TAX EVASION: CAUSES, ESTIMATION METHODS, AND PENALTIES A FOCUS ON LATIN AMERICA

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PREFACE

The Fiscal Policy Series has the purpose of disseminating the results of the research activities developed by the ECLAC-UNDP Regional Project on Fiscal Policy as well as by the ECLAC-GTZ Regional Project on Fiscal Decentralization. Both Projects operate under close coordination and have objectives and activities covering a vast array of topics related to the public finances and fiscal policy of Latin American and Caribbean countries.

This issue of the series relates to the activities developed by the joint ECLAC-UNDP Regional Project on Fiscal Policy. It was prepared as a background paper for the Inaugural Lecture, delivered by Mr. Partho Shome, at the V Regional Seminar on Fiscal Policy, held at ECLAC in Santiago, Chile, January 25-28, 1993.

This type of Seminar makes part of the regular activities developed by the joint ECLAC-UNDP Regional Project on Fiscal Policy and it is programmed to take place in the last week of January of every year. The central focus in the Agenda of the V Regional Seminar was the problem of fiscal evasion. This subject was treated in three different but interrelated sessions devoted to the subject of tax evasion, as well as to the problems of evasion in the payment of contributions to social security and custom or frontier evasion.

The content of this document focus on tax evasion. It begins with a theoretical discussion about its causes and effects. After that the authors present a useful survey of techniques for estimating —directly as well as indirectly— the level of tax evasion. Later the reader is presented with an analysis of the role of tax administration in reducing tax evasion. Finally, after some thoughtful concluding remarks, the authors present useful up-to-date references, followed by an appendix comparing the legal measures against noncompliance of tax laws adopted by numerous countries in Latin America, Europe and the United States.

It is hoped that this issue of the Fiscal Policy Series will make a contribution to a better understanding of these matters —as well as towards a wide dissemination of the results here presented — among the authorities responsible for the formulation, design and implementation of fiscal policy, as much as among all those, within the public and private sector, interested in the broad field of public finances.

I. INTRODUCTION

Tax evasion is a universal phenomenon. It takes place in all societies, in all social classes, in all professions, in all religions, and in virtually all systems. Two thousand five hundred years ago, Plato was already writing about the phenomenon of tax evasion and on the Ducal Palace of Venice there is a stone with a hole in it, through which people who knew about tax evaders could inform the Republic about the culprits. The only surprise is how little attention this phenomenon had received in some places and especially in the United States until recent years. For example, there is no reference to it in the index to Richard Goode's (1964) classic Individual Income Tax; none in Richard Musgrave's (1959) The Theory of Public Finance; and none in Joseph Pechman's (1966) Federal Tax Policy.

In recent years, however, there has been growing attention paid to this phenomenon. In the United States the attention to it started with a somewhat political view that the problem of the rising fiscal deficit could be solved by reducing the so-called "tax gap".[1] Because of its policy of reducing tax rates and its inability to reduce public spending, the Reagan administration promoted the idea that the fiscal deficit could be reduced by simply reducing the rate of tax evasion. In other countries, the concern for tax evasion was in part prompted by a growing preoccupation with horizontal equity. The realization that people with similar incomes often ended up paying very different taxes because of tax evasion, led many governments to begin getting worried about the implications of this phenomenon. Also, the growing concern about underground economic activities and how these affected economic policies, and the realization that the underground economy was often the other face of tax evasion, led in the 1980s to growing attention to tax evasion.[2] This is certainly true of Latin America where the authorities, after introducing major tax policy reforms, have demonstrated increasing interest in the measurement and diminution of tax evasion in both income taxes and consumption taxes.[3]

In what follows, Section II surveys some of the sources of tax evasion and recounts how economists have attempted to provide a theoretical underpinning to them. Section III lists some of the methodologies developed for estimating tax evasion, using examples from Latin America. Section IV reviews, only very briefly, the role of tax administration in the incidence of tax evasion, and presents a cross-country description of the penalties and sanctions associated with tax evasion and fraud. Section V provides some concluding remarks.

II. THEORETICAL UNDERPINNINGS FOR CAUSES AND EFFECTS

1. Sources and implications of tax evasion

Tax evasion comes in different forms. It comes, for example, through the nondeclaration of income; through the underreporting of income, revenue or wealth; through the overreporting of deductible expenses; through smuggling activities; and through many other forms. In fact, the variety of tax evasion is truly remarkable and one finds always new ways by which taxpayers attempt to reduce their tax burden. Many authors have reviewed these matters including Sisson (1981) and Richupan (1984) among IMF studies, and more recently, Cowell (1990), and Webley et al. (1991). Empirical work is more scarce, but a summary of available evidence will be provided later in this study.

The opportunity for tax evasion varies between sectors and this is in fact one of the problems that lead to social turmoil. In Italy, for example, salaried workers have been demonstrating in large numbers in the streets to reduce the tax evasion of independent professionals. Activities in which tax evasion is easier are those of independent workers; of professionals such as doctors and lawyers, etc.; and of those who engage in agricultural activities. There is increasing evidence that enterprises that operate in different countries can also reduce their tax burden through the judicious use of transfer pricing.[4]

Tax evasion has much to do with the structure of the economy. The more atomized is production, the more likely it is for tax evasion to flourish. A country where much production takes place in very large enterprises or establishments is unlikely to have a lot of tax evasion. However, a country where much economic activity takes place in small shops, in small farms, and on the part of single individuals, is likely to be associated with a lot of evasion.

Tax evasion is also strictly connected with the structure of the tax system. It is likely to vary according to the use of different tax bases. For example, in the case of income taxes it is likely to vary between dependent and nondependent income sources; as well as between large, small, and multinational enterprises. In the case of sales taxes, it is likely to be connected with the underreporting of sales or the overreporting of purchases. In theory, at least, tax evasion is connected with the accounting concepts of tax liabilities. When a country relies on presumptive concepts of taxation, tax evasion is likely to be more limited unless there is hiding of the assets on which the presumptive estimate of the tax payment is based. The tax structure will also influence tax evasion by its number of taxes. At times governments introduce additional taxes in order to

neutralize the losses connected with tax evasion associated with existing taxes. However, an increase in the number of taxes will produce inefficiencies in the tax system and will facilitate for taxpayers the search for new ways of avoiding paying taxes.

The policy implications of tax evasion would be quite different depending on whether evasion is an individual or a social phenomenon. A single tax evader in a country of honest taxpayers typifies an individual phenomenon. However, a tax evader in a country where tax evasion is a national sport is a somewhat different phenomenon. Tax evasion has implications for the equity of the tax system, for both its horizontal and its vertical equity. It has implications for the efficiency of the tax system and even for the competitive market framework. For example, it is impossible to have pure competition when some of the sellers can evade taxes, while others cannot. In this case the former will be able to undersell the latter. In many Latin American countries, for example, a small percentage of companies pay a high proportion of the corporate tax. Tax evasion affects the productivity of the tax system reducing the amount of revenue that could be raised given the statutory system. It affects the general attitude of citizens vis-à-vis the government, often building cynicism about the role of the public sector. Often it affects even the statutory system in the sense that the tax laws begin to anticipate the tax evasion by particular groups and try to penalize tax evasion by increasing the tax rates for those particular groups. This often results in increased horizontal inequity since not all the taxpayers in those groups behave like the average.

2. The theory of tax evasion

Since Allingham and Sandmo (1972) wrote a classic theoretical paper on tax evasion, the problem of tax evasion, seen from the point of view of the taxpayer, has been discussed as a kind of game theory. The taxpayer is faced with the decision whether to evade or not to evade. In other words, the decision on whether to pay the tax becomes similar to playing a lottery where one is free to buy or not to buy a lottery ticket. For a rational individual, the choice will be made on the basis of the expectations of gains or losses associated with the decision made. The objective is to maximize the utility of the taxpayer.

The benefit derived from tax evasion is related to the expected value of the money (and thus to the utility of the money) that the individual does not pay. The cost of tax evasion is connected to the probability of being audited or being caught and with the consequences of being caught. These consequences, in the Allingham and Sandmo model, are associated with fines which can considerably exceed the original tax due. But, of course, the probability that the individual will pay these fines depends on the probability of being caught.

The Allingham and Sandmo theory has some important implications for tax administration. In fact, the theory implies that tax evasion can be reduced by either increasing the penalties associated with it, or by increasing the cost of administrative expenses, assuming that this increase raises the probability that the tax evader will get

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caught. In an extreme interpretation of the Allingham and Sandmo theory, it is argued that the penalties should become so high that at the limit the tax evaders who get caught should be hanged with a probability that approaches zero.

There are important limitations to the theoretical literature. Some of these have been discussed by various writers. A first limitation has to do with risk aversion. In the more recent theoretical advances, the taxpayer's behavior toward tax compliance turns entirely on his attitude toward risk. For example, Banerji (1991), treating tax evasion in the context of intertemporal choice models, concludes,

> "Is there a more subtle way of enforcing compliance without such elaborate calibration-by simply increasing the risk of detection for the evader, and thereby making him or her switch from the riskier asset to the safer one of declared income? Unfortunately, this plan would work with certainty only if we were willing to assume that all possible evaders in the economy had constant absolute risk aversion, i.e.,that their willingness to take risks did not depend upon their level of income or consumption." (p. 98).

A second limitation has to do with the application of penalties which are not generalized but are applied to only those unfortunate fellows who get caught. In other words, there are many tax evaders who do not get caught and who are not affected by those penalties. This raises the question of whether the judiciary system will be willing to penalize the unlucky few individuals who get caught when many more individuals are committing the same offenses but are not being punished. Anecdotal evidence from many countries indicates that the judiciary system is unwilling to fully apply the penalties under these conditions. When this is the case, the courts will become more lenient.

Third, the theory assumes that the taxpayers know precisely the probability of being caught so that they can make the calculations. However, tax administrations often keep this information highly confidential. Fourth, the theory ignores costs in terms of embarrassment, loss of self-esteem, etc., experienced by those who get caught. These costs vary from society to society. In a society where tax evasion is condoned because of the unpopularity of the government, tax evaders are seen as heroes, the social costs are very low or even negative. In a society where tax evasion is taboo, these costs can be very high.

3. The role of penalties and amnesties

Perhaps a few comments on the penalties themselves would be appropriate. The higher are the penalties, the more probable it is that the penalties will not be applied. And, if the high penalties have led to a reduction in the cost of administration, the lower should be the probability of detection and thus of their application. Many societies would feel uncomfortable about singling out particular individuals when many other individuals may be as guilty. Second, for the penalties to be effective, they must be applied very quickly. A penalty that is delayed by years because of appeals on the part of the taxpayer is very

unlikely to have the same effect as a deterrent to evasion that is likely to be applied immediately. In some legal systems, as, for example, the Italian one, it has at times been possible to postpone for many years through appeals the application of the penalties. An analysis based on a cross-country comparison of penalty laws is attempted later in this study. However, the impact of penalties on tax compliance may not be very forceful. For example, using a model of varying attitudes toward risk and applying econometric estimation techniques to Mexican data for 1982-89, Dunn (1992), concludes,

> "large changes in the odds of being detected and the penalty for illegal evasion are required to even modestly alter compliance...a doubling of the fines for tax evasion would increase declared taxable income by about 10 percent. Similarly, a large increase in the number of audits would achieve only a modest rise in compliance." (p. 14).

Of course, during the period before which a penalty may be applied, the appeal may be successful or a tax amnesty may come along. Appeals mechanisms and tax amnesties bring a lot of confusion in the theory in which the probability of application of the penalty are known and are precisely defined. The theory is also affected by administrative corruption. If the individual who gets caught can bribe the tax officials and if the bribe is less than the penalty, then the theory becomes ambiguous. Tax amnesties which continue to be used in many countries have important implications for tax evasion because in many ways they encourage tax evasion at least over the longer run and, by so doing, they have an impact on the equity of the tax system, on tax revenue, on the future of the tax system, and on the tax administration. For example, Stella (1989), using a game theoretic approach to an economic analysis of tax amnesties concludes,

> "while in general it may be correct to impose a reduced penalty on individuals who voluntarily disclose tax evasion, short-lived amnesties of the type most frequently observed in practice are unlikely to generate significant revenue when judged against the potential danger of reducing future tax compliance." (p. i).

Also, Uchitelle (1989), analyzing the sustainability of revenue intake from tax amnesty experiences in different countries, including Argentina, Colombia, and India during the 1980s, concludes,

> "most of the programs have not led to a widening of the overall tax base, and many have failed to produce even very large one-time revenue gains" (p. 53).

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III. ESTIMATES OF TAX EVASION

In recent years, many scholars and governments have attempted to measure the size of tax evasion in particular countries, either for specific taxes or for the whole tax system. The measurement of tax evasion is obviously fraught with difficulties. Many of these difficulties have to do with the fact that the information available is, by its very nature, limited and often unreliable. However, there is a more philosophical difficulty often not acknowledged--namely, the problem that the statutory tax system that exists in a country that has a lot of tax evasion has been "contaminated" or influenced by the existence of tax evasion. In other words, it is not one that would exist in the absence of tax evasion: statutory rates have often been increased to compensate for the revenue losses associated with tax evasion. But if this is true, then when one uses the current statutory rates to measure tax evasion, one exaggerates the size of the evasion, since the rates would have been lower if the evasion had not been there.

Various methods have been used to measure tax evasion. Some of these try to measure it directly, some indirectly. Among the direct methods one can identify at least four: (1) the use of the national accounts; (2) the use of direct controls; (3) the use of household budget surveys; and (4) direct surveys of taxpayer behavior. The indirect methods are largely related to estimates of the underground economy. Once the underground economy has been measured, it would be possible to try to assess the extent to which the existence of the underground economy has implied tax revenue losses to the government.

1. National accounts method

Perhaps the commonest and most often used method for assessing the size of tax evasion is by comparing the estimate of the base of a particular tax by the national accounts authorities and the base as reported to the tax authorities after making appropriate adjustments. An early study that attempted this technique for several industrial countries was Tanzi (1969). A similar one for Argentine data was by Herschel (1978). The Internal Revenue Service of the United States has been doing this routinely for the income tax and various authorities have used this approach for measuring the base of the VAT and other taxes. Given that the VAT is collected at various stages of production, a careful use of information based on a sectoral input-output table would also be necessary. This was initiated by Aguirre and Shome (1988) for the case of Mexico, who developed a methodology for constructing the VAT base on a sectoral basis while allowing for differential tax rates for the VAT. It was applied by Serra (1991)

for Chile, and clarified by Mackenzie (1993) on methodological issues. It has since been attempted in various unpublished technical assistance studies by IMF staff, and is being used by technical units in the Ministries of Finance, for example, in many Latin American countries.

The difference between the base as reported to the tax authorities and the base as estimated by the national accounts authorities gives an indication of unreported income. If the tax is a fully proportional one, then this reported income automatically and directly provides an estimation of the unpaid tax. If the tax is progressive, as would be the case with income taxes, then the estimation of the unpaid tax becomes more complex since one would have to make assumptions about the effective tax rate at which the unreported tax base would have been taxed. It would also be necessary to reinstate, into the information based on data from income tax declarations, the various exemptions and deductions at the different tax brackets in order to make that data comparable to the national accounts data.

a.   *Individual income taxes*

In the context of the individual income tax an actual framework, for nonwage earners, may be described as follows. To the declared personal income, adjustments should be made for those components of income that are included in the concept of income in the national accounts but are deductible for tax purposes. These include personal exemptions, deductions, investment allowances, and other deductible direct taxes paid. The adjustments need to be made for individual tax brackets if the tax structure is progressive. The result of the exercise would be a series for gross taxable, declared income (by income class). A comparison with gross taxable income from the national accounts would yield an estimate of undeclared nonwage income.

Tax evasion among wage earners is often limited because of withholding at the source and also because wages are an important cost to the enterprises. To claim this cost, they need to report the wages paid. However, contrary to the obvious, it may be quite difficult to estimate income tax evasion by wage earners. Information on tax withheld by employers may not be readily available since this is not the form in which wage income is usually declared for tax purposes. It may be even more difficult to obtain this kind of information by bracket or by sector. Small- and medium-sized firms that do not pay profits taxes would also tend to underreport tax withheld on wage income or may actually withhold less than that required by law. Of course, the overall revenue loss from this source should not be significant due to the small firm size. In general, estimates of tax evasion from wage earnings would be attempted through sampling techniques.[5]

b.   *Corporate income taxes*

Similar techniques as used in the case of the individual income tax may be applied to the corporate income tax, adjusted for the kinds of deductions and incentives that apply specifically to the corporate sector. The task is not easy, however, since over and above the kind of problems discussed in the case of the individual income tax, corporate

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sector tax incentives would have to be accounted for. These can be used legitimately or otherwise, making the task of adjustment difficult. However, one redeeming feature in the case of corporate income tax evasion is that the corporate form of business in developing countries is often primarily confined to large and/or easily identifiable firms which are under more conscious scrutiny of the tax authorities. It is common in Latin America, for tax administrations to establish special units to control large taxpayers which are mainly big--and often foreign--corporations.

c.   Value-added tax (VAT)

The VAT has emerged as the most important revenue earner in many Latin American countries and attempts to estimate its evasion have become relatively commonplace over the last few years. The widest VAT base is all purchasable goods in the economy, that is, GDP plus imports minus exports. Thus, again, the starting point is the national accounts. However, the estimate can be made either from the expenditure side or from the supply/production side as explained further.

The expenditure side method could be summarized as follows. To total domestic expenditure (including imports), add net private expenditure from abroad, subtract nontaxed expenditure (typically, government expenditure on wages and salaries, fixed capital formation--except private expenditure on new houses--and change in inventories), to obtain taxable expenditure. Adjust for taxes on expenditure, to obtain adjusted taxable expenditure. Further, subtract exempted expenditures (typically, the financial sector, nonprofit and social organizations, small businesses below a legally defined threshold, and gross rents paid) but add back taxable inputs and capital purchases of exempt sectors, to obtain the potential VAT base (Table 1).

The VAT base calculation from the production side is quite similar, except that zero-rated exports have to be subtracted and imports added (Table 2).[6] It is more convenient to use the production side method whenever the VAT contains many exemptions by economic sectors rather than by products for final consumption. Sectoral data are more amenable to production side estimates, while exemptions specified for particular products would be more amenable to expenditure side estimates. Further, given the nature of the VAT, that is, collection based on stages of production, sectoral data are again more amenable to base calculations. Using these methods, IMF staff has recognized that, if a country's average amount of revenue per point of the VAT rate approaches 0.5 percent of GDP, it is operating at a relatively efficient level of VAT effort.

Table 1
DERIVATION OF VAT BASE FROM THE EXPENDITURE SIDE

Final consumption expenditure
Private consumption expenditure
  + Government purchase of goods and services
  - Expenditure abroad by domestic residents
  + Expenditure by nonresidents in domestic market

Plus:
Expenditure on new residential buildings (net of transfer duty)
Taxable capital expenditure in exempt sectors
  Public transport equipment
  Government expenditure in community services

Minus:
Exempted expenditures
  Rent
  Fuel subject to fuel levy
  Education services
  Transport services (taxis, buses, trains)
  Financial services (net of short-term insurance) 1/
  Wages of domestic servants
  Imputed food expenditure
  Expenditure on nonprofit organizations
  Purchases from small businesses

Plus:
Taxable inputs of exempted expenditures
  Rent
  Fuel
  Education services
  Transport services
  Financial services 1/
  Nonprofit organizations

Plus:
Inputs used in financial services purchased by taxable sectors 2/

Minus:
Collected general sales tax

Equals:
Potential VAT base

Minus:
VAT base lost to administrative inefficiency
  (say, 10 percent of potential base)

Equals:
Estimated recoverable VAT base

Total tax revenue to be replaced, for example:
General sales tax
Transfer duty
Income tax "clawback"

Estimated revenue-neutral VAT rate

Source: Fund staff calculations.
1/ Amounts relate only to that portion of financial services consumed by final consumers.
2/ Amount relates only to that portion of financial services consumed by businesses.

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Table 2
DERIVATION OF THE VAT BASE FROM THE PRODUCTION SIDE

GDP (market prices)

Minus trade balance
  Exports
  Imports

Minus value added of exempted sectors (f. cost)
  Nonexportable agriculture
  Domestic consumption of unprocessed exportable agriculture
  Financial services
  Ownership of dwellings
  Wholesale and retail

Minus indirect taxes from exempted sectors
  Financial services
  Wholesale and retail

Add output of exempted sectors to taxed sectors
  Nonexportable agriculture
  Financial services
  Ownership of dwellings
  Wholesale and retail

Add taxed inputs in exportable agriculture

Minus gross domestic capital formation
Add residential buildings
Add capital formation in exempted sectors

Minus government expenditure on wages and salaries

Minus net private expenditure abroad

Minus exempted final consumption expenditures
  Rents
  Household services
  Medical and health services
  Social and cultural services
  Education

Add taxed inputs of exempted expenditures

Minus sales of small businesses below threshold
Add taxed inputs purchased by exempted businesses

Minus taxes to be excluded from VAT base
  Turnover tax (net of exempted sectors)
  Special excises (net of cigarette excises)

Potential base
Minus allowance for base leakage

Recoverable base

Source: Fund staff calculations.

Some economists have sharply criticized the national accounts approach on the grounds that if you have tax evasion then the national accounts will also be underestimated. Therefore the calculation described above becomes meaningless. However, these economists have failed to realize that often the information that the national accounts offices receive from the tax authorities contributes very little to the estimation of the national accounts since the national accounts authorities often rely on other methods for measuring production. For example, the agricultural sector's income is often underre-

ported to the tax authorities because of tax evasion. However, the estimations for the national accounts are made on the basis of sampling or surveys of directly observed average productivity per acre and the average prices at which the crops are sold.

2. Sampling method

The second method of estimation, the tax compliance measurement method, has been used largely by the United States. In this method, a random sample of about 55,000 taxpayers is selected from data available to the IRS and to the social security administration. This sample is subject to very close scrutiny in order to detect tax evasion for the taxpayers chosen.[7] The average tax evasion for the sample is then blown up to provide results for the whole population. The results, called the gross gap, or the tax gap, represent the unpaid income taxes on legally earned individual and corporate income. For 1987, the last year for which this information has been published, the tax gap amounted to $85 billion of which $63.5 billion was tax evasion of individuals, $21.4 billion was tax evasion of corporations, and $1.1 billion was tax evasion by nonfilers. Those who generate these data express skepticism that this money could actually be collected.

3. Budget survey method

The third direct method relies on household budget surveys. These surveys show the relationship between the spending of families and income declared. A family which earns its declared income and spends much more than that income can be expected to have engaged in tax evasion unless other factors, such as accumulated wealth or borrowing against future income, account for these differences. The results from this method are not very reliable and they can only provide some gross order of magnitude.

4. Direct taxpayer survey

A few countries, especially Nordic countries such as Sweden, have used direct surveys of taxpayers. A random sample of taxpayers is chosen and, among other questions, they are asked to describe their tax reporting behavior (see Tanzi, 1982). This approach has been subjected to many criticisms which range from whether individuals remember how they behaved as taxpayers in years past, to whether an individual would be willing to convey accurate information about an activity which may be considered anti-social. The common belief is that tax evasion is often underestimated by these surveys even when they try to maintain anonymity for the taxpayers.

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5. Indirect methods

Indirect methods essentially relate to the quantification of the so-called underground economy, which has been attempted for various Latin American countries (Table 3). The connections between this quantification and the size of the tax evasion is often ambiguous and difficult to establish, especially when taxes are progressive. For example, if those who participate in the underground economy are mostly people with very low incomes who would have paid very little taxes, then the existence of an underground economy may not imply the existence of tax evasion.

There is often a lot of confusion in the way people define the underground economy. In some cases, people refer to taxes not paid, in other cases they refer to the alleged underestimation of the national accounts, and often they do not specify which of these two definitions they have in mind. The problem is that, in many cases, one could have tax evasion without underestimation of the national accounts, or little or no tax evasion with underestimation of the national accounts. A further confusion comes from the fact that the attempt to evade taxes is not the only cause for the existence of the underground economy, since corruption, regulations, and various forms of prohibitions, are also important factors. Despite these questions, as already indicated, the underground economy is often taken as a proxy for tax evasion.

Discussion of the various methods used for the measurement of the underground economy would require too much space. Perhaps it would suffice just to mention the methods used.[8] The first method is the so-called expenditure and income discrepancy method, which assumes that the incomes which are hidden will show up as expenditures, so that the difference between national accounts measured from income flows and national accounts measured from consumption flows can give an indication of the size of the underground economy. A second method is the employment census method, which tries to compare measured unemployment with the probable participation rate for the population in certain age classes. Third is the physical input method, which is based on the idea that there is a predictable relationship between the use of some inputs, such as electricity, and the value of the output. Finally, there are various versions of the so-called monetary approach, an approach that associates evasion with currency or money holding. This monetary approach, developed in various forms by Guttman (1977), Feige (1979), and Tanzi (1980), has been the most popular and has been used in a large number of countries to estimate the size of the underground economy. All of the above approaches have problems. It would, therefore, be prudent not to base economic policy, or even estimates of tax evasion, solely on the results that emerge from these estimations.

To conclude, there are many methods that have been used to estimate tax evasion. In recent years, IMF technical assistance has routinely calculated the potential yield of selected taxes using some variant of the national accounts method but much of those results are essentially confidential. Table 3 presents, therefore, a summary of estimates of tax evasion that are available from the published literature.

Table 3
AVAILABLE ESTIMATES OF INFORMAL SECTOR, POTENTIAL REVENUE BASE, AND TAX EVASION

Country Studies (vintage of data)	Type of Base			
	Income tax			Economy wide
	Value-added tax	Wage earners	Nonwage earners	
CIAT (1980)				A CIAT seminar paper (1986) calculates the informal sector as a percent of GNP based on demographic data: 44 for Bolivia; 35 for Peru; between 30-32 for Ecuador, Honduras, and Guatemala; between 14-32 for Argentina, Brazil, Chile, Dominican Republic, El Salvador, Mexico, Panama, Uruguay, Venezuela; and 11 for Costa Rica.
Argentina (1960s, 1989)		Herschel (1978) calculates evasion in the 1960s at about half of potential tax revenue (analysis in terms of tax).	Herschel (1978) calculates that gross income according to tax returns comprised one fifth of comparable national account figures for 1960s (analysis in terms of incomes).	Staubus (1989) claims 50 percent of overall production comes from the informal economy, based on the observation that Argentines participate in both formal and informal economies at the same time.
Brazil (1988)			Staubus (1989) cites a study by Nelson Barrizzelli (University of Sao Paulo) linking a 2 percent output decline in 1988 with an 8 percent growth in industrial use of electricity, as impossible.	Staubus (1989) cites a study by Nelson Barrizzelli demonstrating Brazil's informal sector at 50 percent over official GDP (and a higher percentage for agriculture).

Country Studies (vintage of data)	Type of Base			
	Value-added tax	Income tax		Economy wide
		Wage earners	Nonwage earners	
Chile (1986)	Using Chile's input-output table, Serra (1991) calculates overall evasion of the VAT at slightly higher than a fifth; but as high as 45 percent for the domestic component (i.e. excluding imports).			
Colombia (1982)				A CIAT conference paper (1985) calculates the underground economy to be US$6 billion, and tax evasion at almost 4 percent of GDP.
Italy (1982)			Using national accounts data, a World Tax Report (Oct. 1987) of the Financial Times reports that undeclared income of corporate and noncorporate businesses comprised almost one fifth of GDP. A government study (the "white book" of July 1987) indicated that businesses evaded tax on one third of GDP.	

Country Studies (vintage of data)	Type of Base			
	Value-added tax	Income tax		Economy wide
		Wage earners	Nonwage earners	
Mexico (1983)	Using Mexico's input-output table, Aguirre and Shome (1988) calculate that taxable supply comprises about half of total supply. Given the VAT rate and the realized VAT revenue, a figure for evasion can be calculated.			
Portugal (1975)		Using the national accounts approach, Correira-Esteves (1979) calculates that 30 percent of taxable earned income is not reported.	Using the national accounts approach, Correira-Esteves (1979) calculates that 40 percent of taxable capital income is not reported.	
United States (1980)				Tanzi (1983) estimates the underground economy at 6-20 percent of GDP depending on methodology used for estimations.

Sources: Various published studies, as indicated.

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IV. TAX ADMINISTRATION AND TAX EVASION

The tax administration of a country plays an important role in the extent to which tax evasion prevails in that country. To the best of our knowledge the theory of the firm has not yet been applied to the activities of a tax administration. But, thinking about it, a tax administration is not very different from a firm. The tax administration has a given budget assigned to it by the state and with this budget it has essentially the task to maximize an output, i.e.,tax revenue, taking into account certain important constraints. The allocation of resources within the tax administration is obviously very important for determining the output.

1. Size and targeting of administrative resources

Some of these constraints are imposed on it by tax policy, others are broader constraints that the tax administration should take into account. How much revenue should a country allocate to the administration of taxes remains also a subject that has received little attention. There is a remarkable variance among countries in both the share of resources allocated to tax administration in the national income of the country and the share of these resources in the total tax collection by the tax administration. One should not conclude that a low share of resources to either of those two denominators is necessarily good. In fact, a country that wanted to minimize administrative expenses, would simply collect the taxes which are easiest to collect, and collect them from the largest taxpayers. This behavior would condone a lot of tax evasion, and would generate tax revenue in a way that would be far from optimal. It would also conflict with other objectives of taxation such as neutrality and equity.

A tax administration should be careful to minimize not only the explicit costs borne by itself but also costs borne by the taxpayer and by the economy. These latter costs do not show up in the balance sheet of the administration and thus, often, tend to be ignored. These are essentially welfare costs, compliance costs, and perhaps those that could be called "good relations" costs.

2. Collection and compliance costs

The welfare cost per dollar collected can be defined as the excess cost to society of collecting $1 of tax revenue. There have been estimates by various authors for the United States, such as Shoven, Hansson, and others, showing that the marginal dollar raised by the U.S. tax administration may have cost the country often more than $1.50.

Clearly, this is an indication that the tax system is far from optimal. These welfare costs are often imposed by the tax policy followed by the country. However, attempting to make the system optimal may raise other costs such as administrative and compliance costs. There is still no literature dealing with the administrative and compliance costs of trying to pursue "optimal" tax policies.

The compliance costs are more closely associated with the behavior of the tax administration, and are more likely to be connected with tax evasion. These compliance costs refer to the cost to the taxpayers in terms of lost time, payments to tax accountants and lawyers, trips to the tax office, and so forth, associated with a given tax payment. In some countries, and for some taxes, these compliance costs can be enormous, especially if the taxpayers have to stand in line for hours and sometimes for days, and perhaps several times a year, in order to meet their tax obligations. They are also likely to be extremely high when the tax laws are so complicated that the taxpayer has to rely on experts' advice, or in the case of enterprises, has to hire experts whose only function is to comply with the tax obligations. There have been reports from Latin American countries that even relatively small enterprises sometimes have had to establish sizable tax departments to simply find their way through the jungle of fiscal laws and regulations. When this situation prevails, the tendency to begin to evade taxes is likely to rise. There must be a direct and positive relationship between the size of tax evasion and the cost of compliance. When firms create tax departments to comply with existing tax obligations, those same departments will be used to scrutinize the laws for any possible loopholes or for any ambiguity that might justify tax avoidance.

3. Public relations

Let us now turn briefly to what could be called "good relations" costs. This is essentially the public relations activity of a tax administration. This public relations activity is connected with the way in which tax administrations are organized, with the number of employees and with the use of these employees, with the level of their salaries, the quality of their working conditions, and the controls that the tax administration is able to extend on the behavior of the tax inspectors. These controls are necessary to minimize or eliminate the possibility that these inspectors, or other tax administrators, will take advantage of their positions for their own benefits.

A tax administration that wants to improve taxpayer compliance and minimize tax evasion must be available to the taxpayer who needs information, forms, specific instructions, and so forth. It must show courtesy toward the taxpayers since resentment on their part is likely to lead to a lower propensity to pay taxes. It must also show punctuality in sending refunds to those who have overpaid since a taxpayer who expects to wait for years to get a possible refund is likely to begin to underpay.

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4. Use of withholding, presumptive and minimum taxes, and cross controls

Collection systems are also important for minimizing tax evasion. There is now overwhelming evidence that evasion is minimized whenever there is withholding at source. In the United States, for example, the difference in tax evasion between independent contracts, for which there is no withholding at the source, and dependent workers, whose taxes are withheld by enterprises, is enormous. The same evidence is available on taxes on interest incomes and dividends. However, as mentioned earlier, withholding by itself is not a complete solution to the problem of tax evasion.

Various countries have tried to minimize evasion by resorting to minimum taxes or to presumptive methods of taxation. In these presumptive methods now in use in a large number of countries, the government tries to assign a particular income to taxpayers on the basis of their standard of living, the value of the houses in which they live, the value of the cars they drive, and so forth. It also tries to estimate, for example, the value added of a company on the basis of sales statistics or on the basis of other criteria (employees, floor space, etc.). Also, a minimum income tax of a company or individual can be based on their gross assets, a system that has been introduced, for example, in Argentina and Mexico.

Tax administrations utilize various instruments of control to limit tax evasion. For example, cross controls between the information available to the tax administration, to the social security institution, and to the customs administration, can play a very important role. The assignment of a taxpayer identification number which is to be used in this cross control is extremely important since it facilitates the use of computers. Instruments of control which also play a role are: (a) the government's ability to access the accounts of individuals or companies in the banks; (b) audits of taxpayers; and (c) reporting requirements by employers or by those who make payments, and so forth.

5. Social ethics

Before leaving the section dealing with the role of the tax administration vis-à-vis tax evasion, it may be worthwhile to refer to another relationship, that between society at large and tax evasion. Tax evasion prospers when society condones it. In a society that does not condone tax evasion, this phenomenon will remain isolated and will concern relatively few individuals. When, however, society condones it, then the phenomenon becomes much more widespread. Citizens at large should have a responsibility in preventing tax evasion. Since tax evasion is often facilitated by the acquiescence on the part of some citizens vis-à-vis the tax-evading behavior of other citizens, laws should be passed that penalize not just the tax evaders but also those who collaborate either passively or actively in the tax evading activities of other individuals. For example, in many countries, the tax evasion of professionals, such as doctors or of independent contractors, is facilitated by requests to their customers on the part of these individuals that payments should be made in cash or by the acceptance, on the part of those who buy the services, of invoices given by these professionals which underestimate the

payment. Also the examples provided by those who govern are very important. When those who govern themselves engage in tax evasion or similar activities, they send an unmistakable signal that noncompliance with the law is acceptable.

6. Penalties

As can be anticipated from the preceding discussions, the severity of penalties would have some impact on the extent and spread of tax evasion. Appendix Table 1 provides a cross-country comparison of the nature and scope of penalties with a focus on Latin America and selected developed economies.

Taxes may be paid in arrears without the intention to evade them especially if the interest charges are low. Usually, interest and penalty are applied to any tax in arrears without tax-evading motivation. Tax evasion or fraud, however, is a more serious matter and, at least in the tax laws, carries much heavier sanctions against it. Appendix Table 1 presents a cross-country comparison of the reach of the tax law for selected Latin American and developed nations.

a. *Interest on and penalties for tax arrears*

Appendix Table 1 indicates that the amount of interest charged on taxes paid in arrears is in most instances calculated in one of two ways: (1) either fixed percentage points above the Central Bank rate or above the average of bank rates (Argentina, Colombia, Costa Rica, El Salvador, Guatemala, Mexico, Nicaragua, Peru, Uruguay, and Venezuela); or (2) a specified percentage per month of amount due in taxes up to a maximum amount (Brazil, Chile, Dominican Republic, Honduras, Panama, and Paraguay).[9] In some countries, additional surcharges are also applied.

Penalties on taxes paid in arrears vary depending on whether the cause is late filing of returns, failure to file returns at all, or filing incorrect returns. In the case of taxes withheld at source, penalties levied on the taxpayer, the responsible party or the withholding agent vary depending on the type of infraction. For example, penalties differ depending on whether the correct amount has been withheld or whether the amount withheld has been surrendered to the tax authorities. In all cases, repeated offenses or offenses not corrected or admitted within a specified time period are subject to higher penalties. Sanctions are often in the form of a percentage of the tax due and range between 25 percent and 100 percent; some countries charge penalties denominated in nominal terms (e.g., Argentina).

In Latin American countries for which information was available, six (Argentina, Brazil, Chile, Mexico, Peru, and Uruguay) adjust penalties for inflation and one (Bolivia) adjusts penalties according to the official quotation of the dollar, presumably on account of the extensive dollarization of the economy. None of the European or North American countries listed in Appendix Table 1 adjust their penalty rates for the effects of inflation.

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b. *Sanctions for evasion or fraud*

Sanctions for tax evasion and tax fraud are much more severe with higher penalties (up to 15 times the amount of the defrauded amount), possible closure of establishments for a specified time period, and/or jail sentences ranging from a few months to several years. Giving the tax administration the power to close establishments for a few days without the possibility of appeal has been an effective deterrent to tax evasion in Argentina and in other Latin American countries.

V. CONCLUDING REMARKS

This paper has surveyed the factors that give rise to tax evasion as well as its ramifications. Tax evasion varies by sector (agriculture, industry, commerce), organization of production (small trader or business, companies), or type of economic agent (salaried, self-employed, capital owner). It is also affected by social ethics and the standards set by those that govern. Given those standards, it is further affected by the attitude toward risk of a potential taxpayer.

Tax evasion affects the horizontal and vertical equity of a tax system, as well as the efficiency of the free market in general and of its tax system in particular. It certainly affects the revenue productivity of the tax system. Unchecked or deficiently controlled tax evasion builds cynicism about the role of the public sector. It tends to complicate the tax structure as the latter begins to anticipate tax evasion. The use of effective and quickly applied penalties to counter tax evasion has an impact on its extent and spread. However, their application does not necessarily imply even a second-best solution for the correction of inequities if many tax evaders do not get caught and remain unaffected by penalties.[10]

The theoretical foundations for modeling tax evasion remain somewhat wanting. It is really too simple to be of much practical use. Theory depends mostly on relating the taxpayer's behavior toward tax compliance to his attitude toward risk, while ignoring other factors that also give rise to tax evasion. The theory assumes that taxpayers know precisely the probability of being caught; however, tax administrators often keep this information confidential.

Estimates of tax evasion of income and consumption taxes have been selectively reported in the published literature on Latin America. More information of a confidential nature exists as a result of exercises carried out by tax authorities or in the context of technical assistance by international organizations. The methodologies utilized leave much to be desired because of the lack of data but, more importantly, because of what the data are able to capture. The data may only partially capture the effects of tax evasion while including the effects of other leakages (e.g., legitimately used tax incentives or deductions whose total effect may be difficult to remove). Thus, it would not be prudent to base economic policy solely on the results that emerge from these estimations.

Given their limitations, methods of estimation include the matching of information from tax declarations with either national accounts data or survey (or sample) data

blown up to population levels. Because of the lack of reliability of surveys (e.g., respondents may not reveal the truth regarding tax evasion even in surveys) and, because of their cost, the national accounts approach is more commonly used. If the objective is to estimate evasion of the VAT, however, a national input-output framework has to be utilized because of the VAT's method of collection at different stages of production, some of which may be exempted from the VAT base. An indirect way of estimating tax evasion has been to estimate the extent of the underground economy, and once that has been done, to estimate the taxes that should have been paid. It appears from the published literature that perhaps a third of potential tax revenue may be evaded in selected Latin American and in some Mediterranean countries. Some estimates would indicate even higher percentages. These estimates, however, must be taken with a grain of salt since they would at times imply very high tax burdens in the absence of tax evasion.

If tax evasion is so high, the role of tax administration becomes doubly important. The size of tax administration resources, the main target groups (large or all taxpayers), the efficiency with which the resources are utilized (collection costs), the ease with which taxpayers can pay taxes (compliance costs), the relation between the tax administration and the taxpayer (good public relations rather than the spreading of fear), and the methods of tax collection (withholding, presumptive taxes, minimum taxes, and cross controls) all play a role in determining the level and lowering of tax evasion.

To conclude, some challenging questions could be raised at this forum. First, the incidence of tax evasion could be placed in a broader macroeconomic perspective. In unstable macroeconomic conditions with high inflation, risk, and uncertainty, the opportunity cost of tax evasion could become low. In such an environment, tax evasion would flourish, feeding into a high fiscal deficit and associated problems. Second, what is best for reducing tax evasion—concentrating on large taxpayers, or setting a standard that would require even smaller taxpayers to participate in the fisc? If social ethics are important, there could be a compelling reason for expanding the taxpayer files rapidly. Third, and somewhat to the contrary, if the underground economy is vibrant and supports, as can often be the case, a higher rate of growth than the organized economy, should tax effort be targeted toward this group? Banerji (1992) indicates that the decision should depend on the authorities' priorities between the importance of squeezing the illegal market and the need for dynamism of the informal sector in an otherwise sluggish economy. Fourth, while withholding may be a good instrument, it may not be a panacea for robust tax collection. Early on, in the Argentina study, Herschel (1978) emphasized that withholding seems to surely work for the large employers but not necessarily for smaller employers who may fear retaliation on profits taxes if they reveal a large wage bill. These are interesting, debatable matters that have to be considered outside of the conclusions that emerge from this paper.

Finally, one interesting aspect of the evasion phenomenon is that it has a counterpart on the expenditure side of the budget but the counterpart has not as yet received the attention that tax evasion is receiving today. While tax evasion is the nonpayment of taxes duly owed to the government, the equivalent phenomenon on the expenditure

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side is the abusive receipt of government payments. In a way, one finds a parallel in a comparison between indirect taxes and consumer subsidies, one often being the negative of the other. Activities connected with the illegal receipt of government expenditures may be those associated with corruption. For example, the receipt of a percentage of government contracts; the receipt of pensions not deserved, for example, by claiming disability when one is not disabled; the payment of wages to so-called "ghost workers," a phenomenon common in several developing countries; the taking of leave on the basis of fictitious illnesses; and so forth. As already stated, this is the other side of the coin of tax evasion; the government loses when taxes are not paid, but it also loses when payments that should not have been made are made. Economic theory and the law should treat the two phenomena in the same way.

Notes

[1] The tax gap is the measure of tax evasion that emerges from comparing taxable income declared to tax authorities with taxable income calculated from the national accounts.

[2] Scholars have often made a distinction between tax evasion and tax avoidance. In theory tax evasion implies violation of the law whereas tax avoidance implies the taking advantage of ambiguities in the law to reduce the tax burden. This distinction, however, is not always easy and in fact in some countries, such as India, the courts have considered tax avoidance with the intention of evading taxation as tax evasion.

[3] Several requests to the IMF for technical assistance by Latin American countries have had the objective of measuring tax evasion.

[4] President-elect Clinton argued, during the electoral campaign, that the reduction of tax evasion by multinationals could generate a lot of revenue. Recent work by the Internal Revenue Service has given some support to this view.

[5] Independent estimates based on a representative sample may, therefore, be called for to yield: average tax withheld (from the sample data adjusted to the population), total potential withholding (from the national accounts) and, therefore, the average compliance rate. If the information is available by sector, conclusions based on different sectoral compliance rates could help target particular sectors for monitoring, with the objective of reducing tax evasion.

[6] In the expenditure side method, exports are already excluded from the domestic expenditure base.

[7] This method is different from that outlined for estimating evasion by wage earners in the previous section. The sampling method that is being described here is based on a sample selected for special scrutiny on a continuing basis, and is used in lieu of the national accounts method.

[8] For a discussion of the methods see Tanzi (1982).

[9] Bolivia applies a rate which is not less than the average rate charged by banks and Ecuador charges an interest rate not less than the free current rate in the financial market. However, for delay of payment exceeding 30 days a penal interest rate of 5

percent per month is applied on the unpaid amount up to a maximum of 100 percent of the amount due.

[10] In fact the theoretically advocated and practically followed procedure of selecting taxpayers through audits to detect tax evaders raises serious questions of equity when many other tax evaders remain undetected and unpunished.

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Table 1
MEASURES AGAINST NONCOMPLIANCE OF TAX LAWS

	Interest on Taxes Paid in Arrears	Penalty on Taxes Paid in Arrears	Adjustment of Taxes Owed for Inflation	Other Penalties
Latin America				
Argentina	Compensatory interest rate 2% above Bank of Argentine Nation highest rate plus a further 1.5% of penal interest if collection procedure through the courts is initiated by the Treasury	Arg$ 396-793 for failing to present tax returns and additional Arg$ 396-3 964 for infringing other administrative duties; closure of establishments 3-10 days	Yes	For fraud, fines ranging between 2 to 10 times unpaid taxes and/or imprisonment for up to 2 years
Bolivia	Not less than the average rate charged by banks	10% of amount due in arrears, no less than Bs 100 and no more than Bs 1 000	Adjusted according to official quotation of the dollar	Fraud is penalized by fines ranging between 50-100% of omitted tax and/or closure for up to 6 months
Brazil	1% per month calculated on the adjusted amount of tax due	10-20% for tax arrears	Yes	150% of the tax underpay ment rising to a maximum of 225%
Chile	1.5% per month on the adjusted tax	10% of tax due rising by 2% per month after 5 months up to a maximum of 35%	Yes	Fraud is subject to a fine ranging between 50% and 300% and up to 5 years imprisonment
Colombia	Market interest rate plus 33.3%	Fines for late filing ranging from 5-100% of tax due; fines for failure to file: income tax: 20% of gross receipts or bank deposits, sales tax: 10% of gross receipts or bank deposits	No	Penalties for fraud not specified

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	Interest on Taxes Paid in Arrears	Penalty on Taxes Paid in Arrears	Adjustment of Taxes Owed for Inflation	Other Penalties
Costa Rica	No more than 10 points above minimum rate fixed by central bank	2-24% per month; minimum for corporation: C 200; minimum for individual C 50; failure to withhold tax subject to fines ranging from 25-50%	No	Penalties for fraud not specified
Dominican Republic	1-12% per month on the difference of tax due	Fines ranging from 15% plus 3% per month of tax due and from RD$10-200 or 6 days to 3 months imprisonment for failing to surrender withheld tax	No	Penalties for fraud not specified
Ecuador	Interest rate not less than free market rate or penal interest of 5% per month up to 100% of tax due	3-100% of tax due plus various surcharges	No	Fraud subject to a fine ranging from unpaid amount to 5 times unpaid amount
El Salvador	Rate charged by banks on mortgage loans plus 1% per year	5-25% of income tax liability and up to 75% for failure of agent to withhold tax	No	Penalties for fraud not specified
Guatemala	Maximum annual rate plus 4%	2% of gross income or working capital up to a maximum of Q 5 000; failure to withhold income tax subject to fines ranging from 30-100% of tax due	No	Penalties for fraud not specified
Honduras	2% per month plus 10% surcharge	25-100% of tax due depending on delay in filing return	No	Tax evasion subject to a fine ranging from 1 to 5 times evaded tax
Mexico	150% per year of aggregate rates up to 5 years (i.e., 2.25% per month)	10-100% or 5 times tax due	Yes	Frauder liable to imprisonment between 3 months and 6 years or longer for serious fraud

	Interest on Taxes Paid in Arrears	Penalty on Taxes Paid in Arrears	Adjustment of Taxes Owed for Inflation	Other Penalties
Nicaragua	Not more than 2% above annual rate charged by banks up to a maximum of 100% of tax due; delay in paying withheld tax subject to penalty interest of 10% per month	25% or C$100; 100-200% for fraudulent withholding procedures	No	Tax evasion subject to fine between 1 to 15 times the evaded amount; fraud liable to fine ranging from C$100 to C$5 000 or 10 times defrauded amount
Panama	1% per month plus 10% surcharge on the deficiency	Fines ranging from B 10 to B 1 000	No	Fraud subject to fine ranging from 5 to 10 times defrauded tax or imprisonment from 1 month to 1 year
Paraguay	1% per month surcharge up to a maximum of 18%	Fines ranging from ₲ 500 to ₲ 10 000 for formal infringement and fines ranging from 10% and 50% of omitted tax for failure to pay	No	Tax evasion subject to fine ranging from 50% to 300% of evaded tax
Peru	Rate charged by central bank to financial institutions plus a rate not exceeding 10% (5% if tax payable in foreign currency)	1-5% surcharge up to a maximum of 100% and possibility of closing establishment	Yes	Penalties for fraud not specified
Uruguay	5.5% up to a maximum of 50% above maximum rate of central bank	Various monthly surcharges up to a fine 15 times amount of tax; 20% of delayed tax payment for arrears and 100% for delayed payment in case of withholding agent failing to surrender tax withheld	Yes	Tax fraud subject to fine ranging from 1 to 15 times defrauded tax plus imprisonment ranging from 6 months to 6 years; tax evasion subject to 1 to 5 times evaded tax

	Interest on Taxes Paid in Arrears	Penalty on Taxes Paid in Arrears	Adjustment of Taxes Owed for Inflation	Other Penalties
Venezuela	Rediscount rate charged by central bank to local banks plus 12% per year up to a maximum of 18% of sums due in the year	One tenth to twice omitted tax and fines ranging from Bs 100 to Bs 10,000; fraudulent withholding procedures subject to fines and imprisonment ranging from 3 months to 2 years	No	Fraud subject to fine ranging from 2 to 5 times omitted tax
Europe				
France	0.75% per month	0.75-10% up to maximum of 40%	No	Fraud subject to fine of 80% of defrauded amount and unlimited penalties in case of criminal suit
Germany	0.5% per month for up to 4 years	10% of amount due up to DM 10 000	No	
United Kingdom	Rate determined by the Treasury	Up to 100% of amount due	No	
North America				
Canada	15% of owed amount	5% plus 1% per month up to 12 months plus other various fines	No	50-200% for tax evasion
United States	3% above Federal borrowing rate	5-25% per month	No	Fraud subject to a fine up to 75% of defrauded amount

Sources: <u>Fiscalité Africaine 1991</u>, International Bureau of Fiscal Documentation, Amsterdam; and U.S. General Accounting Office, "Options for Civil Penalty Reform," GAO/GGD-89-91, September 1989.

Note: The penalties and fines in the above table refer to the respective tax systems as a whole and do not distinguish by type of tax since this information is lacking.

SERIE POLITICA FISCAL*

Nº   Title:

1   "UN MARCO ANALITICO-CONTABLE PARA LA EVALUACION DE LA POLITICA
     FISCAL EN AMERICA LATINA" (LC/L.489)

2   "AMERICA LATINA: LA POLITICA FISCAL EN LOS AÑOS OCHENTA" (LC/L.
     490)

3   "LA POLITICA FISCAL EN AMERICA LATINA: TOPICOS DE INVESTIGACION"
     (LC/L.529)

4   "EL DEFICIT DEL SECTOR PUBLICO Y LA POLITICA FISCAL EN CHILE,
     1978-1987" (LC/L.563)

5   "POLITICAS DE REDUCCION DE LA EVASION TRIBUTARIA:LA EXPERIENCIA
     CHILENA, 1976-1986" (LC/L.567)

6   "AJUSTE MACROECONOMICO Y FINANZAS PUBLICAS CHILE: 1982-1988"
     (LC/L.566)

7   "LA POLITICA FISCAL Y LOS SHOCKS EXTERNOS" (LC/L.568)

8   "EL DEFICIT DEL SECTOR PUBLICO Y LA POLITICA FISCAL EN URUGUAY"
     (Período 1978-1987) (LC/L.579)

9   "DETERMINANTES DEL DEFICIT DEL SECTOR PUBLICO EN BOLIVIA" (Pe-
     ríodo 1980-1987) (LC/L.582 y LC/L.582/Add.1)

10   "EL DEFICIT DEL SECTOR PUBLICO Y LA POLITICA FISCAL EN MEXICO"
     (1980-1989) (LC/L.622)

11   "DETERMINANTES DEL DEFICIT Y POLITICA FISCAL EN EL ECUADOR"
     (1979-1987) (LC/L.624 y LC/L.624 Add.1)

12   "EL DEFICIT DEL SECTOR PUBLICO Y LA POLITICA FISCAL EN ARGENTINA"
     (1978-1987) (LC/L.625)

13   "EL DEFICIT PUBLICO Y LA POLITICA FISCAL EN VENEZUELA" (1980-
     1990) (LC/L.635 y LC/L.635/Add.1)

14   "O DEFICIT DO SETOR PUBLICO E A POLITICA FISCAL NO BRASIL, 1980-
     1988" (LC/L.636)

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15   "CASOS DE EXITO NA POLITICA FISCAL BRASILEIRA" (LC/L.641)

16   "LA POLITICA FISCAL EN COLOMBIA" (LC/L.642)

17   "LECCIONES DE LA POLITICA FISCAL COLOMBIANA" (LC/L.643)

18   "EL DEFICIT CUASIFISCAL: ASPECTOS TEORICOS, CONCEPTUALES Y METODOLOGICOS" (selección de trabajos) (LC/L.646)

19   "EL DEFICIT CUASIFISCAL DE LA BANCA CENTRAL EN COSTA RICA: 1985-1989" (LC/L.647)

20   "EL DEFICIT CUASIFISCAL EN BOLIVIA: 1986-1990" (LC/L.648)

21   "MACROECONOMIA DE LAS OPERACIONES CUASIFISCALES EN CHILE" (LC/L.649)

22   "EL DEFICIT DEL SECTOR PUBLICO CONSOLIDADO CON EL BANCO CENTRAL: LA EXPERIENCIA MEXICANA DE 1980 A 1989" (LC/L.650)

23   "UNA APROXIMACION AL DEFICIT CUASIFISCAL EN EL PERU: 1985-1990" (LC/L.651)

24   "EL DEFICIT CUASIFISCAL EN EL PARAGUAY: 1982-1989" (LC/L.654)

25   "EL DEFICIT CUASIFISCAL EN ECUADOR (1979-1987)" (LC/L.659)

26   "EL DEFICIT CUASIFISCAL EN VENEZUELA: 1980-1990" (LC/L.660)

27   "DEFICIT CUASIFISCAL: EL CASO ARGENTINO (1977-1989)" (LC/L.661)

28   "O DEFICIT QUASE-FISCAL BRASILEIRO NA DECADA DE 80" (LC/L.662)

29   "EL DEFICIT PARAFISCAL EN URUGUAY: 1982-1990" (LC/L.719)

30   "REFORMA FISCAL PROVINCIAL EN ARGENTINA: EL CASO DE MENDOZA, 1987-1991" (LC/L.741)

31   "LA POLITICA FISCAL EN CHILE: 1985-1991" (LC/L.742)

32   "POLITICA FISCAL, EQUILIBRIO MACROECONOMICO Y DISTRIBUCION DEL INGRESO EN VENEZUELA: 1985-1991" (LC/L.745)

33   "INCIDENCIA MACROECONOMICA Y DISTRIBUTIVA DE LA POLITICA FISCAL EN COLOMBIA: 1986-1990" (LC/L.746)

34   "LA POLITICA FISCAL EN BOLIVIA Y SU RELACION CON LA POLITICA ECONOMICA: 1986-1990" (LC/L.750)

35   "LA POLITICA FISCAL EN ECUADOR: 1985-1991" (LC/L.753)

36   "POLITICA FISCAL, AJUSTE Y REDISTRIBUCION: EL CASO URUGUAYO, 1985-1991" (LC/L.759)

37   "LA ARMONIZACION TRIBUTARIA EN EL MERCOSUR" (LC/L.785)

38   "TAX EVASION: CAUSES, ESTIMATION METHODS, AND PENALTIES A FOCUS ON LATIN AMERICA" (LC/L.786)