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Presumptive Income Taxation:
Administrative, Efficiency, and Equity Aspects 1/

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Abstract

This paper discusses assessment of income on the basis of approximate indicators as opposed to conventional records. Such a method of assessment, known as presumptive income taxation, is widely used in many developing and industrial countries; however, it has been neglected in public finance literature. In most cases the presumptive approach has been followed for administrative reasons, but this paper argues that more attention should be paid to the efficiency implications of presumptive taxes.

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Summary

Public finance experts tend to think of individual and company income tax as being imposed on a well-defined and accurate measure of recorded income over a given period, normally a year. In fact, income tax assessment for large numbers of taxpayers in both industrial and developing countries is "presumptive"--that is, it is legally defined on the basis of more appropriate indicators. In most cases presumptive methods are used as a simple administrative expedient, but, as this paper proposes, they can also be used for efficiency and equity goals.

Historically, income tax assessment shows a movement from presumptive to "modern" methods as indicators of income were gradually replaced by income actually received. Meanwhile, schedular income taxes were replaced by global income taxes, and self-assessment and withholding at source became more common. However, the changes in methodology never went as far as most public finance experts assumed, especially in developing countries. Recent criticism of the modern income tax as it is actually administered leads one to examine presumptive assessment as a possible alternative in certain situations.

The only major economist to identify clearly an efficiency concept of presumptive taxation is Luigi Einaudi. He presented what he called an "optimal" tax, namely a tax on "average" income and effort in a given occupation. He argued that if taxpayers were taxed on average rather than actual income, they would have an incentive to produce above average, since the marginal tax rate on the excess would be zero. (This use of presumptive methods may not, however, be administratively convenient, since calculation of an "average" return can in practice be quite difficult.) Presumptive tax methods may also improve equity. For example, in both developing and industrial countries it is well known that wages and salaries paid by large establishments are much more effectively taxed than incomes of the self-employed. Presumptive methods of taxing professionals and the self-employed (by establishing, for example, a minimum income) could then be used to ensure greater horizontal equity.

Current experience with presumptive methods of taxation shows that they require a considerable amount of administrative input if they are to be based on realistic and objective criteria. One could object that this administrative input should be used instead to improve modern income taxes, based on actual income. The answer is that in many cases the modern approach is just not possible. Thus a combination of administrative, equity, and efficiency arguments for presumptive taxation makes the case for more research in this important but forgotten area.

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I. Introduction

Public finance scholars raised in the modern Anglo-Saxon tradition generally think of an income tax as one imposed on a well-defined measure of the income earned by taxpayers (individuals or companies) in a given period, normally a year. Many of them also believe that this is the only way in which income taxes can be levied and are universally levied. This paper shows that income taxes do not necessarily need to be applied to well-defined and precisely measured concepts of income. In fact in many countries they are not. Like men's suits, they can be made to fit specific individuals with all their peculiarities, or they can be made to fit, though in a somewhat less precise manner, broader categories of individuals. Presumptive methods of taxation may be applied for a variety of reasons. In most cases presumptive methods are used as a simple administrative expedient. In other cases, presumptive taxes have been proposed to meet efficiency and equity goals.

Presumptive taxation of individual and company income is a topic that has received relatively little attention on the part of public finance scholars in recent years even though, as we will show, it plays an important role in the tax system of many countries. This introduction to the subject will hopefully stimulate further research of a more detailed nature. Our paper consists of four parts: a historical survey of developments in income taxation; a discussion of presumptive taxation; a section providing information on the use of presumptive taxes around the world; and a general concluding section.

II. Historical Background

We are so used to income taxes that we may think that they have always been part of the economic scene. The taxation of income was not important until this century, although several countries were already taxing income during the last century. Income taxes were introduced in the United States only in 1913 after the U.S. constitution was amended to allow the Federal government to impose an income tax. However, they had been used for a while during and after the Civil War starting in 1863. In the United Kingdom, the income tax was introduced by the Aid and Contribution Act of 1798 as "...a direct outcome of the gigantic struggle against France." ^{1/} In preunification Germany, income taxes were introduced at different times by the various German states, starting in 1834 with Saxony. In France, a rudimentary system of direct taxation was introduced as a result of the French Revolution. It evolved toward a more modern income tax through major reforms in 1830 and 1870. The Italian income tax is a product of the Italian unification in the 1860s.

^{1/} See Seligman, p. 57.

If developments in income taxation were traced through the last two centuries, the following major changes would be observed:

(1) A gradual transition, in both legislation and administration, from an income concept determined on the basis of general indices (e.g., value of land, standard of living of families, wealth, number of doors and windows of the taxpayer's residence, etc.) to one in which, at least in intention, the tax is imposed on the incomes actually received by individual taxpayers.

(2) A change from the taxation of "real" or "schedular" income (i.e., the separate taxation of particular categories of income, such as wages, interest, rent, etc.) to the taxation of taxpayers' global incomes. Global income must, by necessity, always be personalized (i.e., the various components must be aggregated for the individual). Schedular income need not be personalized; for example, a flat rate on interest income could be applied to any individual, rich or poor. This change was in part necessitated by an increasing preference on the part of policymakers for progressive taxation. For the income tax to be truly progressive, it must be levied on the total (global) income of the individual rather than separately on its components. Inequities arise when a schedular approach is combined with progressivity.

(3) A gradual change toward a system of self-assessment in which the individual is required to calculate his own total income, and often his tax liability, and to file a return to the tax authorities. The alternative, of course, is to let the tax administration determine the income and the tax liability of the taxpayer. This approach is still followed in some countries.

(4) Finally, one observes a movement toward a system of withholding at source. Withholding is also relatively new--it was introduced in the United States only in 1943. There are still some countries without a system for withholding income taxes from wages and salaries.

The changes reported above were greatly facilitated by structural changes in the economy and by changes in social attitudes. In fact, one could even take a deterministic view of tax structure changes and argue that these changes were a direct and perhaps unavoidable consequence of economic and social developments. Changes in the structure of the economy increased the proportion of total taxable income that individuals derived from the sale of their labor services or from the leasing of their wealth to others. Over the years, the number of individuals who earned an income from working freely for others rather than for themselves grew. This resulted in part from the transition from an agricultural to an industrial society. Also, the growing role of financial intermediation and of large corporations implied that savers and investors were often different individuals. The former lent their savings to financial institutions which in turn lent the money to borrowers. Or, the savers bought shares in corporations. The result

was that savers did not receive their capital income by directly transforming their savings into real assets for their own use; they received it from others in the form of interest payments, dividends, and rents.

Another important economic change that facilitated the transformation of the tax system along the lines described above was the growing concentration of income generation in fewer and larger economic units. The government became progressively more important as an employer and as a payer of income; in time it came to employ about a fifth of the labor force of many countries. Large corporations employing thousands of workers became a common feature. These changes were accompanied and facilitated by the spread of accounting.

In tandem with these economic changes important social developments were also influencing tax systems. For example, the growing demand for progressive taxation induced most countries to abolish schedular taxes and to replace them with global income taxes. In conclusion, social demands for progressive income taxes together with the technological transformation of the economy made possible the introduction of the modern progressive income tax.

While historically we have observed a movement from presumed to actual income and from the schedular to the global approach, the shift was never as complete as most observers assume. In developing countries it never went very far, especially in an effective sense, perhaps because the economic transformation reported above never took place, or never took place to the same degree as in industrial countries. ^{1/} Even though the tax laws are generally written as if the tax is always imposed on a well-defined and personalized measure of income, in reality taxpayers often do not submit accounts, or they submit accounts that cannot be believed by the tax administrations. Many taxpayers are still taxed on incomes that are derived from educated guesses or general indices. Often the level of taxable income is simply the result of negotiations between the taxpayer and the tax administration, negotiations that may be conducted without any solid facts and which may be influenced by possible bribes to tax inspectors or by the political connections of the more powerful taxpayers. Even some advanced countries, such as France and Italy, rely on presumptive concepts for at least part of their income tax system. ^{2/} In sum, there may still be more taxpayers in the world today who are taxed on the basis of some presumed concept than on the basis of actual and precisely measured incomes.

^{1/} Taxes on personal income account for only about 2 percent of GDP in developing countries. Furthermore, perhaps three-fourths of this revenue comes from wages and salaries (see Tanzi, 1987).

^{2/} See Fuá and Rossini (1985).

The taxation of actual income, with progressive and often very high rates, achieved the greatest acceptance on the part of policymakers, scholars, and possibly even taxpayers in the 1950s and 1960s. In the United States, for example, surveys of taxpayers' preferences made in the 1960s indicated that taxpayers often preferred the income tax over all other taxes. At that time several influential tax experts, including Joseph Pechman, Richard Goode, and others, considered the income tax as the best and fairest of all taxes. Much of the increase in tax revenue that took place in the industrial countries during the 1950s and 1960s came from the global income tax and from a "schedular" tax on wages (the social security tax).

The fairly general acceptance of the modern income tax in industrial countries in this period contrasts with the assessment that Seligman had made 70 years ago in his encyclopedic book on income taxation. As he had put it:

Even if the income tax were the fairest of all taxes--which. . . is not necessarily true--the decision as to whether it ought to be utilized would depend largely upon whether this fairness which is predicated of it in the abstract, would ensue in actual practice. It is notorious, however, that of all taxes the income tax is perhaps the most difficult to assess with scrupulous justice and accuracy; so that what is conceived in justice often results in crass injustice. ^{1/}

In recent years there has been an increasing dissatisfaction in many countries with the way in which income is taxed. This has resulted in a growing interest (not yet apparent in academic writings) in alternative ways of taxing income. These alternatives might include some use of presumptive taxes. The reasons for dissatisfaction with the present-day income tax can be classified under three categories: administrative difficulties, efficiency concerns, and equity considerations.

a. Administrative difficulties

As Seligman wrote, when income taxes are not assessed with "scrupulous justice and accuracy," the result may be "crass injustice." In many countries, especially in those of the developing world, it is often futile to attempt to determine what the actual income of many taxpayers is. The taxpayers themselves, unless their incomes are fully derived from wages, are often incapable of determining their own income with any degree of precision. Thus, even though the law requires that the tax base must be the actual income, it is often in the interest of the tax administration to come close to that measure by using presumptive criteria. This approach is at times justified by growing awareness of the scope of tax evasion in most countries. While until recently tax evasion received little attention on the part of public finance

^{1/} See Seligman, p. 18, (1914).

scholars, it is now the subject of a growing and specialized field. The attention paid to underground economic activities in recent years is additional evidence of this awareness. ^{1/} One is also more aware now that the use of reliable bookkeeping that would make it possible to determine actual income is still quite limited. When taxpayers do keep books, they often have two sets: one for the tax authorities and one for themselves.

The recent trend toward a service-oriented economy and toward the proliferation of small businesses, even in countries as advanced as the United States, has not made the determination of actual income any easier. There is now considerable evidence that tax evasion is a large and growing phenomenon in both industrialized and developing countries.

b. Efficiency concerns

In recent years policymakers have become much more concerned about the impact of high tax rates on work effort, saving, and entrepreneurship. This concern reflects in part the results of recent studies indicating that high marginal tax rates may have more negative effects than previously thought. As a consequence, many economists argue that taxes based on incomes should be replaced by taxes based on consumption. We are also observing reforms that reduce the level of marginal tax rates.

c. Equity considerations

Tax evasion often creates serious injustices between those who are able and unable to evade (or avoid) taxes. The use of actual income as the base for income taxation can result in great injustice when, of two individuals with the same income, one can totally evade the tax while the other pays the full amount. Often the latter is the taxpayer that receives his income from wages and salaries. But there is another equity issue with modern income taxation. Modern income taxes generally exempt the imputed income of assets (houses, land, jewelry, works of art, etc.) used by the taxpayer. This encourages some taxpayers to live in larger houses, or to be less concerned about the efficient use of their wealth. This is a problem of particular importance in developing countries although to some extent it exists also in industrial countries. In developing countries the underutilization of land by rich landowners has often been criticized by development economists.

III. Presumptive Taxes: Some Theory

Although the practice of presumptive taxation has continued in many developing countries and in some industrial countries, there has been very little theorizing about it. The authors found no mention of it in public finance textbooks, and the number of articles dealing with it,

^{1/} See Tanzi, (1982).

especially in English, is limited. ^{1/} In general, public finance scholars seem to have shied away from this concept, perhaps because they consider it primitive and backward, and not in the spirit of a modern tax system. However, like politics, taxation must be the art of the possible. Sometimes aiming for the best can give poorer results than a more modest approach.

In thinking about presumptive income taxation, one could begin with the observation that presumptive methods may be adopted for widely different reasons, relating to the above-mentioned concerns of administrative convenience, efficiency, and equity. On the most mundane level presumptive methods can be adopted for simple administrative convenience, usually as a substitute for taxation of actual income as shown in accounting books and records. In many instances such records do not exist or cannot be effectively audited. For example, a number of countries tax small agricultural units and family businesses, professionals and independent contractors on a presumptive rather than on an actual base.

Presumptive methods designed primarily for administrative convenience can have other implications, however. For example, a technical assistance report concerning a low-income Latin American country recommended that small enterprises be taxed using a presumptive method. Under this method the average ratio of profits to sales (the margin) for each category of small taxpayers is applied to all taxpayers in that category in order to assess their income tax. ^{2/} The perceptive reader will note that this recommendation, made for reasons of administrative simplicity, will also have an impact on efficiency. A very efficient small enterprise could pay the "average" tax, and keep any surplus at a zero rate of taxation.

The only major economist the authors could find who clearly identified and supported an efficiency concept of presumptive taxation without reservations is Luigi Einaudi. ^{3/} As many readers will know, Einaudi was a very distinguished public finance scholar in the early part of this century; Governor of the Central Bank of Italy and President of the Italian Republic after World War II. His work is still very influential in Italy and in Latin America. More than 60 years ago Einaudi presented a strong case for what he called "the optimum tax." ^{4/} He argued that an income tax based on "average income" would stimulate production, and would thus contribute to growth. By "average income" he meant the income that taxpayers who (a) worked an average

^{1/} For a recent and more theoretical paper on this subject, see Tanzi (1986). See also Richard Goode (1984), pp. 108-110.

^{2/} See Musgrave, *Fiscal Reform in Bolivia*, 1981.

^{3/} The authors wish to thank Aldo Chiancone for calling their attention to Einaudi's work on this subject.

^{4/} See "La Scienza Italiana e la Imposta Ottima," Chapter X of Einaudi, 1959. The original work was published in 1924.

number of hours, (b) contributed an average level of effort, (c) took an average risk, and (d) used the average technology of the time, could generate in a given year. He drew his conclusions from historical examples of taxation of agricultural income in the Principality of Milan.

Einaudi made clear that his theory had general applicability and could be applied to other sectors and incomes. He argued that, when taxpayers are taxed on the basis of an average income and not on their actual income, they will have an incentive to produce above the average, as this excess would be taxed with a marginal tax rate of zero. In a way, the tax would come to resemble a poll tax and as such it would preserve incentives. Although Einaudi's writing preceded that of modern optimal taxation theorists, his "optimum tax" is clearly in the spirit of modern optimal taxation.

More modern advocates of the use of presumptive taxation for efficiency concerns are development economists who have advocated a tax on the potential value of land. Noting that large landholders often do not use their holdings productively, these economists have advocated a tax that would be levied on the basis of the most productive use of the land. This use of presumptive methods is almost opposite to its use for administrative convenience. A tax based on the potential value of land raises numerous administrative difficulties, and is far more difficult to administer than a tax based on estimated actual value. In this way we see that the "administrative convenience" and "efficiency" concepts of presumptive taxation can conflict with each other.

A third reason for using presumptive taxation relates to horizontal equity objectives. In both developing and industrial countries it is well known that wages and salaries paid by large establishments are much more effectively taxed than incomes of the self-employed, because wages and salaries can be made subject to withholding. Presumptive methods to tax professionals and the self-employed may then be adopted as a device to ensure that a measure of horizontal equity prevails.

IV. Experience with Presumptions of Income

1. Background

Presumptions are used to assess taxpayers in both developed and developing countries, but especially in the latter, where "hard-to-tax" taxpayers comprise a large fraction of the taxpaying population and administrative resources are generally scarce. One developed country

that has a well-established system of income presumption is France, where the forfait system is used widely. ^{1/}

The degree of economic development of a country tends to influence the choice of methods for estimating incomes and the way they are applied. Countries in the earlier stages of development tend to apply rough and ready methods because they have few personnel qualified to study the profitability of different economic activities and establish the indexes required for calculating presumptive incomes. In those countries in which sectoral studies have been made and appropriate indexes have been established, it is possible to estimate incomes with a much higher degree of accuracy. A perusal of the legal provisions that establish presumptions of income does not, in general, disclose to what extent a particular country is applying the presumptions established in the law nor how they are applied. The answers will depend on the country's circumstances and particularly on the availability of the administrative resources needed to cope with the complexities of certain presumptive methods.

One of the criteria for classifying presumptions of income is whether or not they are applied generally for assessing taxpayers' income. Some methods for estimating income are regularly applied to entire sectors of taxpayers as a substitute for actual incomes based on accounts. Other presumptions of income apply only when taxpayers omit to file an income tax return or their return is audited. The forfait method and the standard assessment methods used in a number of countries are examples of presumptive methods that are applied in a wide variety of circumstances. Presumptions of income that apply only when taxpayers do not submit a return or when they are audited include methods ranging from the use of specific factors and indexes of profitability determined for different activities to crude presumptions based on a single factor, such as the total assets of the taxpayer.

In some instances it is artificial to distinguish between methods used regularly to assess certain categories of taxpayers and methods used only in specific circumstances. Thus, for example, the standard assessment method developed in Israel (the tahshiv method) was established for use in those cases in which the taxpayer was genuinely unable to keep appropriate books and records. ^{2/} In practice, large numbers of taxpayers who were able to establish their actual income by conventional

^{1/} The forfait system in France establishes alternative legal bases of assessment, using indicators to determine estimated income rather than assessments that are supposed to be based on conventional records. Forfaits are used to assess the income tax of farmers, unincorporated business enterprises and professional persons whose gross receipts fall below stipulated levels. The process of establishing a presumptive income may involve negotiation between the taxpayer and tax officials. (See Goode, 1984.)

^{2/} See Wilkenfeld (1973).

methods opted for the standard assessment because it resulted in a lower tax liability.

Presumptions of income can also be classified by whether they are rebuttable or not. Some presumptions are irrebuttable, which means that the taxpayer is not allowed to claim (and prove) that his actual income was lower than the presumptive income. Other income presumptions may be rebutted, if taxpayers can prove that their actual income was lower than the presumed income. In general, rebuttable presumptions are the rule.

A variety of economic bases and methods of calculation are used to provide presumptions of income. For example, certain presumptions are based exclusively on the taxpayer's net wealth or on the value of the assets used in his business. Others are based on the gross receipts of the enterprise. Still others are based on visible signs of wealth. The forfeit and the standard assessment methods use several key factors and indices of profitability, which vary by activity, to determine the taxpayers's income. The remainder of this section is devoted to a more detailed description of the general methods of income presumption that are currently practiced by various countries. Other presumptions that apply only to particular types of income, such as interest, profits obtained by foreign companies--particularly in the areas of communication, transportation, and entertainment--and deemed dividend distributions in the case of controlled enterprises are omitted from the discussion.

2. Presumptions based on net wealth or on the value of particular assets

Several countries use comparisons of beginning-of-year and end-of-year net worth as a method for determining a taxpayer's income when books and records are nonexistent or inadequate to establish actual incomes. The problems posed by this form of assessment are mainly technical in nature. It is difficult to determine with any precision the initial and end-of-year net worth of a taxpayer and the expenditures incurred during the tax year. Because of these difficulties the net-worth approach is not much used in developing countries, although many include this approach in their tax legislation.

A number of developing countries use net wealth as a base for presuming income when auditing taxpayers' returns. Thus, for example, Argentina's tax legislation provides that the amount of capital invested in the enterprise is one of the factors that can be used by the administration to determine the income of an enterprise. In Chile, when the available information is insufficient to establish an enterprise's actual income, the administration is empowered to presume that its income is equal to 10 percent of the value of its total tangible assets.

In some countries the value of agricultural land has been used as a base for presuming agricultural income. In 1968 Argentina established a federal tax on agricultural land that could be credited against the

taxpayer's income tax. The tax on land was a minimum income tax on agricultural income, because no refunds were granted to taxpayers whose land tax payments were higher than their income tax liability. The Argentine federal land tax was repealed in the early 1970s. In Chile, the income tax law provides that farmers who do not keep adequate account books are presumed to have an income equal to 10 percent of the assessed value of their farm. This presumption is irrebuttable.

Perhaps the most comprehensive presumption method based on net wealth is the one currently in force in Colombia. Since 1974 all Colombian taxpayers, individuals and companies, are presumed, without possibility of rebuttal, to have incomes equal to at least 8 percent of their net wealth. The Government, however, may reduce the level of the presumption for a particular region or for the country as a whole whenever abnormal economic conditions or natural catastrophes dictate.

This presumption has been justified on both administrative and equity grounds. It was introduced simultaneously with a major income tax reform. The basic rationale of the presumption was that it was a way of producing revenue, given a lack of appropriate administrative resources for enforcing conventional income taxation. The presumption was also supported as a reaffirmation of the social function of property that had been established in the Colombian constitution.

Scant statistical information exists regarding its revenue effects. Data for 1984, available only for companies, show that 13 percent of company tax collections stemmed from the combined application of this presumption and another presumption, based on gross receipts, established in 1983 (the latter will be described in the next subsection). Eighty-seven percent of collections were based on actual incomes.

Some technical problems are associated with presumptions of income that are based on net wealth or on the value of particular assets. While it is relatively easy to identify the owner of real property or of registered shares, the ownership of bearer shares, foreign currency, and certain other assets is difficult to establish. Because such presumptive methods are more easily applied with respect to certain kinds of property, these presumptions tend to discriminate against taxpayers who own such assets. Valuation of assets, particularly in an inflationary setting, also constitutes a major problem. Presumptions based on net wealth encourage taxpayers to increase their liabilities.

3. Presumptions based on gross receipts

Francophone African countries have been pioneers in the establishment of minimum corporate income taxes. These taxes were originally introduced as fixed lump-sum amounts that were the same for all corporations whatever their size or volume of operations. This tax could be credited against the regular corporate tax but no refunds were allowed if the minimum tax exceeded the corporate tax. Because of the regressivity of the minimum tax, it was replaced in many of these

countries by another form of minimum taxation based on the notion that a corporation's income tax payments should be equal at least to a percentage of its gross receipts. This percentage ranges from less than 0.5 percent in certain countries to 2 percent in others. In a number of these countries the previous lump-sum minimum tax was not repealed, so it coexists with the minimum tax based on gross receipts. Corporations are required to pay, as a minimum tax, the larger of the two sums. In some francophone African countries the minimum tax extends also to individuals. The minimum tax based on gross receipts is equivalent to a simple presumption of income. For example, if the corporate tax rate in a country that applies this system is equal to 40 percent of net profits and the minimum tax is equal to 1 percent of gross receipts, authorities are acting as if all corporations earn a minimum net taxable income equal to 2.5 percent of their gross receipts.

In 1983 Colombia established a general presumption of net income, based on gross receipts, applicable to all taxpayers, individual and corporate, except those whose main sources of income are wages and salaries. The law presumes that net income amounts to at least 2 percent of gross receipts. As may be observed, in this instance we are dealing with a presumption of net income, i.e., a presumed tax base. In the francophone countries that apply a minimum tax, the fraction of turnover set out in the law is the minimum tax.

Like presumptions based on net wealth or on ownership of particular assets, presumptions based on gross receipts are not a panacea for tax administrations attempting to improve taxpayer compliance. In most developing countries concealment of gross receipts is a favored method of tax evasion. Presumptions of income based on gross receipts thus mainly affect taxpayers who cannot easily conceal gross receipts (e.g., large corporations). As a result of such presumptions, corporations with genuine losses are treated in the same manner as corporations that artificially reduce their profits by such methods as manipulating transfer prices. All corporations with the same turnover pay the same tax. For smaller enterprises that have previously concealed a portion of their gross receipts and continue to do so, the introduction of a presumption of net income based on turnover is of little consequence and has no material effect on their tax liability.

Determining the net wealth of taxpayers is much less difficult for tax administrations than checking the gross receipts of businesses other than large corporations. Furthermore, it must be borne in mind that currently many countries impose general sales taxes at fairly high rates. Thus, taxpayers have a double incentive to conceal gross receipts: to evade the sales tax and to evade the income tax.

4. Presumptions based on visible signs of wealth

The income tax legislation of several countries includes presumptions of income based on visible signs of wealth. These presumptions apply only to individuals. In some countries, such as Brazil and Peru,

the tax department is empowered, in somewhat general terms, to presume incomes higher than those reported by taxpayers on the basis of visible signs of wealth. It is left to the administration to decide which signs of wealth to use and what level of income to attach to them.

In other countries, including France, Italy, several francophone African countries, and, until 1978, Spain, presumptions based on visible signs of wealth are carefully specified in the income tax act. The signs of wealth that must be considered are described and each is assigned an income equivalent. Such signs of wealth usually include the taxpayer's main and secondary residences, number of domestic servants, automobiles, yachts, private planes, and race horses.

Presumptions of this nature have existed for decades in many countries. These and other presumptions of income were established to provide tax administrators with an instrument to support additional income assessments in cases where it was difficult to establish how much income was unreported. In some countries the rationale for these presumptions has changed over the years. They are now considered a means to ensure that taxpayers who enjoy a luxurious life-style pay an appropriate amount of tax even if they faithfully report all their actual income. In other words, the presumption currently serves an equity or "public morality" objective.

In practice, presumptions based on visible signs of wealth have proved difficult to apply. When they are established in general terms, tax administrators are hard pressed to decide which signs of wealth to use as a basis for the presumption and how to establish the income equivalent of each. In those countries in which both the signs of wealth and their income equivalent have been specified in the statute, the inflexibility of the provisions may lead to considerable unfairness. Recognizing these problems, tax departments tend to apply these presumptions cautiously and only when additional assessments cannot be supported by other means. One of the areas in which such presumptions have proved useful is in supporting assessments on illegal incomes, such as those derived from racketeering and drug trafficking.

5. Estimated assessment methods

Many developing countries and some developed ones apply methods for estimating the income of "hard-to-tax" taxpayers. These taxpayers are mainly individual proprietorships, farmers, and professionals. France, with its forfait method, has inspired a number of other countries to adopt similar systems. But to successfully implement a forfait system several requirements must be met. First, the tax department must have the technical resources to make detailed studies of profitability by type of activity. Second, an adequate number of tax officials must be available to verify information provided by taxpayers about the characteristics of their business. Third, because the forfait involves discussions between officials and taxpayers regarding the level of the assessment, officials must be strictly supervised and adequately paid. Otherwise, the system creates strong incentives for corruption.

Not many tax administrations can fulfill these requirements. Those countries that have tried to implement systems similar to the forfeit without adequate resources have ended up with a highly flawed system. One of the principal obstacles has been the lack of resources to draw up detailed sectoral profitability studies. Some countries have managed to study a half dozen sectors, and no more. In such circumstances, discussions between officials and taxpayers about assessments are based mainly on subjective impressions. This has led to unrealistic assessments and to corruption among tax officials.

In their search for more objective systems for estimating incomes, a number of countries have tried to adapt the system developed originally in Israel under the name of tahshiv. This system emphasizes the use of objective factors and indexes to estimate the income of taxpayers who do not keep adequate books and records. Physical inputs and factors such as the number of employees are highly important for the determination of each enterprise's income. If, for example, the enterprise to be assessed is a barbershop, the assessment guidelines (tahshiv) for this activity will contain instructions for estimating the enterprise's income according to the different kinds of services provided, the equipment of the establishment, its location, work schedules, and the number of barbers. Each tahshiv is prepared after detailed research and visits to a representative sample of businesses. The average profitability of the sector and its relationship to specific factors and indexes is discussed with representatives of the sector before the tahshiv is issued. More than 80 tahshiv have been developed.

Some aspects of the Israeli experience with standard assessments have been criticized. Some taxpayers whose incomes are above the averages on which the tahshiv are based pretend that they do not have adequate books and records to establish their actual income. The heavy reliance of the tahshiv on precise factors tends to transform the tax on income into a tax on the factors set out in each tahshiv. Taxpayers are therefore motivated to alter these factors in their business establishments in order to obtain a lower assessment.

In spite of these defects, the Israeli system has been imitated by other countries. Korea, for example, has introduced a standard assessment along the lines of the tahshiv. Other developing countries have made efforts in this direction, but few have made much headway.

Faced with the task of estimating the income of "hard-to-tax" taxpayers, some developing countries have devised simple solutions that in practice depart radically from the precepts of income taxation. For example, Ghana developed a standard assessment system in the early 1960s that resulted in fixed lump-sum payments for different activities. These payments were established by determining the average taxable income of a few taxpayers selected at random from each class of self-employed taxpayers. Although the lump-sum payments were established as a minimum income tax, in practice most taxpayers subject to standard assessments paid only the prescribed lump-sum amounts. As regards

farmers, a number of countries have attempted to assess their income on the basis of the potential output of their land. Professionals, on the other hand, are sometimes assessed a minimum income tax based on some estimate of average potential earnings.

Most developing countries have not solved satisfactorily the problem of how to estimate the income of "hard-to-tax" taxpayers. This is of special concern to tax administrators in countries in the earlier stages of development, where relatively few taxpayers can be taxed on actual incomes. In one such country only 14 taxpayers out of the 850 largest businesses were able to submit acceptable income statements in 1985. Middle-income countries are also searching for better ways of presuming incomes for "hard-to-tax" taxpayers. Their objective is to devise estimation methods that will not divert an excessive proportion of administrative resources from more productive work. In Portugal, for example, 35,000 enterprises paid profits tax on actual incomes in 1983, while approximately 340,000 businesses paid tax on a presumptive base. Yet the 35,000 enterprises that paid on actual incomes accounted for three-quarters of total profits tax collections. In these circumstances, tax administration officials must strive to minimize administrative involvement with low-yield taxpayers, without abandoning efforts to collect some tax from all enterprises.

6. The administrative case for presumptive taxation methods

In the context of advice to a particular developing country at least one author has come out strongly against presumptive methods. In referring to Colombia, Richard Bird concluded that no attempt should be made to employ presumptive income methods because:

(1) Problems are encountered in selecting factors that should form the base of a presumptive income tax, i.e., whether to choose gross sales, value of property, number of employees, rent or inventory.

(2) The likelihood that the presumptive tax (which would not really be a true tax on net income but a tax on the factors on which the presumed income is based) will tend to be shifted in an arbitrary and haphazard manner.

(3) The possibility that the use of presumptive techniques will actually discourage the keeping of books and records.

Bird concludes that "any presumptive tax would have to be highly complicated in order to be effective, and would very likely be as difficult to administer fairly and effectively as the regular income tax." ^{1/}

^{1/} See Musgrave and Gillis (1971) p. 409.

Despite the difficulties mentioned it is clear that a need exists in developing countries for simple methods to tax the "hard-to-tax" groups that now escape income taxation. Presumptive methods by nature cannot be exact, but may well be preferable to ad hoc judgmental assessments using unspecified criteria. As noted above, taxation is the act of the possible and simple presumptive methods are a needed tool in the tax administrator's arsenal.

V. Summary and Conclusions

This paper has dealt with a topic which, although important, has attracted very little attention from public finance experts. However, as we have shown, presumptive taxation is widely used in many countries, both developing and industrial. In most cases, this approach has been followed for administrative reasons: to tax incomes which the tax authorities felt would be otherwise difficult to reach. Presumptive incomes have thus been considered proxies for actual incomes. The paper has argued that public finance scholars should pay more attention to the efficiency implications of presumptive taxes. A well-designed presumptive approach can result in a tax system that, in some of its aspects, could be superior, from an efficiency point of view, to one that relies on actual incomes. The reason for this is very simple: when categories of individuals are taxed on the basis of some average estimate of the income that they produce, any excess over that average is implicitly taxed with a zero rate. If one assumes that individuals respond to incentives of this type, the conclusion must be that there could be efficiency gains from the use of presumptive taxes. Of course, the precise way in which these taxes would be designed and implemented is left for future research to determine.

One clear conclusion is that presumptive taxes require a considerable amount of administrative input if they are to be based on realistic and objective criteria. One could object that if a country is willing to invest its resources to design and administer a good presumptive system of taxation, then why not spend that money to improve the modern income taxes, based on actual income. The answer to this question is that in many cases the modern approach to income taxation is just not possible.

The authors hope that this paper will stimulate some interest in what they consider an important but forgotten area, so that, as knowledge of the administrative, equity, and efficiency implications of presumptive taxes increases, a more informed assessment of their potential in modern tax systems can be made.

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