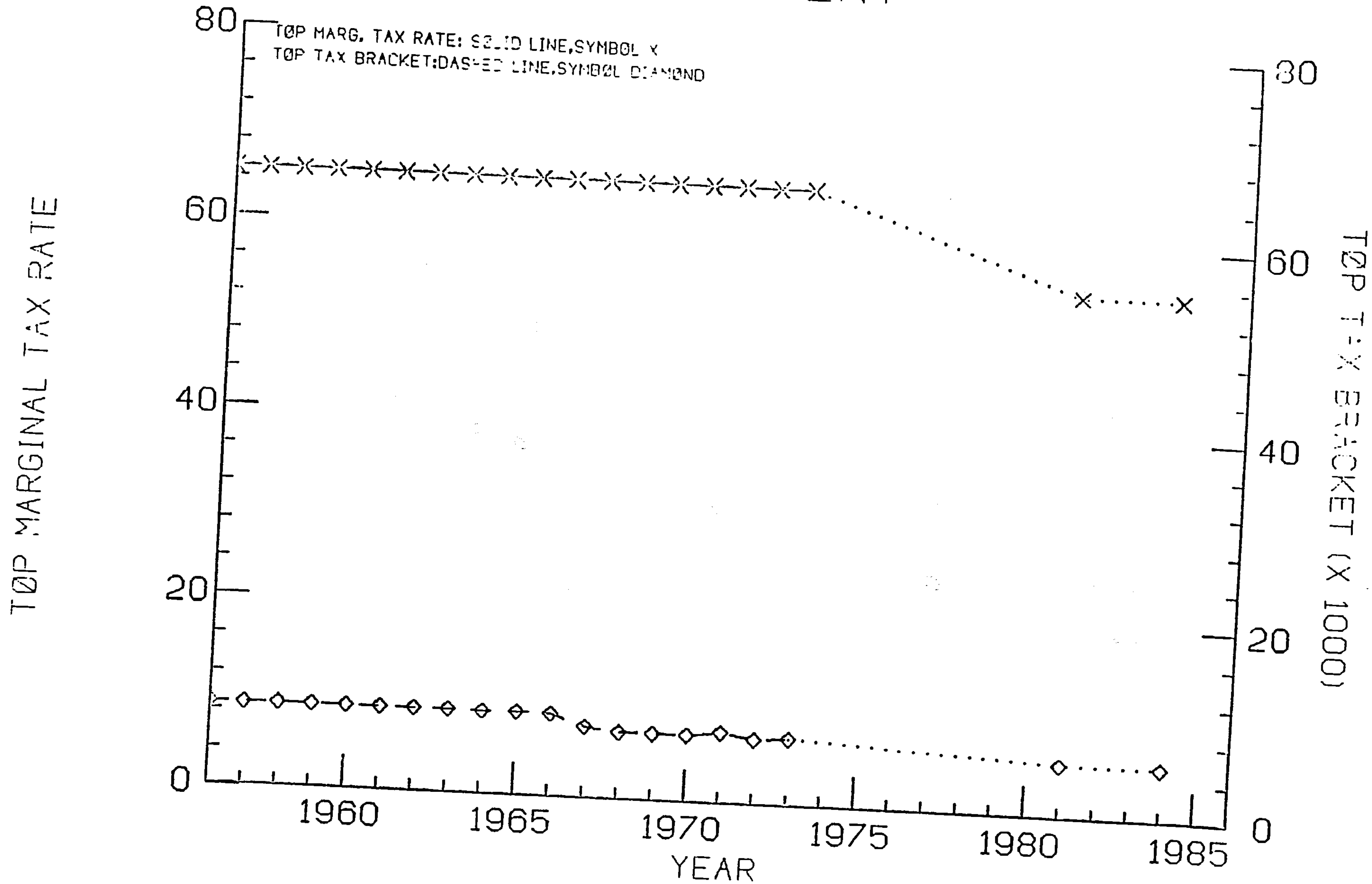

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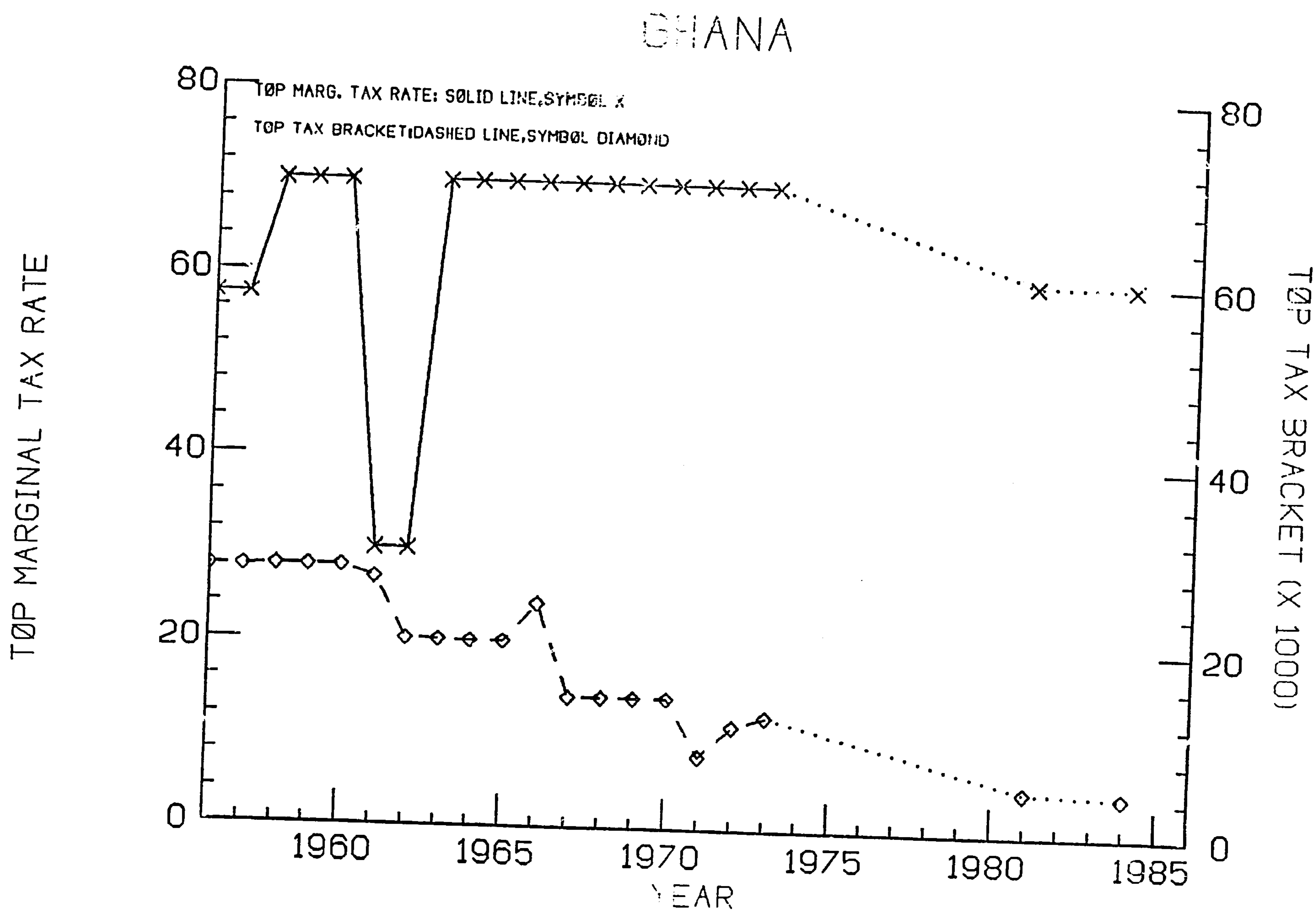
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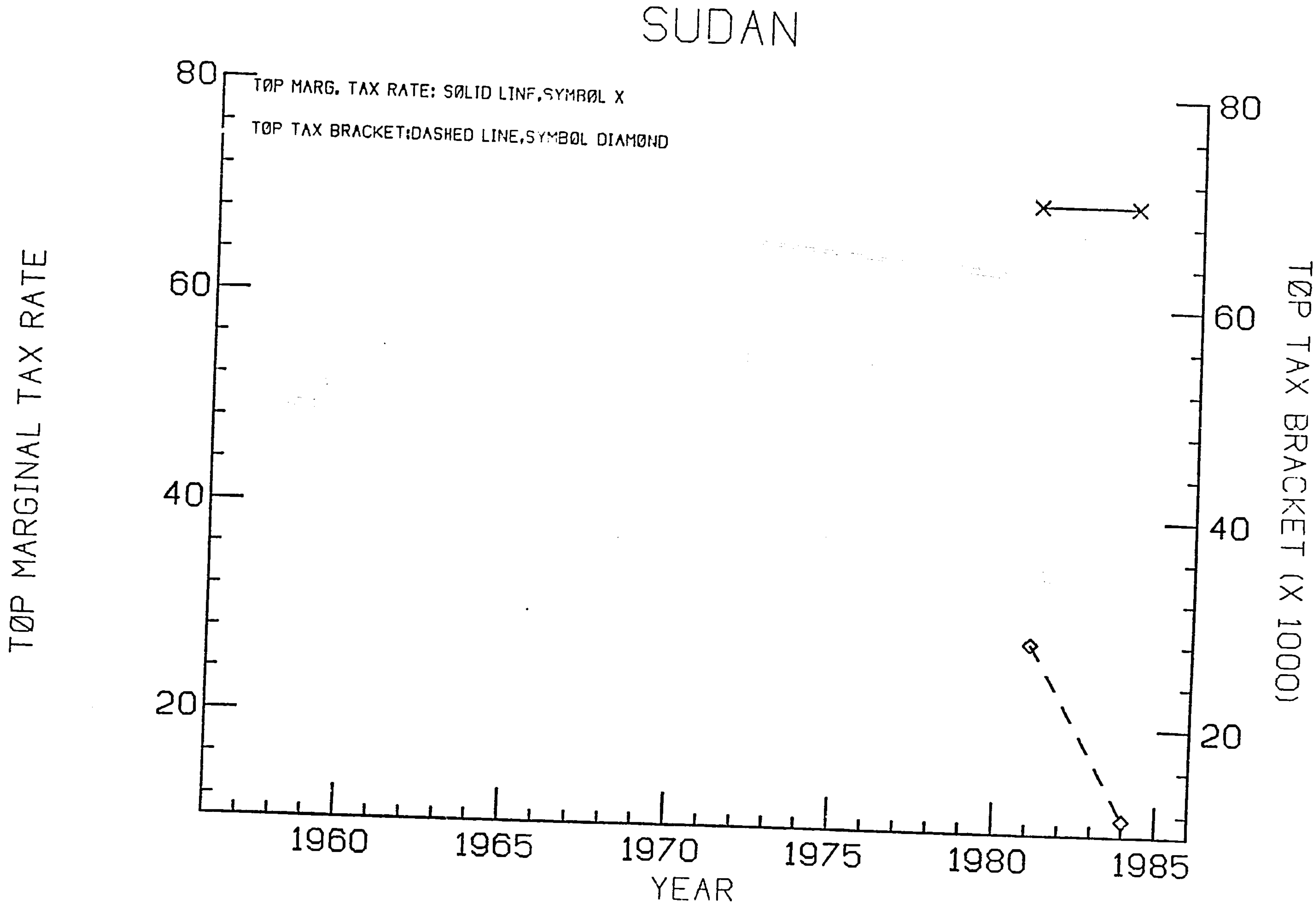

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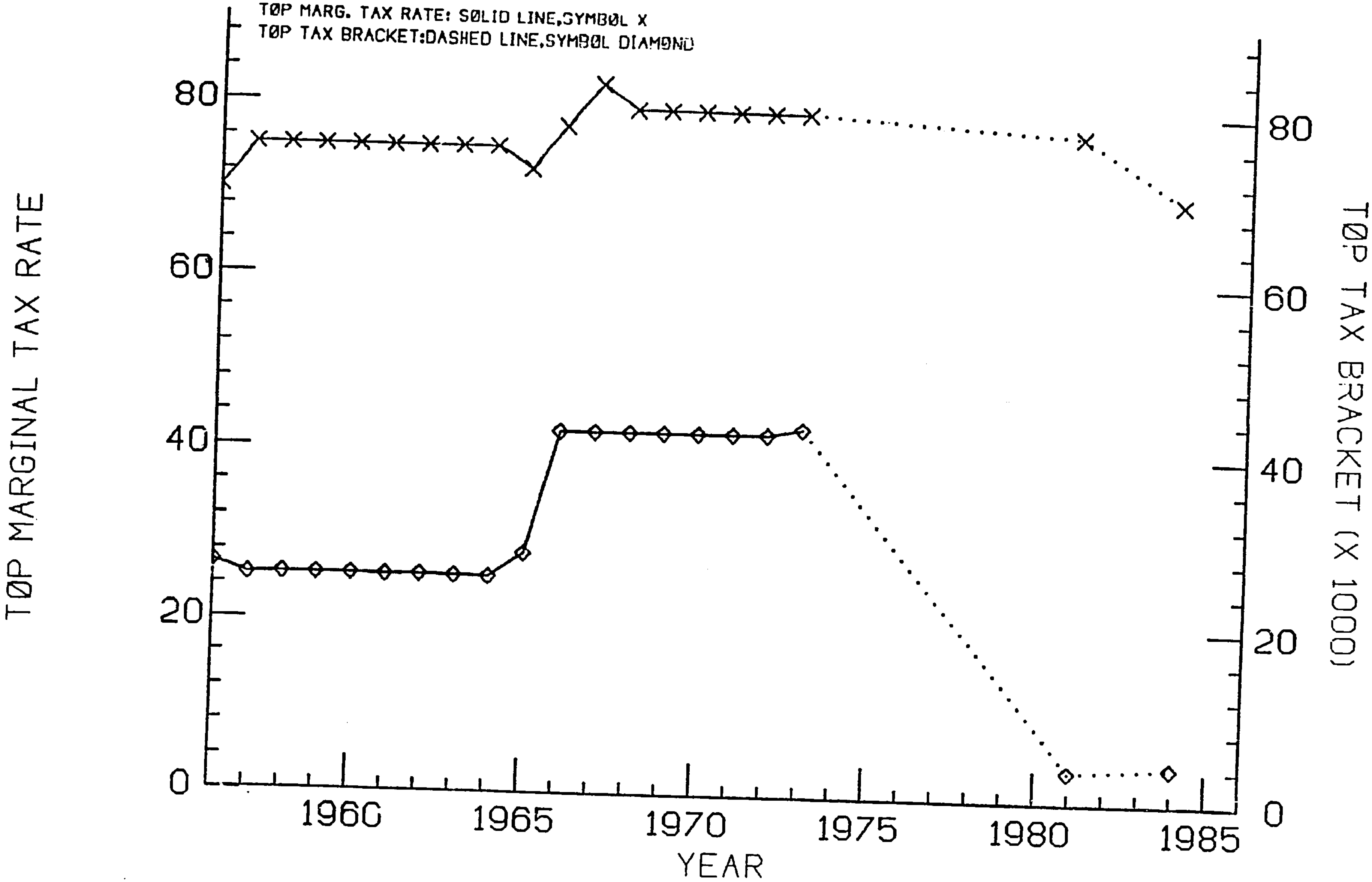

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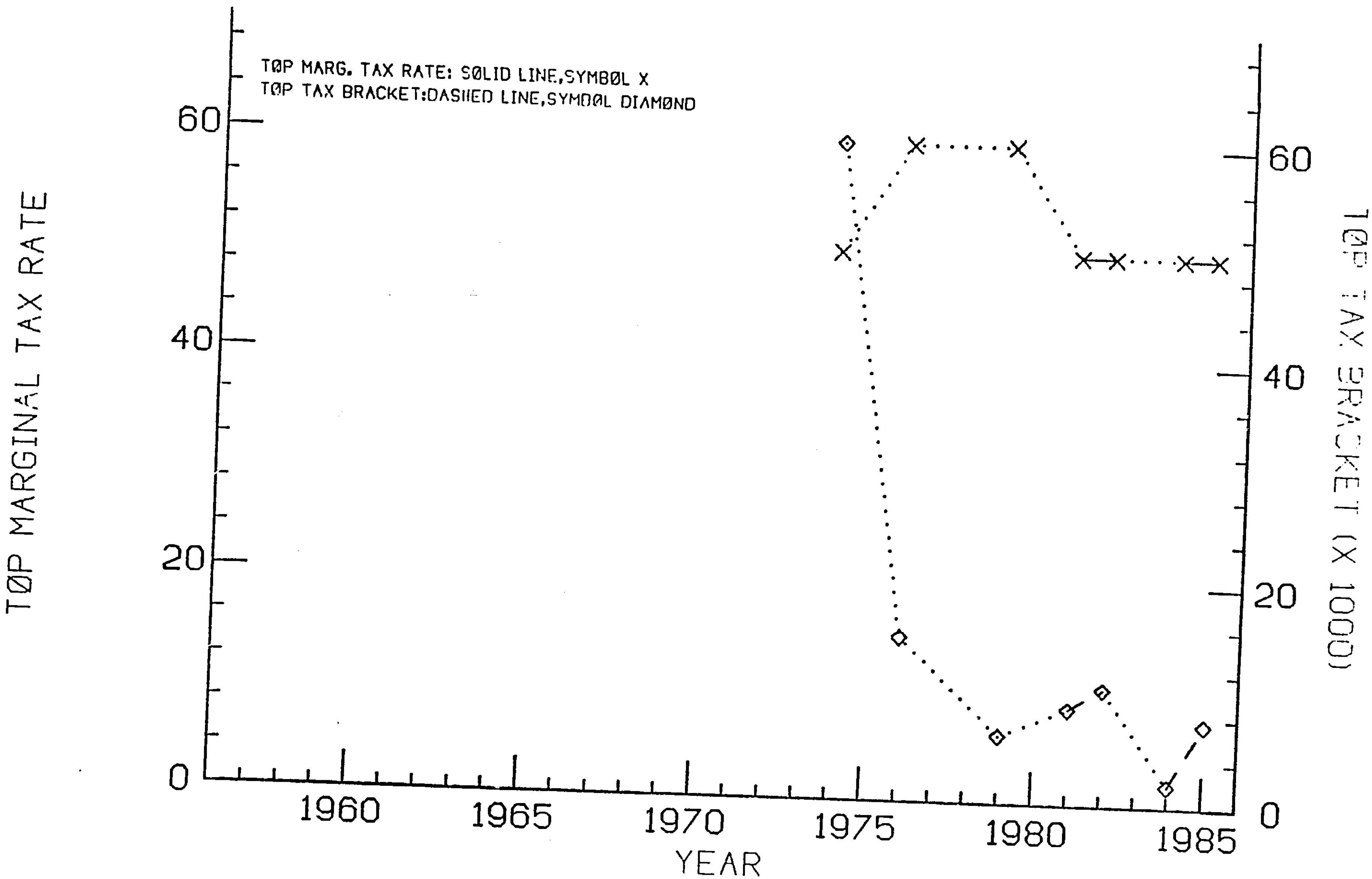
ZAIRE



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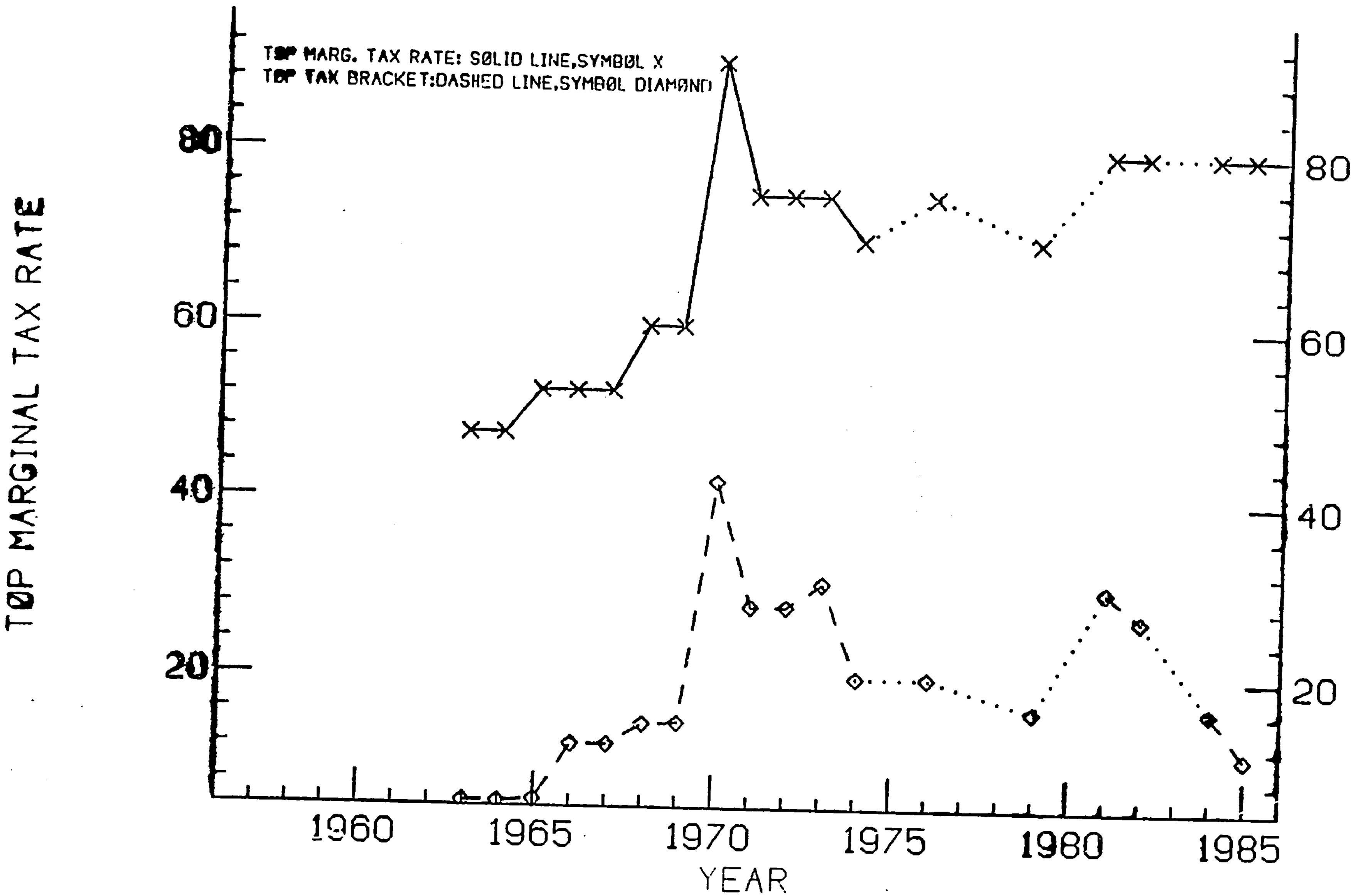

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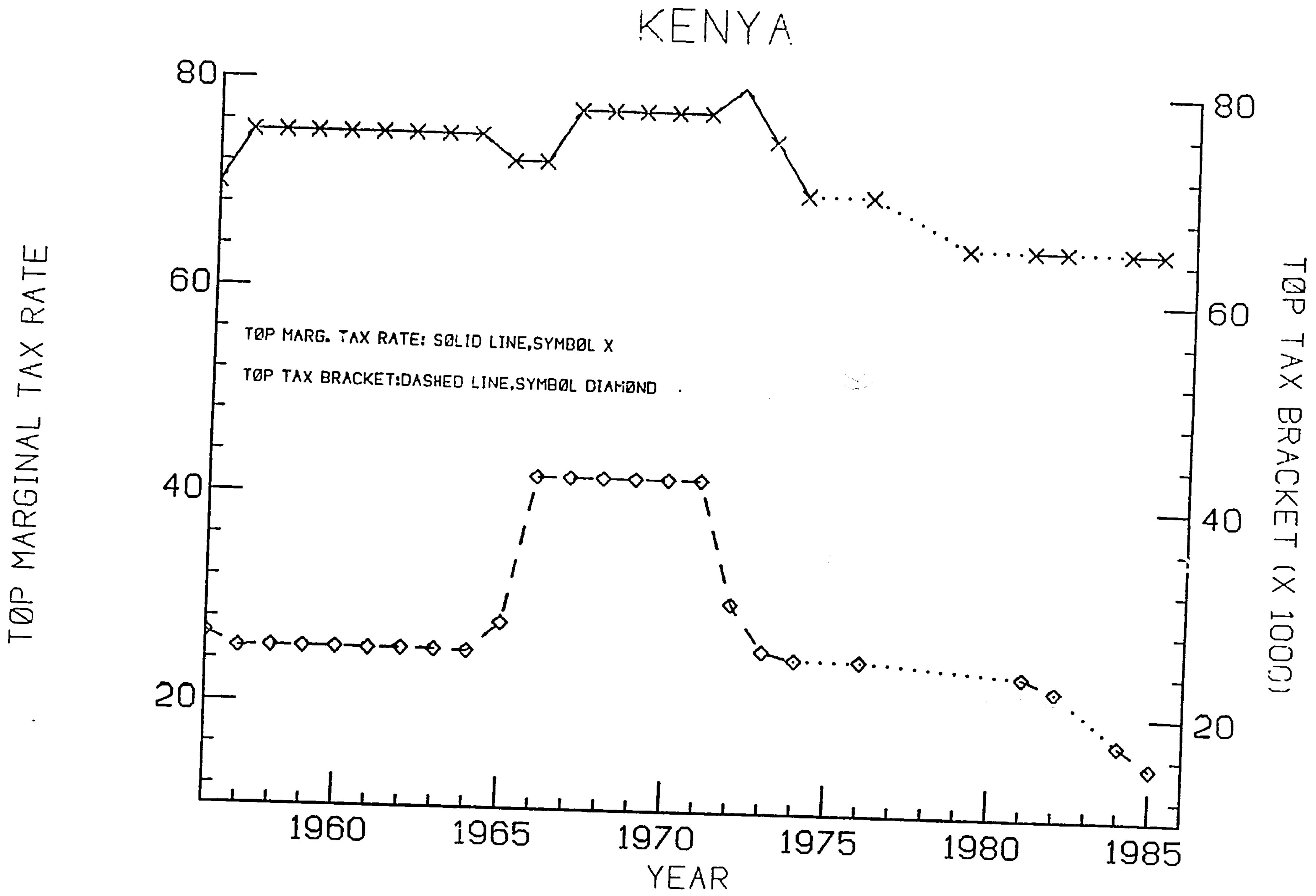
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YEAR

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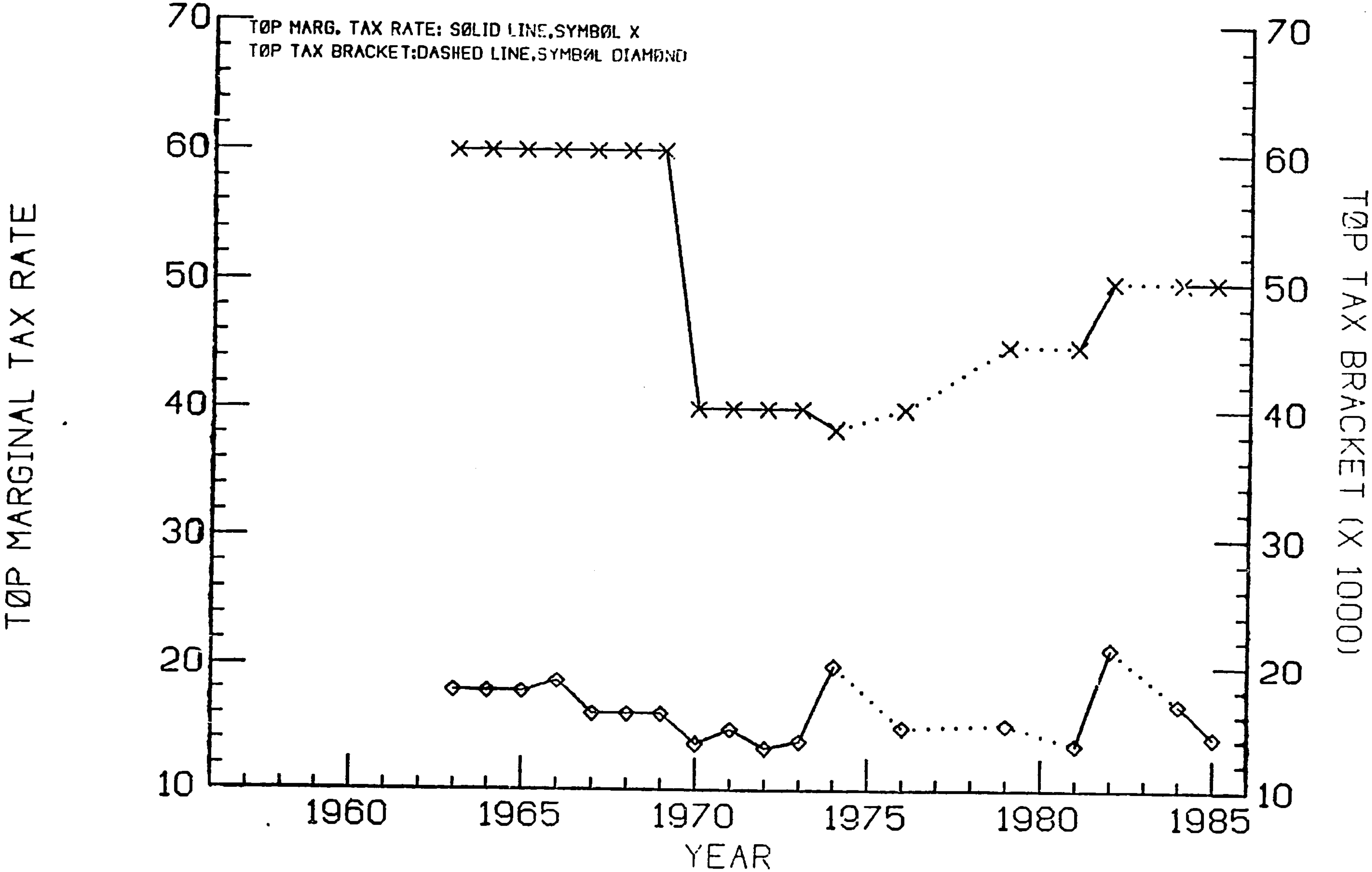

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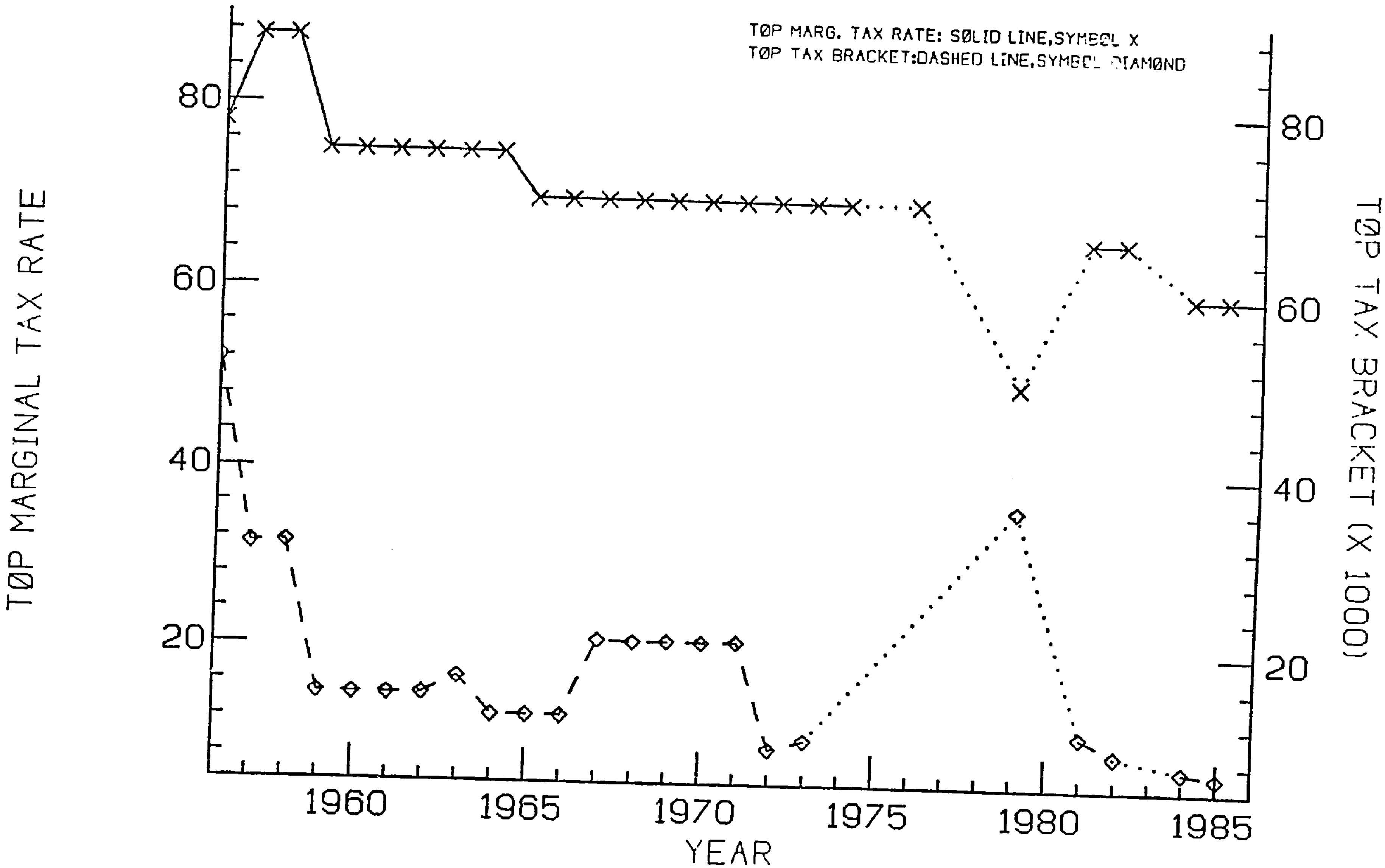

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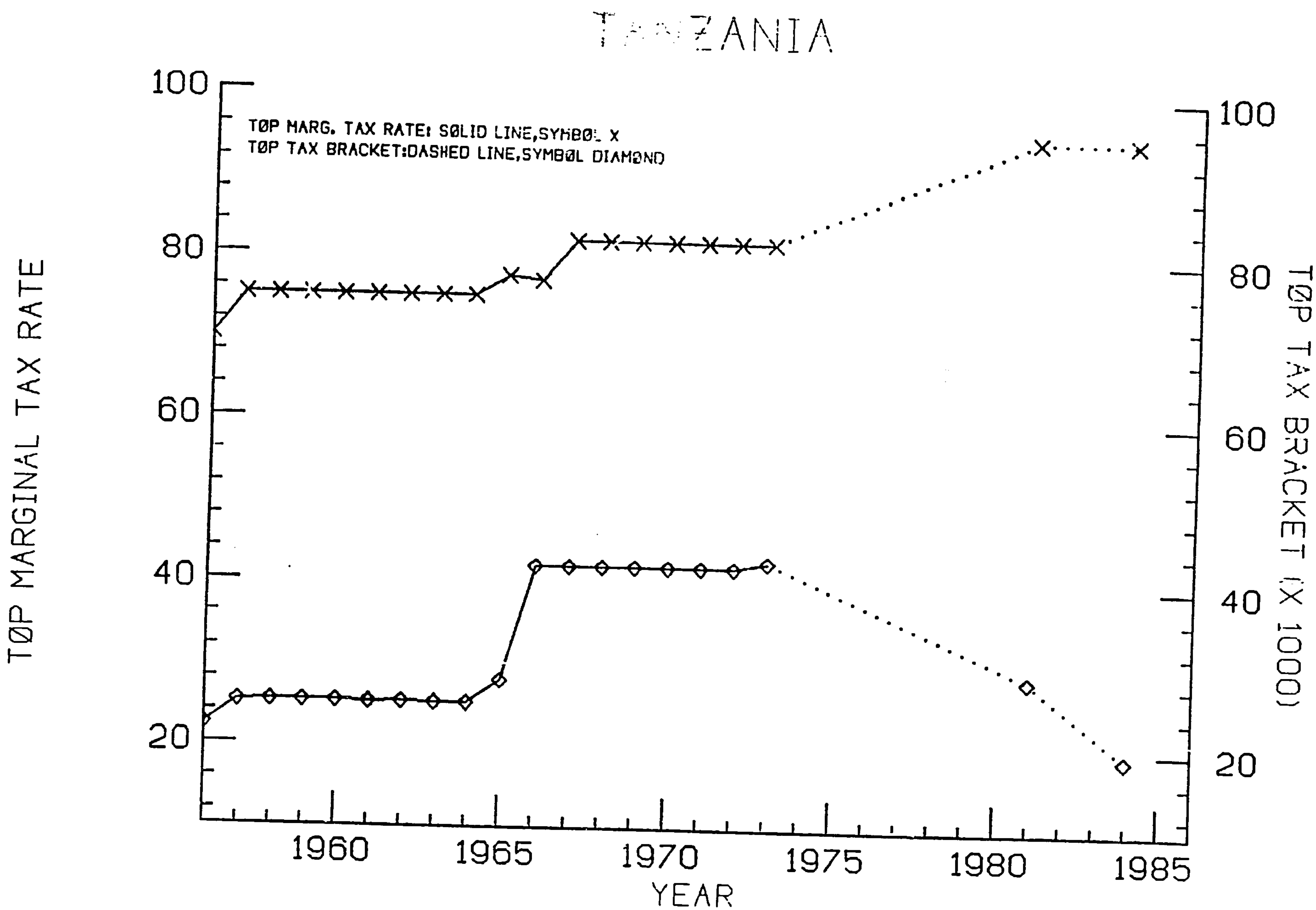
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Additional References

Bagchi, Amiya Kumar. The Political Economy of Underdevelopment. New York: Cambridge University Press, 1982.

Bauer, P.T. Dissent on Development. Cambridge: Harvard University Press, 1972.

-----. Reality and Rhetoric: Studies in the Economics of Development. Cambridge: Harvard University Press, 1984.

Bird, Richard M. Taxing Agricultural Land in Developing Countries. Cambridge: Harvard University Press, 1974.

Block, Walter and Walker, Michael, eds. Taxation: An International Perspective. Vancouver: The Fraser Institute, 1984.

Brunner, Karl, ed. The First World & the Third World. Rochester, NY: University of Rochester, Graduate School of Management, Center for Research in Government Policy and Business, 1978.

Chenery, Hollis B. "The Structuralist Approach to Development Policy." American Economic Review 65(May 1975): 310-16.

Comeliau, Christian. Interdependence and Patterns of Development. Paris: Organization for Economic Co-operation and Development, 1985.

Crockett, Joseph P. "Tax Pattern in Latin America." National Tax Journal 15(March 1962): 93-104.

Dominic, M.P. Income Taxation and Foreign Investment in Developing Countries. Amsterdam: International Bureau of Fiscal Documentation, 1980.

Ebrill, Liam P. "Taxes and the Cost of Capital: Some Estimates for Developing Countries." Washington: International Monetary Fund, Fiscal Affairs Department, DM/84/16, 1984.

Friedman, Milton. "Economic Miracles." Newsweek (January 21, 1974): 80.

-----. "Myths That Keep People Hungry." Harper's (April 1967): 16-24.

Gandhi, Ved P. "Tax Structure for Supply-Side Economics in Developing Countries." Washington: International Monetary Fund, Fiscal Affairs Department, DM/85/1, 1985.

Haberler, Gottfried. "The Case for Minimum Interventionism." In Foreign Aid Reexamined: A Critical Appraisal, edited by James W. Wiggins and Helmut Schoeck, 139-50. Washington: Public Affairs Press, 1958.

Heller, Jack and Kauffman, Kenneth M. Tax Incentives for Industry in Less Developed Countries. Cambridge: Harvard University Law School, International Tax Program, 1963.

Hinrichs, Harley H. A General Theory of Tax Structure Change During Development. Cambridge: Harvard University Law School, International Tax Program, 1966.

Investing in Developing Countries, 5th ed. Paris: Organization for Economic Co-operation and Development, 1983.

Jacoby, Neil H. "Taxation in Laos: Policies for a New Country With an Underdeveloped Economy." National Tax Journal 14(June 1961): 145-62.

Krauss, Melvyn B. Development Without Aid. New York: McGraw-Hill, New Press, 1983.

Landau, Daniel. "Government and Economic Growth in the Less Developed Countries." In Selected Papers, 17-62. Washington: President's Task Force on International Private Enterprise, 1984.

-----. "Government Expenditure and Economic Growth: A Cross-Country Study." Southern Economic Journal 49(January 1983): 783-92.

Lewis, Stephen R., Jr. Taxation for Development. New York: Oxford University Press, 1984.

Little, I.M.D. Economic Development: Theory, Policy and International Relations. New York: Basic Books, 1982.

Mackenzie, George A. "The Macroeconomic Supply Effects of Tax Rate Changes." Washington: International Monetary Fund, Fiscal Affairs Department, DM/83/2, 1982.

Marsden, Keith. "Low Taxes Signal a Healthy Economy." Wall Street Journal (December 18, 1984).

-----. "Why Asia Boomed and Africa Busted." Wall Street Journal (June 3, 1985).

McIntyre, Michael J. and Oldman, Oliver. Institutionalizing the Process of Tax Reform: A Comparative Analysis. Amsterdam: International Bureau of Fiscal Documentation, 1975.

Poats, Rutherford M. Development Co-operation. Paris: Organization for Economic Co-operation and Development, 1984.

Prest, A.R. Public Finance in Developing Countries, 3rd ed. New York: St. Martin's Press, 1985.

Shaw, G.K. "Leading Issues of Tax Policy in Developing Countries: The Economic Problems." In The Political Economy of Taxation, edited by Alan Peacock and Francesco Forte, 148-62. New York: St. Martin's Press, 1981.

Smith, David. "Public Consumption and Economic Performance." National Westminster Bank Quarterly Review (November 1975): 17-30.

Stern, Nicholas. "Optimum Taxation and Tax Policy." Washington: International Monetary Fund, Fiscal Affairs Department, DM/84/9, 1984.

Tahari, Amor. "The Impact of Taxation on Saving and Consumption in Developing Countries: A Paradox?" Washington: International Monetary Fund, Fiscal Affairs Department, DM/79/21, 1979.

Tanzi, Vito. "Tax Policy in Middle-Income Countries: Some Lessons of Experience." *Bulletin for International Fiscal Documentation* 36(August/September 1982): 411-20.

------. "Tax Systems and Policy Objectives in Developing Countries: General Principles and Diagnositic Tests." Washington: International Monetary Fund, Fiscal Affairs Department, DM/83/78, 1983.

Taxation in Sub-Saharan Africa. Washington: International Monetary Fund, Occasional Paper No. 8, October 1981.

Thompson, W. Scott, ed. *The Third World: Premises of U.S. Policy*. San Francisco: Institute for Contemporary Studies, 1978.

Tolley, George S. and Shear, William B. "International Comparisons of Tax Rates and Their Effects on National Incomes." In *International Comparisons of Productivity and Causes of the Slowdown*, edited by John Kendrick, 197-225. Cambridge: Ballinger, 1984.

SUMMARY OF COMMENTS BY EXPERTS
USAID CONFERENCE ON TAX POLICY AND ECONOMIC GROWTH

Panel I - Macroeconomic Policy

Stuart Butler, Heritage Foundation:

If one examines the Rabushka-Bartlett paper from the perspective of the experience in depressed regions in the United States, some interesting observations arise:

-- small enterprises are at the heart of job generation and innovation;

-- indirect taxes are more burdensome to entrepreneurs than is direct taxation;

-- the availability of capital is related to the tax treatment of investors;

-- business decisions are significantly influenced by the manner in which tax revenues are spent; and

-- local tax rates are not very high on the list of factors determining a firm's decision to locate in a particular place.

These similarities may allow for some insight into the Rabushka-Bartlett findings. A reasonably high threshold of taxation allows small entrepreneurs to accumulate capital while high marginal rates at only high incomes may not significantly inhibit economic growth -- indeed, if relief from thes high rates is given for investment, there may be a net boost to business formation. Moreover, if tax revenues are used to improve the basic infrastructure for business, countries with relatively high tax rates may also experience high levels of economic activity.

Vito Tanzi, International Monetary Fund:

The traditional view of developing countries holds that:

-- high incomes do not originate from work effort or entrepreneurship, and thus could be taxed away with little negative effect;

-- high incomes result in high consumption and/or capital flight;

-- government can generate a high rate of saving by raising taxes while holding down its own consumption;

-- because of the lack of knowhow and initiative, government had to take the lead in carrying out investment;

-- the negative effect of taxes on labor supply could be ignored because of the overabundance of labor;

-- private investment in desirable sectors cold be stimulated through the use of specific tax incentives; and

-- there is little evidence that marginal tax rates are important in determining the propensity to save, invest, or supply greater effort.

Each of these assumptions have proved faulty, as follows:

-- large incomes are often more the result of implicit taxes than of property ownership;

-- the assumption that high income inevitably results in high consumption has been challenged in theories of consumption function;

-- governments are unable, for the most part, to resist pressures for higher public consumption or for politically determined investment projects;

-- goverment does not have a monopoly over knowhow or initiative -- a country without entrepreneurs in the private sector is not going to produce them in the public sector;

-- though overall labor supply may be abundant, the abundance does not apply to the supply of skilled workers;

-- investment incentives may stimulate less investment than lower corporate tax rates; and

-- taxation may have negative effects on the propensity to save, invest, and work harder.

These changes would seem to argue for a reduced role in the public sector of the economy. We should scrutinize, more than we have in the past, what the public sector does. We should shift the "burden of proof" from the market to the public sector. Implicit taxes in particular should be closely examined. They breed corruption, misallocation of resources, and eventually lead to the creation of black markets.

The goverment must simultaneously begin to pay closer attention to the level and composition of public expenditure. Policies in the spirit of supply-side economics must aim at reducing public expenditure. The role of public enterprises must be reduced, and some should be privatized or simply shut down.

Finally, the role of subsidies must be reduced.

Only when the ratio of public expenditure to GDP begins to fall, would I pay attention to the proposals to reduce tax burdens made by supply-siders. Moreover, in reducing the tax burden one would want to attack those taxes most damaging to economic efficiency. These are not personal income taxes, but foreign trade taxes.

A major mistake we could make is to tell developing countries to sharply reduce taxes before making these other changes. Such a move would aggravate current problems and would lead to higher inflation and greater balance of payments difficulties. The maximum marginal tax rate of the personal income tax is hardly as important a variable as it is made out to be. Its reduction, in seclusion, would not have significant permanent effects. The real importance of the marginal tax rate is symbolic. It can be thought of as a proxy for the other policies necessary for sustained economic growth.

Geraldo Sicat, The World Bank:

I am in sympathy with the view that the market economy seems to perform better than a regime of controls. This is a result of the last fifteen years of research, which show that controls often lead to unexpected distortions.

A colleague and I recently studied the tax rates in fifty developing countries. First of all, we found that the top brackets do not tell us anything very meaningful with regard to effective rates the average person in a developing country would be facing. In trying to establish such an average, we asked two questions:

-- What is the point at which the individual is required to pay a tax?

-- What is the point in the income stream that the top rate affects?

As to the first question, we found the average to be three times the average per capita family income. The top rate begins to bite at between 30-50 times family income. Thus, such rates apply to only a tiny fraction of any developing country population. In fact, our studies show that poor countries are taxed less. The overall tax rate for our fifty countries was 40.7 percent. But when the industrialized control countries were removed, the average fell to 12.8 percent. I think these are meaningful results, but I leave it up to you to make judgements.

Richard M. Bird, University of Toronto:

The subject of tax policy and growth has been exhaustively discussed in both developed and developing countries for years, and we do not really know a great deal about the subject in either setting. Undoubtedly, there may be significant effects of tax rates on growth in LDCs. But it is highly questionable to draw simplistic conclusions from the limited data available. Instead, I will present a brief story that may provide some more general insights.

The story concerns a country (call it G) in which taxes as a percentage of GDP have been cut by forty percent in five years. The deficit was cut by a similar percentage through expenditure reductions. If we take the Rabushka-Bartlett thesis as our point of departure, we would expect such a country to be a veritable fiscal paradise; particularly if I point out that only 5 percent of GDP was taken in taxes at the end of the period (1984). While true that the top marginal tax rate is still 48 percent on incomes over $150,000, poor administration keeps most earnings out of the tax net. Moreover, all taxes -- not just those on income -- have been declining steadily over this period. Unfortunately, the growth rate, instead of increasing as might be expected, declined and became negative. Further, some evidence indicates that the unofficial economy has been growing.

I do not draw the conclusion that growth fell because taxes fell, but neither would I draw the opposite conclusion had growth risen. In fact, I do not see any reason to expect that the outcome would have been different had the government cut the top bracket rate to 15 percent instead of 48 percent. The point is that the broader economic and political environment is much more important in every respect. To conclude, I will sketch briefly what an ideal tax system from the perspective of growth might look like:

-- little or no taxation of profits, in order not to discourage entrepreneurship;

-- little or no taxation of undistributed profits in view of underdeveloped capital markets;

-- taxes aimed at discouraging consumption relative to saving in order to encourage the latter;

-- taxes with marginal rates low relative to average rates in order to encourage work effort;

-- little or no taxation on the very poorest people, who need an adequate level of consumption to be productive;

-- taxes that are stable, to facilitate sound business decisions; and

-- taxes that are well administered, especially in the non-monetized sector.

This "supply-side" prescription was outlined by Professor Carl Shoup over twenty years ago. As he noted at the time, the characteristics of existing tax systems in LDCs are surprisingly close to some of those prescribed above. Most levy few effective taxes on profits (especially undistributed profits) or income from capital. Most levy few, if any, taxes on the poorest. Most tax consumption much more heavily than saving (at least through their explicit systems). Many even have low marginal effective rates and fairly stable legislation.

Shoup concluded that other values -- "equal treatment of equals, avoidance of socially dangerous concentration of wealth, promotion of a rational tax conciousness" -- are being sacrificed by tax systems in LDCs, as opposed to growth. This may be a better description of reality than the tax-choked growth that emerges from the Rabushka-Bartlett study.

Panel II - Tax Policy

Gary Robins, CSIS:

How do we identify tax policies that have encouraged more or less economic growth? This is an extremely important question. Here we were presented with a cross section of countries, but even so, its seems that we really need to put much more emphasis on developing a consistent or complete systematic framework in order to analyze these kinds of questions.

In my case, what we have done is develop a detailed set of capital accounts so that we can try to take care of questions that dealt with business taxation -- both corporate and noncorporate. In order to get at this question of the threshold versus the top marginal rate, we have had to put together at least a brief cut as an individual tax model that has traces of time series of panel data, and on top of that you need some sort of noncontroversial general equilibrium framework within which to look at this question. For instance, we put up a simple Cobb Douglas production frontier and a simple Cobb Douglas-like household, and those are the only behavioral equations in there and everything else is basically taxes. The problem with trying to apply this kind of analysis to worldwide system is that it is extremely hard to get firm data.

An enormous amount of work is involved in gathering and sorting the necessary data, and this work level greatly discourages most investigators. But that is the kind of work that we have to do and we have to tackle it systematically.

Richard Goode, The Brookings Institution:

If growth were the only economic objective and the political leaders of developing countries believed that minimal state activities were most conducive to it, their choice of tax policy would be obvious: keep taxes simple, non-progressive, and no higher than necessary to pay for the few functions that all except philosophical anarchists agree must be performed by the state. But governments have objectives in addition to growth, and both political leaders and development economists think that growth can be assisted by public expenditures.

The main economic objectives of developing country governments are grwoth and development, stability, equitable distribution of income and wealth, and national independence or self-reliance. Any one of these objectives, if pursued too vigorously, is likely to conflict with the others, and trade-offs may have to be faced much earlier than enthusiasts expect.

The main theme of the Rabushka-Nartlett paper is that low taxes are favorable to growth. The consequences of low taxes (in relation to national income) can be meaningfully discussed only in conjunction with government expenditures. Unless accompanied by low expenditures, low taxes mean inadequate revenue, leading to inflation and excessive borrowing at home or abroad, with harmful effects on growth and other economic objectives. Even if one is persuaded that a small government budget is desirable, it would be foolhardy to recommend that a government move toward it by first cutting taxes.

Rabushka and Bartlett cite the history of Great Britain and the United States in the nineteenth century as evidence that a low-tax-small-budget policy is consistent with rapid development. But prevailing ideas about the responsibilities of the state for interventionist. Brazil, also mentioned in this context, has extensive state intervention in the economy (and high taxes too). As far as equitable distribution, the evidence is mixed. Hong Kong and Brazil have highly unequal distributions, and while Taiwan and South Korea are less unequal, this is probably more the result of agricultural land reform than tax policy.

I think the research has been disproportionately concerned with the individual income tax, as compared with taxes on international trade and domestic consumption. In 1980, for example, three fifths of total central government revenue in LDCs came from the former, while only one fifth came from the latter. Rabushka and Bartlett's research needs to be supplemented by an analysis of indirect taxes and corporate profits taxes and by an examination of special investment incentives.

Oliver Oldman, Harvard Law School:

Identifying appropriate tax rates for economic growth with equity varies from country to country and can only be done as part of an overall evaluation of a country's economy. More important is effective administration and collection. USAID, with the cooperation of the Internal Revenue Service, has been a leader in assisting developing countries to modernize their tax administrations including collection techniques. These efforts were dealt a serious blow when the U.S. failed to implement, and indeed, repealed much of the legislation dealing with income tax withholding on dividends and interest payments.

At the same time that virtually all tax administration modernizers strongly urge the careful design and implementation of extensive withholding sytems, the U.S. is recoiling from its own limited attempts to do so. That message is a form of teaching by one's own actions and is, unfortunately, spreading like wildfire. The world is witnessing the dismantling of one of the most effective means yet devised for international tax compliance. The substitutes -- more intrusive government measures in terms of reporting, and severe penalties -- stand little chance of success, and seem just the opposite of what those who favor less government regulation would wish.

As to the Rabushka-Bartlett paper's conclusions:

-- I agree that "greater prosperity and larger public sectors go hand in hand in the developing as well as developed world."

-- I agree that it is worth noting that "a slightly higher fraction of high-tax countries rank better on political rights."

-- A fuller examination of effective corporate tax rates -- those measured as a percentage of income after normal depreciation and other deductions -- would show a considerable range among the developing countries.

-- The final sentence of the paper -- "greater reliance on direct taxation accompanies higher growth and prosperity" -- affirms the widespread agreement that income taxes have an important role in the process of growth.

-- It is not difficult to agree that "the key to a sound system of direct taxation is to maintain low top marginal rates on high thresholds on which the highest rates apply." Disagreement will arise on the interpretation of "low" marginal rates, but my inclination has been to start with the proposition that 50 percent is neither too high nor too low.

My conclusion is that insofar as the paper states truths, their reiteration is useful. But Rabushka and Bartlett do not offer suggestions which would help in the hard work of modernizing the tax systems of developing countries so that they support the objectives of fairness, efficiency, and simplicity while striving for economic, social, and political growth with equity.

Howard Pack, Swarthmore College:

Many factors besides marginal tax rates affect growth. In fact, it is impossible to believe that getting rid of distortions introduced by high tax rates will have anything more than a 1/10th of 1 percent increase on GNP on a once-and-for-all basis. I should say that my own preference is a very low flat-tax rate in LDCs, but I cannot imagine the structure of any model which would turn up large impacts of the personal income tax.

We have no empirical evidence that savings rates are very responsive to after-tax rates in LDCs -- the effect is probably close to zero. Labor force grwoth is largely a function of population growth. On productivity growth, I think the decisive feature is the extent of competitiveness in the economy, not personal income taxes. Finally, I do not think that entrepreneurship is seriously affected by personal tax rates. LDC entrepreneurs have complained to me about controls, quotas and the like, but never personal income taxes.

If all economic disortions were removed simultaneously, GDP could be increased 3-5 percent on a one-time basis. But all of the obstacles -- not just high tax rates -- would have to be removed together.

Panel III - Compliance and Equity

Sidney Weintraub, University of Texas at Austin:

AID operates primarily in the least developed countries, not in the NICs. And, therefore, if you are going to focus on AID°s kinds of operations, you have to focus on Africa and the other very poor countries in other parts of the world. By definition, these countries have less abundant trained personnel, and inferior human and administrative infrastructure. Income taxes hardly matter in these countries at all, but you still want to keep the tax structures simple in thes countries. You have to think in terms of ease of administration and collectibility.

AID is an operational agency, and it's no longer a critical donor in most developing countries. What I am saying is that AID is limited in its leverage, and that you really need conditionality in lending. AID must therefore depend on the leverage of others. I think AID must focus country by country, on distortions in the explicit and implicit tax structure -- taking into account the variables that others have cited. I think that the choice of any one variable, such as marginal tax rates, is terrible policy.

Where this leads is that you need cooperation between AID, the Fund, the Bank, and other donors in Africa. But I think that trade policy is really the critical issue in many of these countries. You see their protection is given to the wrong industries and that they have exchange rate problems. I think a lot more attention should be paid to this issue.

Ved Ghandi, International Monetary Fund:

I agree with the authors' conclusion that many developing countries have not adopted sound economic policies. Our own studies have also revealed that in developing countries depressed farm prices have curbed agricultural production and exports, regulated interest rates have discouraged savings, and overvalued exchange rates have distorted production structures. Therefore, governments of developing countries need to reform their nontax economic policies in the interest of generating savings and growth.

This will not, in itself, be enough. As the development literature has stressed, generation of savings is a necessary but not a sufficient condition for economic growth to take place. Certain complementary factors would be required if savings are to become investment, and these would include the removal of domestic constraints (viz., foreign exchange availability) as well as the removal of domestic constraints (viz., expanding the size of the market, developing necessary social and economic infrastructure, facilitating the transfer of technology, and establishing adequate capital market and financial intermediary institutions).

The development literature has also established that growth by itself would not mean development unless accompanied by certain instituional reforms, such as human capital formation, land reform, and population control. Therefore, one must conclude that reforms in economic policies are certainly desirable but in no case should they be considered a sufficient condition for rapid economic development.

Bartlett and Rabushka also conclude that the supply-side approach can be applicable to developing countries, but it appears that more empirical evidence would be needed to be convincing. The Fund has begun to give serious thought to an assessment of its relevance, and in doing so, we have raised four fundamental questions:

-- Are labor supply, savings, and investment price sensitive in developing countries?

-- Do tax policies (tax rates and incentives) in developing countries significantly affect savings behavior, especially the availability of financial savings?

-- Do tax policies in developing countries significantly affect investment behavior?

-- Do high and progressive income tax rates significantly affect income tax evasion in developing countries?

The research has identified the following:

-- The literature examining the price responsiveness of labor supply, savings, and investment in developing countries leaves much to be desired, but it nonetheless appears that changes in tax policy will have some effect. However, the behavior of these aggregates is also determined at least as much by other economic and noneconomic elements as by prices.

-- The optimal tax treatment of financial savings seems to depend critically on the degree of financial repression, which varies widely both across countries and over time. Our conclusion is that there is no single recommended policy action, such as reducing the marginal income tax rate.

-- Relating the share of gross domestic investment in gross domestic product to the cost of capital estimates for more than thirty developing countries, we find that while the cost of capital has a significant impact on investment levels, other variables, especially the rate of inflation and the growth of exports, are equally important. Our conclusion, therefore, is that strong policy conclusions concerning the effectiveness of tax rate reductions alone in encouraging investment in developing countries should be resisted. Attention should be paid to controlling inflation and alleviating distortions to exports resulting from exchange rate and producer pricing policies.

-- The theoretical literature does not support the claims that an increase in the tax rate will lead to an increase in tax evasion, or that a progressive tax schedule stimulates tax evasion. One finds that the literature contains stronger conclusions regarding the role of other tax and non-tax factors in affecting evasion. In particular high penalty rates and high probability of detection are shown to have a negative effect on tax evasion. Income tax evasion is also shown to be strongly influenced by non-tax factors such as the type of income and perception of fiscal equity. Thus, one ends up doubting the effect which a reduction of tax rates or even reform in tax policies alone will have on the degree of income tax evasion in developing countries.

The conclusion of our research is that while the supply-side tax policy prescription of reducing marginal income tax rates is not invalid, there are many other important tax and non-tax determinants of the behavior of economic agents in developing countries and constraints on their economic development than high marginal income tax rates. Tax policy reforms in developing countries has to be based on a mix of supply-side as well as other relevant considerations.

Gustav Papanek, Boston University:

There is good empirical and theoretical support for several of the important points in the Rabushka-Bartlett paper. Their central point, as I see it, is that most economic interventions by governments of LDCs are distorting, moving the economy away from economic efficiency, and therefore slowing growth. There is substantial evidence, from a study of five Asian countries supported by AID, that this is a valid observation. Two specific arguments are also both logical and well supported:

-- high rates of taxation on agricultural commodities discourage their production; and

-- high rates of personal income tax, if enforced, encourage capital flight, tax evasion and avoidance, discourage risk-taking, and <u>may</u> discourage effort.

However, there is no very persuasive evidence that high marginal rates and low thresholds of income tax have been a very significant factor in slowing growth. On the total tax rate, the evidence given shows the reverse relationship: higher growth and higher taxes are associated. The explanation offered is plausible: that more rapidly growing countries are able and willing to extract more taxes. But that relationship should give the authors pause in claiming that the limited evidence they present shows a negative causal relationship between nominal income tax rates and growth, for several reasons:

-- Correlation does not demonstrate causality, as the authors recognize in the case of overall tax burden.

-- Even if causality runs from taxes to growth, income taxes could play a minor role.

-- Statistical support for the author's model is not clearcut since: many categories have few observations; dollar denominations of tax thresholds introduces a bias (as against average local income); dispersion is very great in each threshold category; and single countries that have maintained the same tax rate have historically shown substantially varying growth rates.

-- The effective tax rate is certainly more important thatn the nominal rate used in the analysis.

In short, it is likely that any negative relationship of nominal income tax rates and growth is the result of the correlation of high tax rates with a whole host of other policies that have a negative effect on growth, and not to the effect of nominal rates, because taxes are rarely collected at such high rates.

The authors also suggest that supply-side economics is relevant for LDCs. I argued earlier that one aspect of supply-side economics is not well founded in many LDCs: the incentive effects of low income tax rates. Effective rates are low even if nominal rates are high. That does not invalidate supply-side economics, but it implies that the relevant variables are different in LDCs. The crucial factor in expanding supply is not inadequate effort because of high personal income taxes, but inadequate imports. Moreover, balance of payments problems are the most frequent and important obtacles to growth, with inadequate savings rates, excessive controls, and inadequate competitive pressures also important. Supply-side economics can still have relevance, but there are clearly more important determinants.

Arnold Harberger, University of Chicago:

Modern theory suggests that many components are part of the process of growth, including increased quality and quantity of labor, improvements in efficiency, increases in capital stock and savings, improvement in the quality of capital stock components and technical innovation, economies of scale, reduction of distortions (such as preferential taxes, quotas and licensing schemes, and monopoly elements and other private constraints), and improvments in existing products. I would, then, exercise considerable caution in doing cross-country experiments with single-policy variables -- or even multi-variate regressions -- because of the complexity of the phenomemnon of growth. One needs to get richness and texture, and this requires country specific analysis.

As for policy, I would like to lay out several commandments that I think merit our consideration, and which reflect the complexity of the policy-making process:

-- Avoid false technicism in economic policy making. Do not allow prohjections to become plans;

-- Keep budgets under adequate control;

-- Keep inflationary presssures under reasonable control;

-- Take advantage of international trade; comparative advantage is one of God's greatest inventions;

-- Avoid excessive income tax breaks;

-- Avoid excessive use of tax incentives to achieve particular objectives;

-- Use price and wage controls, quotas, licenses and similar restrictions sparingly, if at all;

-- Allow public sector enterprises to behave like private sector enterprises; and

-- Finally, make the borderline between public sector and private sector activity clear and well-defined.

These commandments form a sensible basis for think ing about a research agenda for future work in this field