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Tax Expenditure Budgets

Concepts and Challenges for Implementation

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Abstract*

Tax expenditures are generally defined as those government expenditures carried out through tax legislation, regulations, and practices that reduce or defer taxes for some taxpayers. There is a general concern that the tax expenditures negatively affect the budget and tax policies, which in turn affect the transparency, efficiency, and equality of the fiscal systems. Many countries in Latin American and a few in the Caribbean already estimate their tax expenditures; but in many cases they do so without adopting a consistent methodology that allows for adequate comparisons or that even evaluates their effectiveness. This working paper discusses the conceptual aspects of tax expenditures, the main challenges to assess them, and the general procedures adopted in the OECD countries and Latin America and the Caribbean to calculate, present, and approve them.

Key Words: Taxation, Subsidies and Fiscal Policy

JEL Classification: H20, E62

* This paper is based on research and presentations made at the International Seminar on Tax Expenditures organized by the Vice Presidency of Sectors and Knowledge (VPS) of the Inter-American Development Bank (IDB) and the Fiscal Affairs Department of the International Monetary Fund (IMF) that took place in November of 2008 in Washington DC. Luiz Villela is a senior economist from the Fiscal and Municipal Management Division (FMM) of the IDB's Institutional Capacity and Finance Sector (ICF). Andrea Lemgruber is a senior economist from the Revenue Administration Division of the IMF's Fiscal Affairs Department. Michael Jorratt is an IDB consultant.

1. Introduction

Tax expenditures, understood to be the revenue that is foregone by the application of benefits or special tax regimes, are one of the many tools that governments have available for public policy implementation. Their use is designed to foster and encourage certain economic sectors, activities, regions, or agents. Tax expenditures are often referred to as “foregone revenue” since they can be considered as the way by which the treasury desists, either partially or totally, from applying the general tax regime to pursue a higher objective of political economy or social policy.

The concept of tax expenditures arose at the beginning of the 1960s, practically simultaneously in Germany and the United States. These were the first countries to report tax expenditure budgets to enhance transparency in public activities carried out via this method, in the same way they reported direct public spending in the regular budget process. Later, during the 1980s, the practice was extended to virtually all countries in the Organization for Economic Co-operation and Development (OECD) and to a few developing countries.

The international community’s demands for greater transparency in fiscal policy, together with the growing tendency to use tax benefits—especially in those developing countries seeking investment—led to an increased interest in tax expenditures throughout the world. In 1998, the International Monetary Fund (IMF) published its *Manual on Fiscal Transparency*, which, along with the OECD’s recommendations on tax expenditures, contributed to not only disseminate the subject matter but also to emphasize the need for various countries to consider it when designing their budget.

In spite of such efforts, however, tax expenditures have hardly been studied, especially in developing countries. There is a need to develop a more systematic analysis for assessing the level of tax expenditures and for creating a harmonized methodology that supports comparative studies across countries. In the Latin American and Caribbean (LAC) region especially—a region that has used tax expenditures as a tool for attracting investment—this theme is fundamental for understanding the granting of incentives and their effects. Here, countries seek policy proposals with greater basis on technical studies that simultaneously promote an increase in fiscal transparency.

There are four main themes that show the importance of improving tax expenditure analysis. The first of these is the **measurement of tax expenditures**; certain conclusions might be drawn from its analysis concerning the magnitude of state action in each country. A tax expenditure is a commitment of fiscal resources as valid as any other component of public spending, and recognized as such in fiscal accounts. One interesting implication of tax expenditure measurement, therefore, is that it enables comparisons of the size of the state in various countries to be updated.

A second theme is related to the **political economy that underlies the creation, revision, and updating of tax expenditures**, and how these are generated, evaluated, and modified over time. Because tax expenditures appear as deductions from fiscal revenue, the political system's capacity to assess their effectiveness is limited. Consequently, greater scope for evaluating tax expenditure effectiveness depends on the degree to which more information can be generated on the subject. **The third theme involves equity issues**. In many cases it is not always clear who benefits from tax expenditures. Analysis of their impact on equity is consequently important, including the evaluation of their effect on the progressivity of the tax system. The fourth theme is **the importance of coordination between the different agencies or areas of government** involved in the matter. Admittedly, the study of tax expenditures is a multidimensional analysis that involves aspects of tax administration, tax policy, and public finance management. There must therefore be adequate coordination between the differing public administration agencies in charge of the implementation, execution, and control of these expenditures.

The aim of this paper is to present an integral study that serves as a reference for those involved in tax expenditure budget drafting by incorporating the main guidelines on theory and implementation.¹ Particular emphasis is placed on the practical aspects of implementation, as this is an area that has received little attention in the extant literature on the subject. This practical approach is illustrated by the experiences of the OECD member countries and those LAC countries with available data.

The paper is structured as follows. Section 2 analyzes the main conceptual aspects of tax expenditure budgeting. Section 3 tackles the challenges to be faced by tax expenditure

¹ The debates held at the aforementioned International Seminar on Tax Expenditures, which took place in November 2008 in Washington, DC, have been very useful. The seminar, attended by 71 participants from 19 countries and six international organizations, facilitated the exchange of experiences of LAC countries on this subject.

implementation—among them, the importance of information sources, information gathering, and the problems inherent in tax expenditure budget elaboration. Section 4 offers a synthesis of the estimation and control of tax expenditures in Latin America. Finally, Section 5 concludes and points out the challenges still to be resolved and the way forward.

2. The Tax Expenditure Budget: Conceptual Aspects

2.1. What are Tax Expenditures?

The main objective of any tax system is to collect the revenue necessary to finance public expenditures. Each citizen must provide the government a proportion of his or her income, consumption, or wealth to help finance public goods, social spending, and other activities that generate positive economic effects for society.

The way in which tax collection is carried out, however, is not irrelevant. The tax structure must have certain qualities, such as efficiency, equity, and simplicity. Efficiency is linked to the fact that taxes should be collected with the least possible interference in people's decision making. Equity has a dual sense: horizontal and vertical. Taxes should be horizontally equitable, meaning that they affect taxpayers of an equal contributive capacity in the same way. They should likewise be vertically equitable, in the sense that those people with a greater contributive capacity should pay proportionately more taxes. Finally, it is preferable to have a simple tax structure rather than a complex one, because simplicity diminishes other costs associated with taxes—such as those related to administration and compliance—, and reduces opportunity for evasion and avoidance.

Governments frequently use tax systems to pursue certain political economic objectives, such as encouraging savings, stimulating employment, and protecting national industry. In such circumstances, the tax system fulfills a similar role to that of public expenditures, yet the state foregoes all or part of the amount that otherwise would be collected from certain taxpayers or activities. This renunciation is what is known as a tax expenditure.

It must be pointed out that a tax expenditure can affect the above-mentioned qualities of a given tax system differently. For example, the extent to which it favors a specific group of taxpayers or activities will result in a loss of horizontal equity. From this point of view, tax expenditure budgets reveal, in a sense, the degree of horizontal inequality in taxation.

The OECD (2004) defines tax expenditures as transfers of public resources carried out through a reduction in contributive obligations in relation to a given tax reference point (a so-called benchmark), rather than the route of direct expenditure. One of the main challenges in defining and identifying tax expenditures within a given piece of legislation is, precisely, to agree on a tax benchmark against which tax legislation provisions can be contrasted. This argument will be examined further in a later section of this document. For the moment, it suffices to say that tax expenditure quantifications can be radically different according to the definition adopted, which, amongst other implications, infers the difficulty of making reliable comparisons between the magnitudes of tax expenditures in different countries.

In some countries, other characteristics are added to the aforementioned definition, which constitute additional requisites in order for a tax expenditure to be considered as such within fiscal legislation; however consensus as to whether these should be taken into consideration or not does not yet exist. Based on an OECD (1996) report, the following are requirements set forth by different countries: (i) contributive concessions should benefit an industry, an activity, or a particular class of taxpayers; (ii) tax expenditures should support a particular, easily identifiable purpose (differing from the system's own operational efficiency) with an objective that could be carried out in an alternative manner using other public policy instruments, such as direct subsidies; (iii) the tax in question must be widely-based enough to ensure that there is an adequate benchmark against which the value of the concession can be measured; (iv) it must be possible to change the tax system in order to eliminate the tax expenditures; and (v) there must be no other provisions in the tax system that could amply compensate for the benefits of the tax expenditures.

From the technical point of view, tax expenditures can take different forms, such as the following:

- Exemptions: Revenue or transactions that are excluded from the tax base. In legal regulations, these are encountered under various headings (e.g., exemptions, tax holidays, nontaxable events, etc.).
- Allowances: Amounts that can be deducted from the tax base.
- Credits: Amounts that can be deducted from the tax liability.
- Rate relief: Lower tax rates than those generally applied.
- Deferral: Postponement or delay in the tax payment.

According to the same OECD (1996) report, the identification of such forms constitutes an exercise of classification, consisting in dividing the provisions of the tax laws into those that form part of a benchmark tax and a series of deviations from that benchmark tax. A tax expenditure can be said to exist whenever a tax provision deviates from the general norm. The same report points out that, in general, the benchmark tax includes rate structure, accounting conventions, the deduction of mandatory payments, provisions that facilitate administration, and requirements related to international fiscal obligations.

2.2. Tax Expenditures as a Public Policy Tool

2.2.1. Objectives Pursued by the Use of Tax Expenditures

It has been said that tax expenditures constitute a transfer of public resources carried out through a reduction of the tax obligations in relation to a benchmark tax. Ideally, however, these transfers should in essence pursue at least one of these four objectives: (i) improve progressivity within the tax system, (ii) provide greater efficiency for the tax structure, (iii) stimulate the consumption of merit goods or, (iv) encourage investment in certain sectors or regions. Moreover, certain special treatments are based on the complexity which is sometimes inherent in the application of the general regulations, or in the compulsory way that taxpayers are obliged to carry out different acts or consume in a particular way; however, there is less consensus on whether this kind of deviation should be considered to be a true tax expenditure.

- (i) *Improve progressivity within the tax system:* Tax expenditures sometimes seek to reduce contributions from lower income sectors, with the aim of improving the progressivity of the tax system and, in effect, income distribution. In general, this is applied to taxes such as Value Added Tax (VAT) through exemptions for those goods whose consumption represents a higher fraction of the contributive capacities of lower-income people than those of higher-income people. This is the case of goods in the basic food basket or in collective passenger transport. What really matters is the redistribution that is achieved after public spending. In effect, even when VAT is regressive, if the social spending that is financed through its collection is well channeled, the net effect will be favorable in terms of income redistribution.

The tax expenditures that best pursue progressivity are less frequently found in the income tax, because this tax normally has a progressive design, achieved through the application of marginal rates that increase along with increased income levels and through an exemption bracket that, given the pyramid structure of income distribution, usually frees a large part of the population from paying the tax. This implies that any income tax exemption will benefit only a small percentage of taxpayers, and among these those facing the greatest marginal rates will benefit more.²

- (ii) *Provide greater efficiency to the tax structure:* This category includes those tax expenditures that seek to reduce the distortions associated with the income tax, principally regarding the disincentive effect that income tax has on investment and savings. With regard to corporate income tax, some tax expenditures seek to reduce the effective marginal contribution rate in order to stimulate greater investment in specific sectors. This includes the so-called tax holidays, which exempt certain enterprises from paying tax, usually for a fixed term; accelerated depreciation schemes, which allow investments to be counted as costs in a period shorter than the useful life of the assets; and the reduction of the taxable rates on accrued profits or, in some cases, on reinvested profits and tax credits for investment.

In the case of the personal income tax, these incentives are frequently targeted on stimulating savings through mechanisms such as the reduction of the taxable base for amounts saved in certain financial instruments, exemption from financial interests and other income from real estate capital, the application of reduced rates on some financial revenues, or the use of credits in proportion to net savings carried out in the tax period.

- (iii) *Stimulate the consumption of merit goods:* On some occasions, tax expenditures seek to encourage the consumption of certain goods or services which are said to be of a “meritorious” nature but do not represent an important enough volume for the most dispossessed sectors of society, and their promotion does not necessarily create distortions in savings and investment. This is true of tax expenditures that benefit

² In order to avoid the regressive effect of income tax exemptions, complex formulae are sometimes designed that try to ensure that the benefit is inversely proportional to the marginal rate applied to the taxpayer.

education, health care, housing, sporting activities, the publishing industry, and cultural activities.

This type of tax expenditure usually belongs to levies such as the VAT, in which case many of the aforementioned products or services are exempt from the tax, or a reduced rate is applied. Generally, these exemptions or reduced rates increase the regressivity of the VAT, because they relate to goods and services that are preferentially consumed by households with greater income. In the case of education and health care, for example, the households with the lowest income accede to free services provided by the state, which means that the tax expenditure is concentrated on the higher quintiles.

These preferential treatments are also applied to the income tax. One of the most frequent mechanisms employed in this regard is to permit spending carried out by families on certain goods and services to be deducted from the taxable base. On occasion, although less frequently, the seller or provider of these services is also exempt.

(iv) *Promote regional or sector development*: For a considerable time now, a habitual policy, both in developed and in developing countries, has been to provide incentives in order to attract direct foreign investment or to promote investment in certain sectors or regions. Incentives to underdeveloped regions, which are typical of territorially large countries, are often concentrated in regions with comparative disadvantages caused by their distance from the principal urban centers. Activities in these regions imply, generally speaking, elevated transport and communications costs, which thereby increase the costs of production and distribution.

In some countries, fiscal incentives are given for investment in certain sectors that are considered to be strategically important for development. These incentives are, in effect, instruments of industrial policy, meaning that they attempt to support development in certain activities. The rationale implicit in the concession of incentives to sectors that are deemed strategically important is based on correcting the market's failure to reflect future earnings derived from the fall of unit costs associated with a sector's development. Over time, as production increases, unit costs fall and the country as a whole acquires a comparative advantage as the beneficiary industry

develops. This is the classic argument in support of protection for so-called “infant industries.”

These four categories correspond to ideals; that is, they are the principles that should be followed so that it makes sense, at least, to assess whether a given tax expenditure should be implemented or not. However, it is important to bear in mind that tax expenditures are often established to attend to considerably less meritorious purposes than the aforementioned ones. For example, they are frequently created in response to pressure exercised by certain corporate groups, either to protect uncompetitive national industry or to send a message to specific interest groups.

2.2.2. The Advantages and Disadvantages of Tax Expenditures

Tax expenditures constitute additional instruments among the various public policy tools available to governments, such as direct budgetary action or regulatory action over certain activities. They should therefore be permanently subject to evaluation, not just in regards to justifying a particular state intervention, but also in terms of their relative efficiency in comparison with other available policy instruments.

Once the need to put public policy into practice within a given area has been verified the best available instrument to carry out that intervention should be evaluated. Professor Stanley S. Surrey (1970), one of the pioneers of this subject, lists five disadvantages of tax expenditures in public policy implementation when compared to direct subsidies:

- (i) **Tax incentives are regressive by nature:** Tax incentives, logically, favor those who pay taxes. Under a progressive income tax, upon which this assertion is based, the poorest people are not included and therefore reap no benefit from the tax expenditures. Nonetheless, if the fact that the application of exemptions in VAT and other taxes on consumption can contribute to improving the progressivity of the tax system, then the assertion takes on another meaning.
- (ii) **Tax incentives generate unexpected gains:** In many cases, tax expenditures create stimuli for people to do what they would have done anyway, in which case the stimulus finally becomes a windfall for the beneficiary. In other words, in order to encourage one individual, the cost is shared by all.

- (iii) **Tax incentives are more difficult to administrate and control:** Tax administrations do not have sufficient experience in administering and controlling public spending programs. Whenever tax expenditures are implemented, however, the administrations find themselves obliged to fulfill this function and, given that it is more difficult to control a system that has many exceptions, this can give rise to fraud or even greater involuntary errors.
- (iv) **Tax incentives distort market decision making:** Whenever tax expenditures favor a specific sector of the economy, they produce a rerouting of resources towards the favored sector. However, this does not necessarily constitute a disadvantage in those cases in which the tax expenditure seeks to correct a distortion previously caused by the tax itself, as occurs with measures to stimulate investment and savings.
- (v) **Tax incentives require higher tax rates:** In effect, higher tax rates will be needed in order to collect a given amount if a part of the potential revenue is lost through the application of tax expenditures.

On the other hand, Swift, Brixi, and Valenduc (2004) mention the following positive aspects of tax expenditures:

- (i) They provide an incentive for private sector participation in economic and social programs in which the government takes the leading role.
- (ii) They promote private sector, rather than government, decision making.
- (iii) They reduce the need for state supervision of the equivalent direct expenditure.

With particular regard to this latter point, although the implementation of a tax expenditure does eliminate the need for the state supervision that all direct expenditures require, it also creates the need to supervise and control the correct use of the eventual tax benefit, as well as the possible room for tax fraud that this may create. The aforesaid advantage, therefore, must be evaluated further, given that in many cases the costs of the supervision of tax expenditures are greater than the control over direct spending, especially if the related abuses and frauds are taken into account.

Additionally, the following tax expenditure characteristics should be taken into consideration when contrasting them with other public policy instruments:

- (i) **Targeting:** From the beneficiaries' points of view, tax exemptions are easier to access than direct subsidies, because they operate in a relatively automatic manner,

whereas subsidy programs require a collection system and a beneficiary selection process. On the other hand, from the state's point of view, the fact that they are automatic means that they are not targeted as well, because they benefit both the target group and anyone else who complies—or pretends to comply—with the legal requirements.

- (ii) **Horizontal inequity:** Tax expenditures tend to generate horizontal inequity, given that not all people have the same consumption needs or preferences. Therefore, for example, when exemptions from VAT are established, either in order to improve progressivity or to stimulate the consumption of merit goods, the tax burden for families showing a preference for the goods that are exempt is reduced, in detriment to other families with the same level of income that prefer the consumption of nonfavored goods.
- (iii) **Encouragement for evasion and avoidance:** The application of tax expenditures makes the tax structure more complex, thereby increasing evasion and avoidance. Slemrod (1989) summarizes the following four main reasons for this: first, the uncertainty about the correct interpretation of the legal regulations caused by the aforesaid expenditures; second, the undermining of the tax administration's monitoring capacity, because auditing requires more time due to the more complex rules; third, the greater difficulty imposed on taxpayers to comply with their tax obligations, leading to noncompliance with some of them, either through ignorance or in order to compensate for the added costs imposed by the system; and finally, the greater opportunities to manipulate the tax system, in view of the increased room for evasion and avoidance that opens up as tax regulations become more complex.
- (iv) **Increased costs of tax compliance:** In general, the greater the number of tax incentives, the greater the costs in terms of time and money that taxpayers face in order to comply with their tax obligations. These costs, moreover, do not always fall on the beneficiaries. For example, the exemptions regarding VAT benefit the final consumers, but the greater costs of compliance arising from the special registers needed to account for exempt sales and VAT credits are borne by the sellers. With regard to income tax, the control of exemptions requires, in many cases, information to be provided by third persons.

In a recent study, Tokman, Rodríguez, and Marshall (2006) proposed permanent evaluation of all tax expenditures within the tax structure, and to this end they suggested eight dimensions in which it might be relevant to contrast the performance of a tax expenditure with that of a direct subsidy. These dimensions, which draw together the aforementioned elements, are summarized in Table 1.

Table 1. Relative Advantages and Disadvantages of Tax Expenditures as Tools of Public Policy

	Tax expenditures	Direct subsidies
Accessibility for beneficiaries	Simple, due to their automatic nature.	More complex, requiring selection.
Administrative costs	Low for exemption, but high for the tax system as a whole because they make it more complex.	Medium level, due to necessity of a selection and allocation system.
Possible abuses	Room for evasion and avoidance, and for rent seeking.	Room for arbitrariness and capture of the allocating body.
Flexibility	Works with permanent laws, thereby generating stability but also inertia.	Works with budgets, evaluations and regular reallocations.
Transparency and accountability	Their automatic nature does not contemplate control mechanisms or accountability.	Must be approved by congress as with all governmental expenditures.
Expenditure control	Expenditure determined ex post, uncertain and unlimited, which can cause fiscal imbalances.	Programmed and controlled spending, limited by the budget law.
Effectiveness	Additionality in the targeted action cannot be guaranteed. Inframarginal cases are financed.	Risk of displacement of private sector and difficulties in ensuring additionality.
Equity	Only those who pay taxes accede, and those with greatest income benefit the most.	Discretionality can provide more equitable access, enhancing targeting on beneficiaries.

Source: Tokman, Rodríguez, and Marshall (2006).

2.3. The Purpose of Tax Expenditure Budgets

In general, regular budget expenditure is permanently subject to public scrutiny. The drafting of an annual budget, which must then be submitted for parliamentary approval, undergoes this scrutiny. Tax expenditures, on the other hand, remain hidden among income projections and are only submitted for parliamentary discussion during their initial approval. From a purely budgetary point of view, the difference between direct spending and tax expenditures is that the former is carried out over two stages: the receipt of revenue and the payment or transfer of the subsidy. In the latter case, however, the revenue covers the payment, thereby foregoing the aforesaid two stages. The traditional way of presenting revenue, therefore, as being net of tax expenditures, violates the budget principle of noncompensation of revenues and costs.

From a public policy point of view, tax expenditures are an alternative tool of state intervention, which pursue similar results to those that could be obtained via direct public spending. They should, therefore, be subject to the same controls and transparency criteria as the latter. The OECD (2004) points out that less rigorous control on tax expenditures relative to direct expenditures create incentives for the establishment of subsidies and transfers that take the form of the former, irrespective of objective considerations that might justify such a choice. This threatens the budget's distributive, macroeconomic, and administrative functions and can also put the tax system's primary function of revenue collection at risk. Tax expenditure budgets are financial reports that give account of the aforementioned problems. In effect, they provide transparency for the use of tax concessions, facilitate their adequate control, and enhance efficient resource allocation.

There is no standard format for tax expenditure budgets, which means that their structures and content can vary significantly between countries. The following elements, however, are almost universal: (i) definitions, concepts, and coverage; (ii) description of the benchmark taxes; (iii) description of the tax expenditures; (iv) time series of tax expenditure estimates (one or more years); and (v) projected tax expenditure estimates (one or more years) and (vi) estimation methodology. Some of the international best practice guidelines regarding the estimation and the presentation of these reports are worth being considered when preparing tax expenditure budgets. In particular, the OECD and the IMF have dealt with the matter in some of their manuals and directives. Boxes 1 and 2 present a summary of the OECD's and the IMF's recommendations on the best practice guidelines for tax expenditures.

Box 1. OECD: Best Practice Guidelines for Tax Expenditures

Identification of Tax Expenditures

- Tax expenditures should be identified by use of a benchmark tax. The benchmark does not necessarily need to represent the normative tax base. The benchmark should be comprehensive and unique.

Budgetary Control of Tax Expenditures

- All tax expenditures should be estimated and integrated in the expenditure documentation that is presented to the budget authorities for all significant taxes. Regular expenditures and tax expenditures should be shown in this documentation side-by-side for the same number of years.
- Tax expenditures should be included in the total expenditure cap or else a special expenditure cap should be set for them. Overspending on tax expenditures should be fully compensated, at least insofar as it originates in policy change. If a special tax expenditure cap is used, compensation can take place within that cap or through reduction of the regular expenditure cap.
- Staff of the line ministries and the budget bureau should review all tax expenditures in the same way as regular expenditures in the annual budget process. Special evaluation procedures, including program review, should be applied equally to both.
- Tax expenditures should be assigned to individual ministries.

Estimation of Tax Expenditures

- Tax expenditures should be estimated by revenue forgone, corrected by an equivalent tax margin, if equivalent expenditure transfers are taxed (or by outlay equivalence).
- The responsibility for tax expenditure estimates should remain with the Ministry of Finance.

Source: OECD (2004).

Box 2. References to Tax Expenditures in the IMF’s “Manual on Fiscal Transparency”

The IMF’s (2001) manual captures the best practices in matters of public finance and includes specific references to tax expenditures. The following are the principal references to the subject found in the manual.

- Statements describing the nature and fiscal significance of central government **tax expenditures**, contingent liabilities, and quasi-fiscal activities should be part of the budget documentation.
- **Tax Expenditures**, which may include exemptions from the tax base, allowances deducted from gross income, tax credits deducted from tax liability, tax rate reductions, and tax deferrals (such as accelerated depreciation). The effects of **tax expenditures** are often identical to those of explicit expenditure programs. They can be targeted, for example, towards providing assistance to individuals, families or firms through expenditure programs or through selective provisions in the tax code. However, once a **tax expenditure** has been presented it does not require formal annual approval by the legislature (although some may be subject to sunset clauses) and it is therefore not subject to the same degree of scrutiny as a regular expenditure. This means that a proliferation of tax expenditures can result in a serious loss of transparency.
- A basic requisite of fiscal transparency is that a statement of the main central government’s **tax expenditures** should be included as part of the budget documentation. This declaration should include the public policy purpose of each provision, its duration, and the intended beneficiaries. The principle **tax expenditure** components should be quantified as far as possible.
- The OECD’s guidelines on best practices call for the provision in budget documentation of all the estimated costs of **tax expenditures**. They also call for the discussions of tax expenditures and general expenditures to be combined to the greatest extent possible. Although there can be serious difficulties in cost estimation, reporting the approximate cost of **tax expenditures** and describing the basis of the estimates can significantly enhance transparency. A number of OECD countries regularly publish estimates of **tax expenditures**.
- If important subnational levels of government exist, then the general government’s aggregate fiscal balance and the consolidated fiscal balance should be published. The subnational levels of government must also publicly declare their off-budget activities, debt, financial assets, contingent liabilities, and tax expenditures, as well as the quasi-fiscal activities of public financial institutions and the nonfinancial enterprises under their control.

Source: IMF (2001).

3. The Challenges of Implementing Tax Expenditures

The effective implementation of the tax expenditure budget is a complex task that involves the following steps: (i) construction of an adequate legal and institutional framework, (ii) application a coherent and transparent methodology, (iii) provision of good information management, (iv) integration of this process with the country's regular budget process, (v) systematic evaluation of the costs and benefits, and (vi) control and oversight by the tax administration.

Significant challenges are involved in coordinating efforts in these areas and—in practice—they are accompanied by deficient implementation capacities in many countries. The following is an analysis of each of the steps mentioned above, which, in general, represent themes infrequently dealt with in the extant international literature, especially the need to implement a combined system of interdependent actions in various governmental agencies.

3.1. Institutional and Legal Framework

The estimation, monitoring, and control of tax expenditures are complex administrative activities because they are multifunctional (involving distinct areas of interest or expertise) and intergovernmental (involving different ministries and, in the case of federal countries, different governmental levels). Agencies dealing with tax policy, tax administration, the budget, and program evaluation all take part in the process, depending on the functions accorded to them. The legislative and the executive branches; national, state, and municipal governments; and regulatory agencies participate in the intergovernmental aspects.

The full scope of this agency network is demonstrated by the participation of free trade area administrations, economic sector monitoring agencies, or national development agencies (e.g., for tourism or foreign investment) that have at their disposal detailed information on many of the enterprises that receive tax benefits. The tasks must be clearly delegated among the authorities and close coordination among all agencies involved must be promoted.

A clear legal framework regarding tax expenditures thereby becomes indispensable. In general, this framework is established in fiscal accountability and budget legislation and/or tax laws and codes. There are various points that must be included in this legal framework, such as definitions of the obligation to coordinate and estimate the tax expenditure budget and the agency responsible to carry this out, the frequency of calculation, and the presentation of

estimates. It is a common and recommendable practice for the tax expenditure budget to be estimated annually and presented alongside (or integrated with) the regular budget process. Another important recommendation is that all concessions should be provided only through legal channels (and not, for example, by decree or other infra-legal measures). It should be ensured that draft laws soliciting the granting of new concessions are accompanied by revenue loss estimates and suggestions for resource compensation. A more complete and better-defined legal framework will lead to greater security in all administrative procedures and actions related to tax expenditure estimation and control.

3.1.1. The Agency Responsible for the Tax Expenditure Budget

The task of assigning the coordination and final estimation of the tax expenditure budget to one agency is an aspect that deserves particular attention. In order to avoid inconsistent methodologies and unnecessary costs due to the duplication of administrative tasks, it is important to designate which agencies will be responsible for coordinating the work, even when a series of agencies is involved. The OECD recommends that the final responsibility remain with the ministry of finance. In fact, there are various reasons why this recommendation may be preferable. According to Minarik (2008), the centralization of estimates can benefit from economies of scale. For example, the development of a simulation model enables the simultaneous estimation of various tax expenditures, whereas the decentralization of estimates calls for the implementation of multiple models (at least one per each programmatic agency), thereby increasing development and maintenance costs. Furthermore, the centralization of estimates produces benefits via methodological consistency.

Moreover, the prime sources of information used in estimation are the tax databases, and the ministry of finance's staff has a relative advantage in terms of knowledge and access to this data. In spite of this, however, the programmatic agencies should be expected to help obtain the information needed for carrying out the projection whenever it is not possible to obtain it from the tax sources.

Once the ministry of finance has been given responsibility for estimating the tax expenditures, the next step is to define exactly which area or specific agency dependent on said ministry will be responsible to gather the information and carry out the estimates. Two natural candidates for this task are the tax administration and the office in charge of revenue projections.

Each of them presents pros and cons in their capacities to deal with the task. On the one hand, the tax administration's main advantage is its direct access to the tax returns database, which constitutes the basic source of information for carrying out the estimates. The administration also has greater knowledge of the tax system and the benchmark against which the tax expenditures have been legally granted. On the other hand, the budget bureaus are the most qualified to integrate tax expenditures into the regular budget cycle. They might, however, encounter difficulties in gaining access to detailed taxpayer data (including, in general, rules regarding fiscal secrecy). The most recommendable way to allocate responsibility is to assign the task of gathering and accessing data, analysis, and estimation to the tax administration, which can thereafter send the calculations to be included in the budget proposal by the budget bureau. Cooperation and information exchange between these two agencies therefore becomes indispensable.

3.1.2. The Challenge in Federal Countries

In federal countries, or in highly decentralized countries, the subnational levels account, in many cases, for a large share of the tax burden and also for tax expenditures. In these countries, estimates of tax expenditure budgets should include information from the states (provinces or departments) and the municipalities. The central (or federal) government is the natural candidate to assume responsibility for coordinating this work, thereby ensuring the harmonization of methodologies, information exchange, and the aggregation of national results.

This is, however, a matter in which not even federal countries with developed economies have made much progress. In some countries, subnational levels are involved in a kind of tax competition, which makes it difficult to even ascertain the complete inventory of benefits conceded. A nationally-binding fiscal responsibility law might offer a legal framework, to at least attempt to systemize information aggregation and provide greater transparency to the tax expenditure budget.

In countries such as Brazil and Colombia, the fiscal responsibility laws impose the obligation to estimate the fiscal cost of current tax exemptions, as well as the fiscal impact of any draft law, regulation, or agreement that authorizes any future expenditures or grants tax

benefits.³ However, given that no standard estimation methodology has been established in these countries, subnational governments complying with the obligation to estimate tax expenditures use different, and possibly inadequate, criteria. Even in Colombia, which formally is a unitarily organized country, many jurists believe that a national normative could not impose the use of a specific methodology without confronting the subnational governments' guaranteed autonomy. It is possible that a viable alternative in this sense might be cooperation between central and subnational governments, along with an awareness campaign aimed at informing citizens and agencies of legislative and subnational control of the need for accountability.

3.2. Coherent and Transparent Methodology

Tax expenditure budgets should be reliably estimated, according to (i) the adequate identification of tax expenditures and (ii) the development of specific estimation methodologies.

3.2.1. Identification of Tax Expenditures

In order to correctly identify tax expenditures, a list should be drawn up of all the exemptions associated with the various levies within the tax system. It is hence necessary to define a benchmark tax in relation to each type of tax, so that subsequent deviations regarding such benchmark can be duly identified. This benchmark tax is an “ideal” tax, meaning that it is a tax without any exceptions applied to a wide tax base, such as income or consumption. It is also necessary to define for which taxes the tax expenditures are to be measured. Nevertheless, in order to avoid the a priori exclusion of apparently minor taxes that might later have important repercussions, it is advisable to make the list as comprehensive as possible at this stage.

With regard to the selection of the benchmark tax, a choice will have to be made between a wide and comprehensive methodology, the so-called *conceptual approach*, and one that is more restrictive, such as the so-called *legal approach*. (The following section includes detailed information on each approach.) A decision must also be made at this point as to what information is to be included in the tax expenditure budget. On one extreme, only those entries that have been previously defined as tax expenditures could be included, while on the other, all

³ Article 14 of the *Lei Complementar* 101 (Complementary Law), 4 May 2000, in Brazil, and articles 5 and 7 of Law 819, 9 July 2003, in Colombia.

legal provisions that imply reduced tax collection will be included by identifying those that correspond to such costs according to the authorities' criteria. From the fiscal transparency point of view, it would seem that the wider approach with an abundant quantity of information is the best alternative.⁴

3.2.1.1 Three General Approaches

Craig and Allan (2001) point out that there are three general approaches that countries use to define benchmark taxes and identify tax expenditures. In this paper, they are given the following names: (i) the **conceptual approach**, (ii) the **legal approach**, and (iii) the **analogous subsidy approach**.

The **conceptual approach** attempts to link the benchmark tax to a “normative tax structure,” which does not necessarily bear any relation to the legal definitions of the tax. For example, many countries use the Haig-Simons income concept to define the benchmark for income taxes.⁵ This means that the benchmark tax is defined by using the Haig-Simons income as its tax base, to which some adjustments are introduced to reflect situations in which it is not administratively feasible to apply the pure concept. Likewise, it is common to consider the benchmark tax contributions made on capital gains on a performance basis as part of the benchmark tax, even though in the pure Haig-Simons concept such incomes are taxed on an accruals basis. Consequently, each time the real tax is not applied to the conceptual income, or is applied to a lesser amount, a tax expenditure appears. In the case of VAT, the normal tax structure could be one of pure VAT levied, without exceptions, on all final consumption.

⁴ In this respect, Canada, for example, has opted to present reports with the greatest possible quantity of information, reporting every deviation from a conceptual tax system, which only incorporates the basic structural elements. Canada's tax expenditure report therefore also includes many tax provisions that are not, in general, considered to be tax expenditures. These estimates, which are added to the report separately and known as “memorandum items,” are classified into three groups: (i) measures that are considered part of the system of references (for example, credits to avoid overlapping contribution on dividends); (ii) measures that generate debate on whether or not they should be considered as tax expenditures (e.g., the deduction of the costs of business lunches, that might be taken as a necessary expenditure for generating revenue or, rather, as a tax expenditure); and (iii) measures for which the available information does not allow the separation of the tax expenditure component from that portion that forms part of the benchmark tax code (for example, the deduction of the cost of feeding certain categories of workers). Although this approach has the virtue of supplying the greatest possible information, it is not risk free. Seguin and Gurr (2004) point out that such abundant information may lead users of the report to consider all items as tax expenditures, or as potential sources of increased revenue.

⁵ According to this concept, a person's income is defined as the variation that his or her net worth undergoes between two fixed points in time, plus the consumption undertaken in that period.

The **legal approach** takes the current tax legislation as a basis for defining the benchmark tax and, thereby, for identifying tax expenditures. The difference in relation to the conceptual approach can be illustrated by examining what happens if the VAT law in a given country defines the sale of personal property and the provision of services as taxable events, and explicitly exempts health care service provision. Under the legal approach, there will be a tax expenditure associated with this provision, which is explicitly **exempt** under the legislation, but there will not be one associated with property, given that this does not form part of the legal definition of the tax base. Under the conceptual approach, however, there will be two tax expenditures, one associated with health care service provision and the other with the use of personal property, because both represent consumption.

Finally, the **analogous subsidy** approach identifies as tax expenditures only those tax concessions that are clearly analogous to a direct subsidy. In practice, in this approach the way tax expenditures are identified is similar to the way they are identified in the legal approach. In conclusion, the conceptual approach constitutes a wider definition than that of the other two approaches, resulting in a more extensive list of tax expenditures with a greater total cost.

The principal problem of the legal approach, in relation to the conceptual approach, is that many tax concessions can remain hidden according to the tax technique applied by legislators. In effect, from the economic point of view, it does not matter if a certain good is not subject to VAT because it falls outside of the definition of a taxable event, or because the law expressly exempts it. In both cases there is a product, an activity, or a group of taxpayers that benefits. Nonetheless, under the legal approach the tax expenditure will only become transparent in the latter case. It is for this reason that one of the OECD (2004) best practices guidelines for tax expenditures points out that the benchmark tax has to be global and unique, and that it does not necessarily have to represent the normative tax base.

According to the study carried out by Craig and Allan (2001), among the OECD countries, six apply the conceptual approach (Australia, Belgium, Canada, Finland, Ireland, and Spain); five opt for the legal approach (Austria, France, Holland, Portugal, and South Korea); and two choose the analogous subsidy approach (Germany and the United Kingdom). For its part, the United States uses two benchmark taxes, one according to the conceptual approach and another that follows the legal approach (see Table 2). In Latin America, Chile follows the

conceptual approach, whereas Argentina, Brazil, Colombia, Ecuador, Guatemala, and Peru opt for the legal approach (see Table 3).

3.2.1.2 Other Distinctive Characteristics of the Benchmark Taxes

The three aforementioned approaches are related to the tax base, which is one of the characteristics that define the benchmark taxes. However, the benchmark taxes have other aspects that should also be defined. In the case of the income tax, amongst other things, it is important to decide the following: the rate structure of benchmark taxes, the unit of taxation, the taxation period, and the accepted deductions. The following are some habitual practices in OECD countries:

- **Rate Structure:** The progressive rate structure contained in tax law is considered to form part of the benchmark tax. This means that neither the habitual exemption bracket in the rate scales nor the marginal rates inferior to the maximum give rise to a tax expenditure.
- **Taxation Unit:** In general, the taxation unit accepted by the law is taken to form part of the benchmark tax (e.g., individual, matrimonial, or family tax returns). This means that the lesser (or greater) tax derived from the matrimonial tax return, instead of the individual one, does not give rise to a tax expenditure.
- **Taxation Period:** The taxation periods defined by law are considered to be part of the benchmark.
- **Deductions:** Deductions of expenditure necessary to produce income are usually taken to be part of the benchmark—which is consistent with the Haig-Simons income definition—as well as the deductions of mandatory expenses.
- **Others:** In general, accounting conventions to determine income, provisions that attempt to facilitate tax administration, provisions aimed at avoiding duplicate taxation, those relating to international taxation, and the deduction of losses from previous periods are all included as part of the benchmark tax.

In the case of the VAT and other indirect levies, the benchmark tax must define, amongst other things, the tax rate, the handling of the tax credit surplus, and the accepted returns.

- **Rates:** The common practice is to consider the generally applied legal rate as part of the benchmark. Consequently, reduced rates give rise to tax expenditures whereas increased rates produce negative tax expenditures (even though not all countries record them).

- **Surpluses:** In general, the legal treatment of tax credit surpluses is considered to be part of the benchmark. In the event that a particular sector or taxpayer group benefits from a surplus rebate, then that treatment, without doubt, should be considered a tax expenditure.
- **Refunds:** VAT refunds to exporters are usually considered to be part of the benchmark tax. This is consistent with consumption-based VAT at destination.

3.2.1.3 The “Particular Group” Requisite

Some countries, (Argentina, Australia, Belgium, and South Korea) establish that a tax concession is considered as a tax expenditure only when it favors a particular industry, activity, or group of taxpayers. From this point of view, a tax provision that deviates from the benchmark, but which is applied equally to all taxpayers, is not a tax expenditure, but rather a structural characteristic of the tax itself. In principle, this requisite appears to be reasonable, because as long as the provision benefits all taxpayers equally, there is a possibility that it bears some relation to the tax intended design in terms of the qualities of equity and efficiency. For example, the personal income tax exemption bracket is a provision that favors all taxpayers, observes the criteria of equity in the tax’s design, and is normally considered to be part of the benchmark tax.

Nevertheless, it should be pointed out that few tax concessions have these characteristics, which means that some precautions must be taken in their identification. In the first place, some tax provisions have a general application, but within a subgroup of taxpayers, which means that they should be considered as tax expenditures. For example, the system of accelerated depreciation, which is available for all enterprises, could be considered in some countries as part of the benchmark tax.

However, this criterion does not take into account that such a benefit is restricted to the subgroup of taxpayers that carries out entrepreneurial activities and whose income is determined on the basis of the full accounts. The benefit is not available to the rest of the taxpayers, such as workers or firms subject to other tax assessment schemes. Secondly, some concessions are available for all taxpayers, but they do not necessarily benefit them all equally. For example, VAT exemption targeted on a good from the basic food basket might be categorized as general, insofar as the good in question is consumed in all households. However, the exemption favors to a greater degree the households for which the good represents a greater proportion of their

consumption, in which case it should be considered to be a tax expenditure. It is probably due to the aforementioned considerations that various countries have been led to define tax expenditures as those legal treatments that deviate from the benchmark tax, without making allusion to each one's individual nature.

3.2.2. Methodologies for Estimating Tax Expenditure Cost

3.2.2.1. *The Three Estimation Methods*

The specialized literature on the subject distinguishes three methods for estimating the costs of tax expenditures. In reality, these methods correspond to three different concepts, which can be described as **foregone revenue**, **earned revenue**, and **equivalent direct expenditure**. Before explaining the difference between them it should be borne in mind that the application of a tax expenditure induces changes in taxpayer behavior. For example, if the income generated by various savings instruments is exempted from taxation, there will be a greater demand for these instruments and, therefore, the yield on them will be greater than would have been the case if the preferential treatment had not been applied. Likewise, if an income tax deduction is abolished it is possible that taxpayers might make greater use of the other deductions admitted by law, as a way of compensating for the lost benefit. The recognition of these and other behavioral changes in the estimation of tax expenditures clearly shows the differences between the three aforesaid methods.

The **foregone revenue method** (also known as ex post measurement) measures the loss of revenue that occurs after a tax expenditure has been introduced. It supposes that there is no change in the taxpayer's behavior.

For its part, the **earned revenue method** attempts to estimate the additional revenue that can be obtained by the elimination of a tax expenditure. In contrast to the foregone revenue method, this method (also known as ex ante measurement) takes changes in taxpayer behavior into account. In practice, the application of this method is quite limited, because it requires estimates of the elasticity of supply and demand of the goods or incomes favored by the special treatment. This method should also account for changes in behavior relating to tax evasion. A part of the potential revenue derived from the elimination of a tax expenditure will end up being evaded, as similarly occurs with a proportion of the total of all taxes collected.

Finally, the **equivalent direct expenditure method** estimates the subsidy or transfer that would leave taxpayers with an income (net of taxes) similar to that which they would obtain from the existence of the tax expenditure. In order to understand the differences between this method and the previous ones, a distinction must be drawn between two types of tax expenditures: “tax subsidies” and “tax transfers” (see OECD, 2004). The first are those that are linked to the purchase of certain goods, such as exemptions from VAT. The second are those that are not linked to the purchase of goods, such as reductions in tax rates. The equivalent direct expenditure method takes into consideration the fact that transfers normally form part of the taxable income. Therefore, if a tax expenditure is to be estimated on the same basis as a direct transfer, then the amount of the tax that would affect the said transfer must be added. On the other hand, it is not necessary to make this adjustment in the case of those tax expenditures described as tax subsidies, given that, in general, direct subsidies do not increase taxpayers’ taxable income.

Box 3. Comparison of the Three Methods of Tax Expenditure Estimation

A pretax income of 1,000 is supposed, with an effective deduction of 200. The taxable income is subject to a scale of two marginal rates: 20 percent for income up until 800 and 30 percent for income over and above this limit. Moreover, the only estimated change in behavior, were the deduction to be abolished, would be a reduction in consumption subject to VAT by an amount equal to the lowest possible income. The VAT rate is 10 percent. Using the **foregone revenue** method, the tax expenditure is estimated as the effective deduction multiplied by the marginal rates that would be effectively levied on the highest income if the tax concession were abolished, meaning, $200 \times 30\% = 60$. Under the **earned revenue** method, the supposed change in behavior must also be applied, according to which the household expenditure subject to VAT will be reduced by 60, which means that VAT collection will diminish by $60 / 1.1 \times 10\text{ percent} = 5.5$, making an effective tax expenditure of $60 - 5.5 = 54.5$. Finally, using the **equivalent direct expenditure** method, the marginal rates that would effectively be levied on the highest income if the tax concession were abolished must be applied to the amount of the deduction and increase the result of the amount of tax that would affect an equivalent transfer, meaning, $200 \times 30\% / (1 - 30\%) = 85.7$. Note that a transfer of that value would subsequently produce an after-tax income of 840, equal to the situation with the tax expenditure (line 7 of the table).

	With tax expenditure	Without tax expenditure		
		Foregone revenue	Earned revenue	Equivalent direct expenditure
1 Pretax income	1,000.0	1,000.0	1,000.0	1,000.0
2 Effective deduction	200.0	0.0	0.0	0.0

3	Equivalent direct expenditure	0.0	0.0	0.0	85.7
4	Taxable income (1 – 2 + 3)	800.0	1,000.0	1,000.0	1,085.7
5	Marginal rate	20%	30%	30%	30%
6	Income tax	160.0	220.0	220.0	245.7
7	After-tax income (1 + 3 – 6)	840.0	780.0	780.0	840.0
8	Highest income tax		60.0	60.0	85.7
9	Change in behavior		0.0	5.5	0.0
10	Tax expenditure (8 – 9)		60.0	54.5	85.7

If the equivalent transfer were not subject to taxes, or if it were a tax expenditure of the subsidy type, the equivalent direct expenditure method would come up with exactly the same result as the foregone revenue method. This situation can be observed in the following table. As the equivalent direct expenditure is not subject to income tax, its value is estimated as the deduction multiplied by the marginal rate that would affect the taxpayer in the case of its elimination, meaning $200 \times 30\% = 60$.

	With tax expenditure	Without tax expenditure			
		Foregone revenue	Earned revenue	Equivalent direct expenditure	
1	Pretax income	1,000.0	1,000.0	1,000.0	1,000.0
2	Effective deduction	200.0	0.0	0.0	0.0
3	Taxable income (1 – 2)	800.0	1,000.0	1,000.0	1,000.0
4	Marginal rate	20%	30%	30%	30%
5	Income tax	160.0	220.0	220.0	220.0
6	Equivalent direct expenditure	0.0	0.0	0.0	60.0
7	Income after tax (1 – 5 + 6)	840.0	780.0	780.0	840.0
8	Highest income tax		60.0	60.0	60.0
9	Change of behavior		0.0	5.5	0.0
10	Tax expenditure (8 – 9)		60.0	54.5	60.0

Source: Authors' elaboration.

The choice of the best method depends upon the objective that is being pursued. If a precise estimate of the greatest possible revenue that could be obtained from the elimination of a tax expenditure is required then the earned revenue method is the most appropriate. On the other hand, if the establishment of a parallel between the direct expenditure budget and the tax expenditure budget is sought then it is better to use the equivalent direct expenditure method. In this respect, the OECD (2004) points out that the “best practice” consists in estimating the tax expenditures using the foregone revenue method, but correcting the results by an equivalent tax margin for all cases in which the equivalent transfer is subject to tax. As previously explained, this practice is the same as the application of the equivalent direct expenditure method. The

OECD's recommendation is based on the fact that use of a different method would give rise to the false idea that a tax expenditure is a relatively cheaper alternative to direct expenditure.

Nonetheless, tax expenditure reports also tend to be used in the search for alternatives to tax reforms. In such cases, estimates made using the equivalent direct expenditure method can give rise to false hopes about the possible increases in tax revenue arising from the elimination of certain tax expenditures. Likewise, it might also be convenient to draft complementary estimates showing figures that are closer to the increase in tax revenue that could be obtained by the elimination of tax expenditures. In order to achieve this it is possible to adjust the income figures by foregoing the application of the supposed total constant expenditures, a method utilized in Chile and Argentina. Moreover, it is also reasonable to consider that a proportion of the foregone revenue will be evaded. If estimates of tax compliance for the principle taxes exist, then the foregone revenue could be calculated using the compliance rate of the respective tax.

It is worth mentioning that practically all countries that report tax expenditures use the foregone revenue method, as it is the simplest methodology to estimate and the most advisable one to begin with. The United States applies both the foregone revenue method and the equivalent direct expenditure method. In Latin America, both Chile and Argentina incorporate a supposed change of behavior: the supposed total constant expenditure. According to this, the elimination of an exemption is translated into a lower available income for taxpayers, and therefore a lower level of consumption and payment of VAT.

Once the estimates of foregone revenue have been established, it is not difficult to then draft estimates of the equivalent direct expenditure. To this end, tax expenditures must be classified into two categories: those that could eventually be replaced by a transfer subject to tax and those that could be replaced by a subsidy or a transfer that is not subject to tax. Thereafter, the estimates of foregone revenue in the first group should be increased by the value of the tax that the equivalent transfers would have to pay, following the procedure described in the previous chapter. In the case of personal income taxes, an additional calculation is necessary to determine the average calculated marginal rate to be levied on the transfers, which could be estimated without much difficulty if statistics on the beneficiaries of each tax expenditure, broken down into income brackets, were available.

Table 2. Definition and Measurement of Tax Expenditures (OECD)

Country	Definition and measurement		
	Definition of tax expenditures	Approach	Concept measured
Australia	Tax law provisions levied on certain classes of taxpayer or particular kinds of activity that are different from the structure of the chosen benchmark.	Conceptual	Foregone revenue on accruals basis
Austria	Foregone revenue by the federal government through exceptions to the general normative tax code, “to individuals or juristic persons for the private activities performed in the interest of the general public.”	Reference law	Foregone revenue on accruals basis
Belgium	Revenue foregone through the use of tax incentives in the form of exceptions from the tax code that are granted to certain taxpayers or economic, social, or cultural activities, and which could be replaced by direct subsidies.	Conceptual	Foregone revenue on cash basis
Canada	Deviations in relation to the benchmark tax.	Conceptual	Foregone revenue on cash basis
Finland	Deviations from the basic standard tax structure in order to support certain objectives.	Conceptual	Foregone revenue on cash basis
France	Legal provisions whose implementation leads to lower tax revenue for the state when compared to the application of the benchmark or norm, which is the principle of the tax’s basic calculation.	Reference law	Foregone revenue on cash basis
Germany	There is no explicit definition. References to benefits received by enterprises or economic sectors.	Analogous subsidy	Foregone revenue on cash basis
Holland	Deviations regarding the benchmark tax system.	Reference law	Foregone revenue on accruals basis
Ireland	No formal definition.	Conceptual	Foregone revenue
Italy	Favorable tax treatment, which, although structural in nature, is an exception to the principles of	N.I.	Foregone revenue on accruals basis

Country	Definition and measurement		
	Definition of tax expenditures	Approach	Concept measured
	universality, uniformity, and progressivity in taxation.		
Portugal	No formal definition.	Reference law	Foregone revenue
South Korea	Reduction of national tax revenue that arises from the application of special provisions, such as exemptions from the standard tax system, in order to reduce the tax burden for a specific group of taxpayers.	Reference law	N.I.
Spain	No formal definition.	Conceptual	Foregone revenue on cash basis
United Kingdom	Tax relief that provides alternatives to public spending and has similar effects.	Analogous subsidy	Foregone revenue on accruals basis
United States	Preferential exemption from the tax structure's benchmark regulations.	Conceptual and reference law	Foregone revenue, equivalent subsidy, and present value, on cash basis

Sources: OECD (1996), Craig and Allan (2001), Swift, Bixi, and Valenduc (2004), and reports from the countries themselves.

N.I. = No information available.

Table 3. Definition and Measurement of Tax Expenditures (Latin America)

Country	Definition and measurement			
	Definition of tax expenditures	Approach	Concept measured	Unit responsible for estimates
Argentina	Amount of revenue that is definitively foregone by granting special tax treatment that deviates from that generally established in current tax legislation, in order to benefit certain activities, zones, or taxpayers.	Reference law	Foregone revenue, corrected by the supposed total constant expenditure	<i>Dirección Nacional de Investigaciones y Análisis Fiscal</i> , (National Directorate of Fiscal Research and Analysis), <i>Secretaría de Hacienda</i> , (Treasury Secretariat) and the <i>Ministerio de Economía y Producción</i> (Ministry of Economy and Production)
Brazil	Indirect government expenditure carried out through the tax system that seeks to support economic and social objectives.	Reference law	Foregone revenue	<i>Receita Federal</i> (Federal Revenue Administration)
Chile	Revenue foregone due to the application of exemptions or special tax regimes, which are designed to support or encourage certain economic sectors, activities, regions, or agents.	Conceptual	Foregone revenue, corrected by the supposed total constant expenditure.	<i>Servicio de Impuestos Internos</i> (Inland Revenue Service)
Colombia	Tax benefits that are conceded with the aim of encouraging economic activities or underdeveloped areas.	Reference law	Foregone revenue	<i>Oficina de Estudios Económicos de la Dirección de Impuestos y Aduanas Nacionales</i> (DIAN) (National Customs and Tax Directorate's Economic Research Office)
Ecuador	N.I.	Reference law	Foregone revenue	<i>Servicio de Rentas Internas</i> (SRI) (Inland Revenue Service) (since 2007)

Country	Definition and measurement			
	Definition of tax expenditures	Approach	Concept measured	Unit responsible for estimates
Guatemala	Those situations in which the taxable event has occurred, but in which there is no obligation to pay the tax, unlike the rest of the taxpayers; universally applied concessions are considered as part of the norm.	Reference law	Foregone revenue	SAT
Mexico	The amount of revenue that is foregone due to the existence of special tax treatments, administrative facilities, authorized deductions, preferential rates, fiscal incentives, and private resolutions.	N.I.	Foregone revenue	<i>Secretaría de Hacienda y Crédito Público</i> (Treasury and Public Credit Secretariat)
Nicaragua	Transfers made by the state to certain groups or sectors, which are carried out through a reduction in the taxpayers' tax obligations, rather than through budget expenditure.	N.I.	N.I.	<i>Ministerio de Hacienda y Crédito Público</i> (Treasury and Public Credit Ministry)
Peru	Any tax measure that leads to a loss of revenue for the state and the corresponding reduction in the tax burden for the taxpayer that has not resulted from the application of a general tax law.	Reference law	Foregone revenue	<i>Superintendencia Nacional de Administración Tributaria</i> (SUNAT) (National Superintendency for Taxation Administration)

Source: Craig and Allan (2001), Swift Brixi, and Valenduc (2004) and reports from the countries themselves.
N.I.: No information available.

3.2.2.2. Calculation Methods

The specific methodologies used for calculating foregone revenue depend on the type of tax expenditure to be estimated and on the information available in each case. The experience of most countries demonstrates that, in general, it is necessary to use a wide range of calculation methods (see Table 4). However, by examining their common characteristics, it is possible to distinguish between the following four types of methodologies:

- *Direct data gathering from revenue statistics:* Although it is relatively infrequent, it is possible that certain tax expenditures, in particular certain tax credits, are declared in a specific entry on the tax return form and are thereby directly registered in an account in

the tax administration's database. In such cases, the foregone revenue will correspond exactly to the balance of the aforesaid account.

- *Estimates using aggregate statistics:* These methodologies consist in the carrying out of arithmetical operations on aggregate statistics, principally obtained from tax returns but also from other sources, such as national accounts. This is an appropriate approach, above all, when the cost of the tax expenditure is a simple proportion of total transactions. This would be the case, for example, for the exemptions and deductions made against corporate income tax, in which the foregone revenue is estimated as either the aggregate amount of the deduction, or of the exempt income, multiplied by the tax rate. It is also advisable to use this method to estimate the foregone revenue arising from the application of reduced rates by applying a simple "rule of three" to the effective revenue of each respective rate.

This method is sometimes also used in some countries to estimate the cost of exemptions and deductions on personal income tax, in which case the aggregate amount of the deduction or income exemption must be multiplied by a marginal weighted average rate. This rate should be previously calculated using data from a given base year and updated every few years. The ideal situation would be a marginal weighted average rate for each deduction or exemption, given that the profile of the beneficiaries is not necessarily the same for each tax concession. This approach can lead to a good approximation to the foregone revenue, although its results are less precise than those that would be obtained by using aggregate simulation or microsimulation.

- *Aggregate simulation models:* In this approach, as in the former, work is undertaken using aggregate statistics drawn primarily from tax sources, but also by using national accounts, budget surveys, and other sources. However, in contrast to the former methodology, in this case greater stratification of the aggregate statistics is called for, as well as the development of algorithmic mathematics of greater relative complexity.

Models of this type are also applied to the calculation of deductions and exemptions for personal income tax. For example, this kind of model has been elaborated in Australia (Brown, 2004), where it is known as "distributional modeling" and is based on the data for the distribution of revenue and tax concessions according to taxable income brackets. Information is drawn from the administration's databases.

Models based on input-product matrices used to estimate the cost of VAT exemptions also fit into this category. Apart from the frequent lack of information about exempt activities in the administration's databases, however, the VAT methodology also makes it difficult to use only data taken from taxpayers' income returns to carry out these estimates. In effect, the loss of revenue associated with an exemption is determined not only by the added value of the exempt beneficiary, but also by the buyer's tax profile: there is only revenue collection when the buyer is either a final consumer or an intermediate exempt consumer. Therefore, the best way to estimate these tax expenditures is through models based on the input-product tables, which enable a more precise calculation of the nondeductible VAT that would be foregone by the application of a tax exemption. These models take into account the intersector buying and selling that is associated with different goods and services. The tax expenditure is estimated to be the difference between the VAT that would be nondeductible under the supposed elimination of the exemption and the VAT that is nondeductible under the current tax legislation.⁶

- *Microsimulation models:* The microsimulation models analyze detailed data at the individual level, in general from tax returns, although alternative or complementary sources of information are also used on occasion, such as budget surveys or corporate financial statements. In some countries the whole base of the taxpayers are incorporated into the models, whereas in others only a statistically representative sample is chosen. In the former case, precision is gained, but the response times are prolonged and technological tools of a higher capacity are required.

Microsimulation consists, fundamentally, in recalculating the taxes that each taxpayer would have to pay by simulating changes in the tax code. The foregone revenue is obtained as the difference between the revenue collected in a situation with rule changes compared to another situation in which there are no rule changes. These models are often elaborated using data from a base year and updated every certain number of years. The model therefore has to be adjusted whenever estimates are made, so that it can reflect the current valid tax code. Likewise, the initial results must also be updated to reflect the growth of the tax bases. These models are especially useful to calculate tax expenditures that benefit groups of taxpayers whose characteristics are not observable in

⁶ Examples of the application of these models can be found in Canada (2004) and Chile (2006).

the aggregate statistics, as well as exemptions and tax deductions with progressive rates, and to quantify the combined or simultaneous effects of tax expenditures. Microsimulation also helps to determine the necessary parameters for estimates made using aggregate statistics, such as the marginal weighted average rates.

3.2.2.3. The Choice of an Accounting Base

The estimates made by different countries can also vary according to the accounting base chosen, which can either be a cash base or an accruals base. The former approach considers the impact of tax expenditures on the treasury's cash flow over a set period. The latter takes into account the impact of accrued tax liabilities in the treasury's favor over a fixed time period. It is necessary to seek harmony with the regular expenditure budget, depending on the choice of one or the other approaches. If the regular budget has been prepared on a cash basis, then the tax expenditure budget must be drafted as such, and vice versa.

3.2.2.4. The Specific Case of Tax Deferrals

Tax deferrals correspond to a special case of tax expenditures, which is characterized by the postponement of payment of taxes. Deferrals include the accelerated tax depreciation schemes, which enable the costs of fixed assets to be classed as expenses at a faster rate than would usually be deemed reasonable in accordance with their gradual loss of economic value, or with the rules of financial accountancy. These schemes give rise to the payment of less income tax during the first useful years of the physical investments when compared with the tax paid during the normal depreciation regime. However, this situation reverts in the following years, when the assets are completely depreciated and therefore, the payment of income tax is greater than would have occurred under the application of the normal tax regime.

In the majority of countries, the cash criterion is applied in order to measure the tax expenditure of deferrals. This means that the revenue that would have arisen in the period analyzed is estimated as if there had been no deferral, and the effective revenue collected is then subtracted from this figure. Evidently, the result of a particular period might be positive, when the postponements of that period are superior to recoupments or negative, when recoupments surpass the postponements. An alternative way to measure deferrals, used only in the United

States, is to use the present value method. In this case, the country estimates the differences in future revenue that would be caused by the deferrals originating in the analyzed period and calculates the present value of that cash flow. In such circumstances, the figure will obviously be positive.

3.2.2.5. Problems of Calculating Total Tax Expenditures

Another methodological aspect that should be taken into consideration is the interaction between various tax expenditures, which might be summarized by stating that the tax expenditure of A plus B is not necessarily the same as the tax expenditure of A plus the tax expenditure of B. This becomes particularly relevant in the case of personal income taxes with progressive rates. In effect, if A and B are deductions from the taxable base for a certain taxpayer, it might be the case that the individual elimination of A might leave the taxpayer in the same income bracket, just as the individual elimination of B might do. However, the simultaneous elimination of A and B could place the taxpayer in a higher income bracket with a superior marginal rate. In this case, the total combined tax expenditure would be superior to the sum of the individual tax expenditures.

Interactions are also produced in the case of exemptions from VAT, but in the opposite direction. The elimination of exemption A reduces the intermediate exempt purchases and, therefore, the transfer of nondeductible VAT for the production of B, and vice versa. The combined tax expenditure will therefore be inferior to the sum of the individual tax expenditures. For this reason, the majority of OECD countries, such as Austria, Belgium, Canada, Finland, France, Ireland, Italy, the United Kingdom, and the United States, purposely omit the totals lines from their results tables.

Table 4. Estimation Methodologies and Sources of Information used in OECD Countries

Country	Methodologies	Sources of information
Australia	Three global approaches applied: aggregate modeling, distributional modeling, and microsimulation.	Tax databases, national accounts, surveys, sales, and production statistics.
Austria	Direct gathering of revenue statistics. Estimates based on aggregate statistics.	Government revenue accounts, tax statistics, national accounts, and bank statistics.
Belgium	Personal income tax: microsimulation model on a sample of households representing 3 percent of the tax base. Other taxes: estimates based on aggregate statistics.	Tax databases.
Canada	Personal and corporate income tax: microsimulation models. VAT: based on input-product matrix.	Income tax: tax databases. VAT: input-product matrix.
Finland	Personal income tax: microsimulation model over a sample of 35,000 people. Corporate income tax: microsimulation model with all companies (200,000).	Personal income tax: income survey and tax databases. Corporate income tax: tax databases.
Germany	Computerized tax models. Estimates based on aggregate statistics.	Tax databases, national accounts, and special accounts maintained by the administration.
Holland	Microsimulation model based on tax returns. Others.	Tax databases and any other class of appropriate statistical information.
Ireland	Models based on the entirety of personal and corporate income tax returns.	Tax databases, national accounts, and other public sources.
Italy	Personal and corporate income tax models. Estimates based on national accounts.	Tax databases and national accounts.
Spain	Personal income tax: computerized models with data from tax returns. Indirect taxes: estimates based on national accounts and sales data.	Tax databases, national accounts, and sales statistics.
United Kingdom	Diverse methods, including models and estimates based on aggregate statistics. Methodologies are regularly revised.	Tax databases and national accounts.
United States	A variety of methods applied. Income tax: microsimulation models applied to a sample of tax returns.	Tax databases, national accounts, industrial statistics, and others.

Source: OECD (1996), Brown (2004), and Seguin and Gurr (2004).

3.2.2.6. Coverage, Frequency, and Classification

Concerning the tax expenditure budget coverage, meaning the taxes that are included in the estimate, both personal and corporate income taxes are taken into account in practically all countries. Amongst the OECD countries, Austria, Holland, and Ireland carry out measurements for this tax alone. A large number of these countries also incorporate VAT, although this is sometimes restricted only to exemptions. Canada, Portugal, and Spain measure only the tax expenditures for income tax and VAT. The rest of the OECD countries also incorporate other taxes, both indirect and direct (see Appendix 1).

Among the Latin American countries that measure tax expenditures, all include in their tax expenditure budgets at least income tax and VAT. Chile and Colombia measure only these two taxes. Argentina, Brazil, Guatemala, Mexico, and Peru also include other taxes, such as tariffs on specific imports and consumer items. In the great majority of the analyzed countries, the measurements are carried out with an annual frequency. The exceptions are Germany, where the frequency is biannual, and Italy, where sporadic measurements are undertaken.

The ways of classifying or grouping tax expenditures together in budgets vary among countries. Annex 1 illustrates that tax expenditures are classified according to the tax, the taxation technique used to grant the benefit, (exemptions, deductions, credits, deferrals, or rate reductions), the budget function, the pursued objective, the economic sector beneficiary, or the geographical zone.

3.3. Information Management

A basic requisite for carrying out reliable tax expenditure estimates is the availability of sufficient quality and timely information. However, in many countries the importance of this question is not fully grasped, and information gathering and analysis is not organized into integrated systems; furthermore, the majority of countries continue to rely on manual and partial information gathering. There are three well-defined stages in the information management process: data collection, treatment, and analysis.

3.3.1. Data Gathering

There are basically two types of tax expenditure information sources: internal sources (tax returns and specific returns for tax benefits) and external sources (information from third parties or other agencies involved, such as free trade zone administrators). In general, information exchange agreements have to be signed in the case of external information.

3.3.1.1. Information from Internal Sources

In general, the principal source of information for carrying out tax expenditure estimates is the data provided by the taxpayers themselves, contained within the tax returns and in the complementary information demanded by the tax administration. If the agency responsible for the estimates is the tax administration itself then it will have much easier access to the entire volume of this information, thereby facilitating the development of, for example, microsimulation models. On the other hand, when responsibility for the estimation lies with a different agency access to this data might be limited. In effect, legislation usually protects information provided by taxpayers that is administered by the tax agency. In this case, alternative ways of accessing the information must be sought, such as via anonymous data or aggregate statistics. At times, the agency responsible for the estimates delegates the management of the microsimulation models to the tax agency. In this working scheme, the responsible agency defines the model's design requirements and the simulations that should be carried out. For its part, the tax agency then executes the design, carries out the simulations, and delivers its results.⁷

3.3.1.2. Adapting Tax Return Forms

In many countries, tax expenditure estimation is made more difficult by the lack of appropriate data found in the corresponding sources of information. In effect, tax returns do not always gather all the information desired for this task. It is common, for example, that taxpayers who are

⁷ In this respect, it is interesting to analyze the experience of Canada, a country that used this working methodology for many years. Up until 1990 in the case of personal income tax, and up until 2001 in the case of corporative income tax, all simulations were carried out using a model developed by the Canada Customs and Revenue Agency (CCRA) for the Finance Department, the entity responsible for the tax expenditure budget. Although the model's structure offered a high degree of functionality, the conclusion was drawn that the response was slow and that the service offered by the operator in times of greatest demand was inadequate. These problems led the finance department to adopt the decision to move towards a model that would allow them greater autonomy. For more information on the Canadian experience, see Seguin and Gurr (2004).

exempt from all taxes are freed from the obligation of filing a tax return, which means that alternative information sources must be sought, estimates must be made based on guesswork, or, quite simply, the information should be omitted. In the light of this, a strategy for increasing the availability of information consists of either tailoring the tax return or creating new returns in order to gather a greater volume of information that relate to the concessions. In this sense, the very exercise of elaborating the estimates enables the information shortcomings to be identified.

It should be stressed that data gathering relating to tax expenditures has a dual benefit: it is not only useful for tax expenditure estimation, but it also enables the respective agency to exercise better control of these activities. Obviously, the requirement for a greater volume of information implies increased costs for both the taxpayer and the administration but, on the other hand, the use of the Internet for communication between the two has reduced costs on both sides.

3.3.1.3. Information from External Sources

Sufficient autonomy in information access and processing is another important tool in the estimation of tax expenditures. Those who have worked in drafting estimates know that lack of autonomy impedes the submission of appropriate and good-quality estimates, because it means relying as much on the information owner's "goodwill" as on the agency's ability to adequately process the data. Therefore, the unit responsible for estimates should be given the greatest possible degree of autonomy for accessing and processing information.

In general, even in those countries where entities already providing information are independent from the treasury department or from the tax administration (for example, other ministries, free trade zone administrators, regulatory agencies), those who draft estimates only have access to printed information, or are only able to gather data through an unsystematic or unexplained method. Although this is a habitual practice in many countries, it constitutes a very serious problem for tax expenditure budget implementation.

One way of progressing towards the achievement of expeditious and appropriate access to information by other agencies is through a formal data delivery process. A helpful step could include signing information exchange agreements stipulating, among other things, specific and detailed information requirements, the means used for data transfer, the frequency and dates of delivery, and the identity of those responsible for administering the agreement in each institution. It should be stressed that this type of agreement is extremely useful in cases where the tax

administration is also the entity responsible for elaborating the estimates because, as previously mentioned, a series of nontax information sources exist that are needed for carrying out certain tax expenditure estimates. These include, for example, national accounts statistics, input-output matrices, budget surveys, and corporate financial statements.

3.3.2. Data Processing

One of the challenges posed by data processing is achieving coordination between the information unit possessing the data and the unit responsible for the estimates. Access to this data is frequently inadequate and much work is required in defining the two areas. Fortunately, there are new alternative technologies, which are increasingly affordable, that enable the user areas to gain autonomous access to information management, such as to the so-called *data warehouses*. These tools integrate the diverse operative databases into a standard format, thereby enabling microdata to be accessed and processed, either for drafting microsimulation models or for aggregate statistics generation.

A computerized system to gather and process data is the best solution for effective tax expenditure budget implementation. For example, the possibility of developing a government Intranet portal should be considered. All of the agencies involved (as defined in the information exchange agreements) could then feed tax expenditure information directly into a system that offers direct access to a centralized database. In this way, speedier access to data would be guaranteed, and it would not depend on the available resources of the agency owning the information. This system could even take over the administration of all the stages of tax benefit concession, for example, in cases in which prior authorization by a certain ministry or agency is needed (in some cases benefits are conceded according to lists of companies or by economic sectors).

Finally, attention must also be paid to data processing and to detecting inconsistencies in such a way as to ensure that the data subject to analysis is of the best possible quality. The use of information in tax expenditure estimates always requires a preliminary phase to prepare the data obtained from the operative bases. This preparation would entail, for example, checking for consistency, eliminating data from outside of the range, and correcting obvious errors. As the data gathering procedures improve, better quality information will become available and the time needed to submit the estimates will decrease.

It is now possible to prepare and submit tax returns electronically, which has improved the data quality. This process obviously necessitates monitoring by the tax administration, but it has had a positive indirect effect on information use for other purposes, such as for tax expenditure estimates. With electronic filing, the quality of the information is improved because the computer applications used to prepare tax return forms control consistency, particularly in the sections of the tax return form that determine the amount of tax due. Thus, it is possible to avoid the frequent errors common to manual procedures, such as differences between the totalizing values and the sums of the partial values, or the omission of required information. On occasion, this type of control is carried out in the sections of the tax return form that determine the amount of tax due; but, unfortunately, this control is often omitted from sections that request complementary information that may well be useful for estimating tax expenditures.

3.3.3. Data Analysis

After the data is gathered and processed, the next phase of data analysis begins. This phase can support both fiscal transparency measures and decision making regarding changes in tax policy. In general, in order to provide the best possible guarantees regarding these functions, the tax expenditure budget is presented according to tax typology, budget function, geographical region, and economic sector. In some countries, tax expenditures are also already analyzed according to income profiles, in order to determine their impact upon equity.

3.4. Integration with the Budget Process

As tax expenditures are a substitute for direct expenditure programs, they should be subject to the same budgetary control regulations as the latter. From this point of view, one best practice rests on integrating tax expenditure estimates into the budget documentation that is sent yearly to parliament. Not all countries that prepare tax expenditure reports, however, follow this practice and independent reports are frequently prepared. According to the analysis carried out by Swift, Brixi, and Valenduc (2004), the situation currently encountered in the OECD is the following: Germany includes the report on tax expenditures as part of the budget document entitled the “subsidies report”; Austria, Belgium, France, Holland, and the United States append the tax expenditure budget to the budget documentation; Australia, Canada, and Italy treat the reports as

separate government documents that can be used for reference prior to the budget; and, finally, the United Kingdom attaches the report as a statistical supplement to its revenue statement (see Table 5).

Furthermore, budget integration presupposes that tax expenditures should be presented “side by side” with direct regular expenditures, and that both are classified according to budget functions and for the same number of years. This method does not merely facilitate but actually induces adequate comparison between tax expenditure and direct spending programs that pursue the same objective. Ideally, this “side-by-side” vision should facilitate decision making to enable, for example, the replacement of a tax expenditure by a direct expenditure program, or vice versa. As Minarik (2008) points out, it might be considered feasible to abolish a direct expenditure in order to create or augment a different one, but it is less realistic to believe that a tax expenditure of a certain size could be abolished and the resulting additional revenue earmarked for a new direct expenditure program. This is because there are established limits as to what can be considered a tax burden or what can be considered a reasonable size of government.

Craig and Allan (2001) point out that the integration of tax expenditures with the budget should also imply that a clear distinction is drawn in the budget documentation between those that are new and those that already exist, thereby initiating an ordered budget process for the introduction of new policy measures, alongside transparent arrangements for evaluating the so-called trade-offs between tax expenditures and direct spending. Box 4 presents the Australian experience in this respect.

Box 4. Australia: Presentation of Tax Expenditures and Budget Integration

Australia's tax expenditure report, despite being conceived as a document separate from the budget, offers a good example of how to present tax expenditures "side by side" with direct expenditures.

Aggregate Tax Expenditures and Direct Expenditure According to Function, 2005–06

	Tax expenditures \$m	Direct expenditures \$m
General public services		
A. Legislative and executive affairs	3	768
B. Financial and fiscal affairs	0	3,958
C. Foreign affairs and economic aid	431	2,955
D. General research	0	2,346
E. General services	11	560
F. Government superannuation benefits	0	2,203
Defense	102	16,194
Public order and safety	0	2,558
Education	-2	15,883
Health care	425	37,459
Social security and welfare	27,408	86,219
Housing and community amenities	570	2,248
Recreation and culture	60	2,585
Fuel and energy	1,680	4,046
Agriculture, forestry, and fishing	475	2,780
Mining, manufacturing, and construction	-560	1,905
Transport and communications	250	3,075
Other economic affairs		
A. Tourism and area promotion	15	209
B. Labor and employment affairs	450	3,825
C. Other economic affairs	8,372	840
Other purposes		
A. Public debt interest	0	3,628
B. Nominal superannuation interest	0	5,582
C. General purpose intergovernmental transactions	0	3,936
D. Natural disaster relief	0	211
E. Contingency reserve	0	36
Not allocated to function	2,454	
Total	42,144	206,096

Source: Commonwealth of Australia 2006, *Tax Expenditure Statement*, Chapter 2 (Trends in Tax Expenditure Estimates, page 12. http://www.treasury.gov.au/documents/1211/PDF/02_Chapter2.pdf).

The OECD (2004) best practice guidelines suggest that tax expenditures should be included within the limits of total expenditure, or, alternatively, a specific limit will have to be set for them. At the same time, it is considered that when tax expenditures exceed the established limit, as a result of changes in policy, then they must be compensated for, either through the reduction of other tax expenditures or through a reduction in the limit on direct expenditure.

There are hardly any existing experiences of budget integration along these lines. The closest attempt so far was possibly the one made by Canada at the beginning of the 1980s. At that time, the so-called “envelope system” was implemented in this country in order to support the budget formulation process. According to this method, the programmatic agencies received a hypothetical “envelope” containing the amount of resources at their disposal equivalent to the sum of direct spending and tax expenditures. At the same time, the agencies could spend the money in their “envelopes” either in tax expenditures or as part of a direct expenditure program. This system initially worked very well, but it soon had to be abandoned. According to Minarik (2008), problems concerning the impartial treatment of different political areas arose. The tax expenditures proposed for the treasury were not put into the “envelope” of any of the programmatic agencies, which meant that they had an incentive to try and associate their own planned tax expenditures with the said ministry. On the other hand, the programmatic agencies were given incentives to make sure that tax expenditures were eliminated in their areas, leading them to propose increases in taxes in order to finance their own increased expenditures.⁸

The establishment of budget integration methodologies, such as the system described above, seems a long way off, even for developed countries. The integration of tax expenditure reports with budget documentation, however, is a step in this direction, and would undoubtedly improve fiscal transparency and facilitate the appraisal of tax expenditures as tools of public policy.

One of the main problems with tax expenditures is that they are treated, generally speaking, as permanent (as if they were taxes) and are therefore not regularly revised (as occurs with regular expenditures, which are approved yearly during the budget process). Less rigorous control of tax expenditures, in comparison to regular direct spending, can feed the tendency

⁸ For a more detailed analysis of this system, see Poddar (1988).

towards a proliferation of the former, with subsequent administrative costs and economic distortions.

Table 5. Links between the Estimation of Tax Expenditures and the Budget Process

Country	Links with the budget process
OECD	
Australia	Separate document
Austria	An appendix, part of the “subsidies report” of the budget documentation
Belgium	An appendix to the budget
Canada	Not linked to the budget process, but rather to consultations prior to budget documentation
France	Appended to the draft budget legislation
Germany	Part of the budget, called the “subsidies report”
Holland	An appendix to the budget. Not directly linked to the budget process, but provides additional information for parliament
Ireland	Not linked to the budget process
Italy	Neither linked to the budget process, nor an appendix to budget documentation; independent document
Portugal	Part of the annual report that accompanies the annual budget project; presented to parliament by the government
Spain	Included in the general annual budget
United States	Not linked to the budget process, but is part of the annual budget documentation
United Kingdom	Neither linked to the budget process, nor an appendix to budget documentation, but does form part of the statistical supplement entitled the <i>Autumn Statement</i>
Latin America	
Argentina	Included in the message accompanying the <i>Proyecto de Ley de Presupuesto</i> (Draft Budget Law)
Brazil	<i>Informe de Beneficios Tributarios</i> (Tax Expenditure Report) integrated with draft budget legislation
Chile	Part of the <i>Informe de Finanzas Públicas</i> (Public Finances Report) that accompanies the draft budget legislation
Colombia	Information attached to draft budget legislation
Guatemala	Independent document
Peru	Information attached to draft budget legislation

Source: OECD (1996), Craig and Allan (2001), Swift, Brixi, and Valenduc (2004), Minarik (2008) and reports from the countries themselves.

3.5. Systematic Evaluation of Costs and Benefits

Establishing procedures for the systematic evaluation of tax expenditures is equally important as providing sufficient information about them. In this regard, the OECD (2004) guidelines on best practices suggest that tax expenditures should be reviewed in the same way as direct expenditures are reviewed in the annual budget process, and submitted to the same special evaluation procedures, including program review, that are commonly applied to the latter.

According to arguments put forward by Tokman, Rodríguez, and Marshall (2006), the evaluation of a particular tax expenditure implies responding to the following four sequential questions:

- (i) Is there any justification (on the grounds of economic or distributive efficiency or any other kind) for state intervention?
- (ii) If the justification for state intervention has been demonstrated, what empirical evidence is there that the tax expenditure will effectively fulfill the objective?
- (iii) Is the tax expenditure efficient in fulfilling the objective, in the sense that it produces benefits that outweigh its costs?
- (iv) Do alternative instruments exist that would enable the objective to be pursued more efficiently than with the tax expenditure?

The evaluation of tax expenditures should be carried out regularly and on a case-by-case basis, given that the contextual conditions are constantly changing, which means that a state intervention that is justifiable at a certain time might no longer be so at a later date. The conditions of effectiveness and efficiency might also change. Evaluation of the absolute or relative efficiency of tax expenditures should, ideally, take into account all of the costs associated with the tax concession. This would obviously include the foregone revenue as well as the administration costs, the costs of compliance, and those costs associated with the risks of evasion and avoidance. In terms of relative efficiency, the costs and benefits of alternative instruments of public policy should be studied and compared to those of the tax expenditure.

3.6. Control and Oversight by the Tax Administration

Tax administrations must implement controls to ensure the correct use of concessions within their field of action, because as tax expenditures introduce greater complexity into tax

legislation, they create new possibilities for abuse and fraud within the incentives system. This means that the tax administrations have to verify that taxpayers make use of tax expenditures according to the law, thereby avoiding the opportunities for tax evasion, which normally open up whenever exceptions are made to the pertinent tax regulations. Classic examples of controls related to tax expenditures are audits linked to operations within the free trade areas, exemptions and reduced VAT rates, income tax deductions, presumed credits, and erroneous subjective classification (for example, third sector, nongovernmental organizations, and universities).

To this end, the administration must make use of traditional monitoring tools, such as massive data cross-checking and selective audits. The choice of one tool or another will depend upon the specific characteristics of each tax expenditure. For example, some deductions or personal income tax exemptions—such as pension fund contributions, mortgage interest payments, or savings using various financial instruments—can be easily verified through massive data cross-checking between the amounts declared by taxpayers and the amounts reported by the receiving institutions. This eliminates the possibility of evasion through the reporting of falsely-inflated deductions or exempt income, except in cases where there is collusion with the receiving institution.

Other kinds of tax expenditures—generally those that benefit companies or exemptions from VAT—should be managed by selective controls. It is important for the tax administrations to know the design details of each control to more effectively define programs aimed at controlling specific evasion possibilities. For example, exemptions from VAT open up evasion possibilities through the manipulation of the proportions of sales of exempt and liable goods, which determines the proportion of VAT on inputs that can be recovered as credit. An audit of a taxpayer with exempt sales must therefore consider, among other things, the review of these proportional calculations.

It should be pointed out that greater efficiency in controlling tax expenditures reduces their relative costs and improves their performance in comparison with alternative tools of public policy, such as direct expenditures. On the other hand, the administration must clearly account for the higher operating costs that arise from the application of tax concessions and the tax authorities, in turn, must consider those higher costs when it comes to drafting the entity's budget. In other words, deficient oversight of a new tax expenditure will lead to less control and, therefore, more possibilities for evasion than it would from other tax provisions.

It should likewise be stressed that it is indispensable to work towards greater integration between the activities of tax expenditure estimation and control. The estimates can and must be the first step towards more efficient monitoring of the correct use of tax expenditures. In other words, tax expenditure estimates should not be limited to the tax administration's research areas, but there should also be systematic feedback between the research and the audit departments. The tax administration should work with tax expenditure risk profiles (for example, type of taxpayer, beneficiary area or sector, and free trade zone) and assign specialists to control these expenditures.

Box 5. Chile: Integration of Tax Expenditure Estimation and Oversight

The Chilean *Servicio de Impuestos Internos* (Inland Revenue Service) promotes permanent collaboration between its research and audit departments, which consists of transmitting the observations noted during the estimation phase that are deemed as potentially useful for subsequent monitoring. In general, these observations can be summed up in the four following ways:

Lack of information for adequate surveillance: Data gathering for tax expenditure estimates enables shortcomings to be detected in this area that are often relevant, not only for estimates, but also for subsequent monitoring. For example, in Chile, the lack of information concerning certain deductions and exemptions that benefited the incomes of salaried employees—such as meals allowances, transport and representation costs, and exempted income in marginalized areas—caused the tax return form to be modified to incorporate more information on the earnings of salaried workers.

Incompliance with legal benefit requirements: When working with microsimulation models, first tax returns are taken from taxpayers who accede to a certain benefit. Then a simulation is carried out to estimate what the liable tax would be in the absence of the aforesaid benefit. In this process, it is often observed that some taxpayers take advantage of the exemptions without fulfilling the requirements demanded by law. In Chile, for example, thanks to the tax expenditure estimates associated with presumed income and simplified tax regimes, it was possible to identify taxpayers who took advantage of these benefits despite having declared sales surpassing the limits that permitted access to them.

Effective use of exemptions that exceed previous estimates, or what might be considered as reasonable: When draft legislation is sent to parliament outlining tax expenditure plans, it should be accompanied by financial reports that estimate the final fiscal cost that such benefits are expected to have. If the post-tax expenditure estimate, after the regulation has entered into force, comes up with a result considerably superior to that estimated in the financial report, this would signal a possible violation of regulations, which would in turn call for the implementation of an audit plan.

Inconsistencies between independent information sources and tax information sources: Tax expenditure estimates sometimes make use of external sources of information, such as national accounts. When some of the variables or parameters obtained from such sources differ considerably from those corresponding to the tax sources, this is

an indicator of possible abuse, which should be investigated. In Chile, for example, estimates of VAT exemptions are calculated using an input-product matrix, complemented with other sector information sources. When the financial sector was analyzed, it was discovered that the financial institutions were using more VAT credit than was estimated in accordance with the proportion of affected sales. This situation gave rise to a special sector audit plan.

4. Tax Expenditures in Latin American Countries

In the Latin American region, awareness has been gradually growing about the need to identify and estimate tax expenditures. Following on from the pioneering experience in Brazil, other countries have prepared their estimates and, at present, many of them now have a solid legal framework and a long tradition of calculating and publishing results.⁹ Among those Latin American countries that carry out estimates, there is a tendency for the tax administration agency to be responsible for the calculations (except in Argentina and Mexico, where treasury agencies take on this function). However, in other countries, such as Paraguay, this process has still not even begun, which demonstrates the prevalent heterogeneity in this regard and the need to work towards harmonizing methodologies and to increase the study of this subject in the region.

4.1. Estimation in Practice

4.1.1. Argentina

In Argentina, an annual report is included in the national budget and made available on the Internet. Tax expenditures are defined as the amount of income foregone by granting a tax treatment that deviates from what is generally established in the tax code, with the aim of benefiting certain activities, zones, or taxpayers. The two main requirements for identifying tax expenditures are (i) they provide benefits only for certain taxpayers, activities, zones, or products and (ii) they finance a given public policy. Argentina uses the legal approach and the foregone revenue method. For 2009, it is estimated that tax expenditures represented 2.14 percent of GDP in Argentina.

⁹ The first estimates date from 1981, in work undertaken by Luiz Villela regarding personal income tax. In 1984, the *Secretaria da Receita Federal* (Federal Tax Administration) began to carry out estimates for the whole of federal taxation and, due to the 1988 constitutional provision, started to publish tax expenditure estimates every year.

4.1.2. Brazil

Brazil was the first country in Latin America to develop a definite legal framework for tax expenditure estimation; it did so within the context of their 1988 constitutional reform. The country's *Magna Carta* establishes that the draft budget legislation must be accompanied by a regionalized sample of the effect on income and expenditures that all exemptions, amnesties, cancellations, subsidies, and benefits of a financial, tax, and credit nature will entail. After the new constitution was inaugurated, the Fiscal Responsibility Law of 2000 introduced greater transparency into tax expenditure estimation by establishing the need to adopt fiscal compensation measures whenever a new tax expenditure was proposed, on top of extending the obligation to carry out estimates to the states and the municipalities.¹⁰

In Brazil, tax expenditures are required to have the following characteristics: a reduction of potential revenue, an increase in the taxpayer's economic possibilities, exception from the adopted benchmark tax system, a compensatory or stimulatory nature, and equivalence with direct expenditure carried out by the government through the budget. The information sources employed are either internal (tax returns and the tax administration's own data systems) or external (Manaus Free Trade Area, Brazilian Institute of Geography and Statistics, Ministry of Science and Technology, Ministry of Development, Industry and External Trade, the Central Bank, and others). The estimates are classified by tax types, geographical region, budget function, and tax expenditure mode.

4.1.3. Colombia

In order to provide the greatest possible transparency and information for decision making within the framework of the fiscal policy, Article 87 of Act 788 (2002) established the Colombian government's obligation to present a detailed report in which the fiscal impact of benefits must be evaluated and made explicit. The *Oficina de Estudios Económicos de la Dirección de Impuestos y Aduanas Nacionales* (DIAN) (National Customs and Tax Directorate's Economic

¹⁰ This report can be found at <http://www.receita.fazenda.gov.br/publico/EstudoTributario/BensTributarios/2009/DGT2009.pdf>

Research Office) has systematically published Colombia's tax expenditure estimates since 2003 and presents the principal categories of preferential treatments for the last 10 years, making the distinction between those treatments to individuals and companies.

4.1.4. Ecuador

In Ecuador, the first study of tax expenditures was carried out in 2003, but as an isolated exercise. Since 2007, the *Servicio de Rentas Internas* (SRI) (Inland Revenue Service) has published those tax expenditure estimates. The foregone revenue method is employed through a very precise analysis of the juridical framework and costs identification and calculation. The sources of information employed are living conditions surveys and tax returns.

4.1.5. Guatemala

The definition of a tax expenditure refers to the amount of revenue foregone due to the application of preferential or exceptional tax treatments. It is not considered to be a tax expenditure when the preferential treatment includes all tax's passive subjects or covers all similar taxable events. Since 2001, the *Superintendencia de Administración Tributaria* (SAT) (Tax Administration Superintendence) has calculated all tax expenditures in Guatemala. The report, which is published on the Internet, accompanies the state's regular revenue and expenditure budget. The data sources consulted are the tax returns and national accounts statistics, as well as information provided by other public and private institutions.

4.1.6. Mexico

Tax expenditures have been estimated in Mexico since 2002. In compliance with provisions set out in the *Ley de Ingresos* (Revenue Act), the tax expenditure budget must be presented to the Congress of the Union. This budget contains estimates for both the current and subsequent years and assumes that the normal structure of federal taxation will be maintained, except when laws stipulating modifications are approved by the legislature. The budget also contains the projection for tax incentives granted by the executive; that is, those that do not result from a legislative process. The estimation method adopted is that of foregone revenue resulting from the application of a preferential tax regime, without taking the taxpayer's behavior into account. The

methodology does not consider the effect that the elimination of a special tax treatment has upon revenue loss in another. As in other countries, Mexico also works with internal (tax returns) and external (National Accounts System and the National Institute of Statistics and Geography's Survey of Household Revenue and Expenditure, the Central Bank and others) sources of information.

4.1.7. Peru

In Peru, the estimation of tax expenditures is the product of a very clear legal framework: the *Ley de Responsabilidad y Transparencia Fiscal* (Fiscal Accountability and Transparency Act). The tax expenditure report is informative and is attached to the public sector draft budget legislation. The report drafting process demonstrates the degree of integration between the *Superintendencia Nacional de Administración Tributaria* (SUNAT) (National Superintendence for Tax Administration) and the Ministry of Economy. Basically, SUNAT carries out all of the estimates whilst the ministry prepares the report it has drafted for integration into the multiannual macroeconomic framework and sends it to the National Congress. In Peru, tax expenditures are considered to be deviations in relation to the benchmark system that imply a reduction in state revenue, with the aim of achieving off-budget objectives. SUNAT's sources of information are tax returns presented by taxpayers, tax withholders, or tax informers; national accounts statistics; official and other diverse private statistics; and express petitions for information from both public and private entities. Estimated tax expenditures for 2009 accounted for 1.81 percent of GDP in Peru.

4.2. The Magnitude of Tax Expenditures

Table 6 shows the tax expenditure estimates for seven Latin American countries and demonstrates that the magnitudes vary substantially from country to country, ranging from approximately 1.5 percent of GDP (Brazil, 2001) to 12.7 percent of GDP (Guatemala, 2002). It must be remembered that the estimates of different countries are not always directly comparable, owing to differences in methodology. The comparison of Chile and Argentina clearly illustrates this situation. In 2007, Chile's tax expenditures were more than double those of Argentina's. One important methodological difference, however, rests on the fact that Argentina does not

incorporate deferrals within the estimates, whereas Chile does. If deferrals are excluded in the latter case, then Chile's total tax expenditures are reduced to 1.64 percent of GDP, thereby becoming less than Argentina's total.

Although tax expenditures in Brazil have shown an important increase in recent years and there has been a decrease in Argentina's case, the evolution of tax expenditures in the rest of the Latin American countries does not show a clear tendency. In Guatemala's case, there was an abrupt fall in estimates for 2005, which can be attributed, however, to methodological changes rather than to the elimination of benefits.

Table 6. Tax Expenditures Estimates in Latin America, 2000–09 (*percentage of GDP*)

Country	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Argentina	-	3.01	2.71	2.41	2.01	2.21	2.11	2.20	2.14	2.08
Brazil	1.58	1.51	1.78	1.70	1.40	1.69	1.99	2.29	2.77	3.20
Chile	-	4.43	4.22	3.87	3.45	4.38	4.05	4.88	3.96	3.96
Colombia	-	-	-	-	-	3.70	3.96	3.52	-	-
Guatemala	12.00	12.30	12.70	12.50	12.30	8.40	8.50	8.60	-	-
Mexico	-	-	5.26	6.05	5.28	6.32	5.59	5.38	-	-
Peru	-	-	-	-	1.83	2.07	2.24	2.22	2.05	1.81

Source: Official reports from the countries themselves.

Table 7 shows tax expenditures estimates for 2007 classified according to taxes. In Brazil, Chile, Guatemala, and Mexico there is an appreciable concentration of tax expenditures on income tax, whereas in Argentina and Colombia VAT concessions play a much greater role.

Table 7. Tax Expenditure Estimates in Latin American Countries by Tax, 2007 (*percentage of GDP*)

	Argentina	Brazil	Chile	Colombia	Guatemala	Mexico
VAT	1.14	0.36	0.74	1.92	2.00	1.94
Income	0.51	0.99	4.14	1.60	6.30	3.13
Social security	0.25	0.81	-	-	0.00	-
Excises	0.13	0.00	-	-	-	-
External trade	0.16	0.10	-	-	0.20	-
Others	0.02	0.03	-	-	0.10	0.31
Total	2.21	2.29	4.88	3.52	8.60	5.38

Source: Official reports from the countries.

With regard to the classificatory variables employed, nearly all countries take the tax and the tax mode as variables. The exceptions are Colombia, which only classifies according to the type of tax, and Guatemala, which classifies by tax and economic sector. Some countries also incorporate the geographical zone, the beneficiary sector, and the budget function. Chile, in its 2005 report, presented a one-off classification by income deciles. Brazil's tax expenditures are classified according to budget function and region. A marked concentration in industry, commerce, health care, and agriculture can be observed in Brazil, whereas from the regional perspective it can be seen that 50 percent of tax expenditures are earmarked for the southeast region, the most developed part of the country.

5. Conclusions, Challenges to Resolve, and the Way Forward

Tax expenditures constitute one of the tools used by governments to finance their public policies, and as such, pursue objectives that are similar to those that could be obtained through the use of regular expenditures. They should therefore be subject to the same controls and transparency criteria as the latter. Tax expenditure budgets—which are financial reports that seek to make the use of tax expenditures more transparent, facilitate adequate monitoring, and allocate resources more efficiently—are elaborated with this end in mind.

The aim of this paper is to offer a synthesis of the principal aspects related to tax expenditure budget drafting from a dual perspective: the conceptual and the implementation. Countries use three general approaches in order to define benchmark taxes and identify tax expenditures: the conceptual approach, the legal approach, and the analogous subsidy approach. Regardless of which approach is chosen, however, first it is important to decide which concept will be measured. In the specialist literature three concepts are distinguished. The first concept is foregone revenue, which corresponds to the loss of revenue that occurs after a tax expenditure has been introduced. The second concept is earned revenue, which is defined as the additional tax collection that can be obtained after abolishing a tax expenditure, taking behavioral changes into consideration. A third important concept is equivalent direct expenditure, which is the subsidy or transfer that would leave the taxpayer with an after-tax income similar to the one he or she would obtain with the existence of a tax expenditure. Furthermore, estimates can be made on a cash basis or an accruals basis.

From the implementation perspective, four types of methodology are identified: direct data gathering from revenue statistics, estimates from aggregate statistics, aggregate simulation models, and microsimulation models. The availability of good quality and opportune information is fundamental when applying any of these methods. This requires that the unit in charge of estimates have a certain degree of autonomy in access to the sources of information; that data exchange agreements are signed with those entities that have information at their disposal that would be useful for the estimates; that technological tools to facilitate information access and processing are utilized; and that tax returns forms are adapted to gather a greater volume of tax expenditure-related antecedents. Another relevant step is to decide which agency will be responsible for the tax expenditure budget and the estimates. It is generally considered that the treasury should carry out this function; however, the responsibility to carry out the estimate is often delegated to the tax administration.

As tax expenditures are a substitute for regular direct expenditure programs, they should be subjected to the same budget control regulations as the latter. From this point of view, best practice consists in integrating the tax expenditure estimates with the rest of the budget documentation that is sent annually to parliament. Moreover, budget integration supposes that tax expenditures are presented “side-by-side” with direct expenditures, in such a way as to promote adequate comparison between them. Besides providing sufficient information on tax expenditures together with the budget documentation, it is important that procedures are established for their systematic evaluation. Tax expenditures should be reviewed in the annual budget process and submitted to special evaluation procedures, in the same way as direct expenditures.

This paper also analyzes the role of the tax administration regarding tax expenditure evaluation and monitoring activities. It concludes that the tax administration, along with participating in the projection of revenue foregone arising from tax expenditures, must monitor the correct use of the tax expenditures and provide a regular evaluation. The paper also stresses that making accurate tax expenditure estimates can and must be the first step towards more efficient monitoring of their use.

In conclusion, reference must be made to three general observations and some important challenges in the future agenda. The first observation emphasizes the great progress that has been made in the treatment of these matters in Latin America, especially regarding estimates of the

magnitude of tax expenditures. Although there are methodological variations, estimates are based, in general, on ex post foregone revenue methodologies. The second observation emphasizes that although tax expenditure treatment is primarily focused on transparency in expenditures in general, there is still no common perception that tax expenditures are equivalent to regular budget expenditures. The third observation points out that there still is no evaluation of the benefits that should result from the tax expenditures. The cost of tax expenditures are indeed beginning to be measured, but very little is done to measure their results.

It is obvious that there is a long road ahead in promoting accurate tax expenditure estimates, with many obstacles and challenges to undertake. Some of these challenges are products of the internal circumstances of individual countries, such as extending tax expenditure calculation from the federal to the subnational level. There is also consensus regarding the need for greater and better quality information to carry out estimates.

Other challenges are related to the harmonization or homogenization of the methodologies and procedures adopted in different countries, both with regard to VAT—the most important tax in Latin American countries—and also regarding corporate income taxes, especially those related to promoting investment. Such methodological harmonization is very important if comparisons are to be drawn. Total uniformity is not possible, however, as tax expenditures reflect the idiosyncrasies of each individual country.

It is also vitally important that progress be made in analyzing the political economy that underlies the use of tax expenditures in order to seek ways to limit their proliferation, which debilitates tax systems and complicates the corresponding administration. Finally, greater effort must be made to integrate tax expenditures with the regular budget. It is essential to subject tax expenditures to the same limits as direct expenditures.

References

- ARGENTINA, MINISTERIO DE ECONOMÍA Y PRODUCCIÓN. (Several Years). “Estimación de los gastos tributarios en la República Argentina, años 2006–2008.”
- AUSTRALIA, DEPARTMENT OF TREASURY. 2006. “Tax Expenditures Statement.”
- BRASIL, RECEITA FEDERAL. (Several Years). “Demonstrativo dos Gastos Governamentais Indiretos de Natureza Tributária (Gastos Tributários).”
- BROWN, C. 2004. “Tax Expenditures in Australia.” In: BRIXI, H. P., C. M. A. VALENDUC and Z. L. SWIFT (Eds.). *Tax Expenditures – Shedding Light on Government Spending Through the Tax System: Lessons From Developed and Transition Economies*. Washington, DC: World Bank.
- CANADA, DEPARTMENT OF FINANCE. 2004. “Tax Expenditures: Notes to the Estimates/Projections.”
- CHILE, DIRECCIÓN DE PRESUPUESTOS DEL MINISTERIO DE HACIENDA. (Several Years). “Informe de Finanzas Públicas.”
- CHILE, SERVICIO DE IMPUESTOS INTERNOS. 2005. “Informe de Gasto Tributario.”
- COLOMBIA, MINISTERIO DE HACIENDA Y CRÉDITO PÚBLICO. (Several Years). “Aspectos Complementarios - Mensaje Presidencial - Proyecto de Presupuesto General de la Nación.”
- CRAIG, J. AND W. ALLAN. 2001. “Fiscal Transparency, Tax Expenditures, and Budget Processes: An International Perspective.” NTA Papers and Proceedings.
- GUATEMALA, SUPERINTENDENCIA DE ADMINISTRACIÓN TRIBUTARIA. (Several Years). “Estimación del Gasto Tributario del Gobierno Central.”
- IMF (INTERNATIONAL MONETARY FUND). 2001. “Manual on Fiscal Transparency.” IMF, Washington, DC.
- MEXICO, CÁMARA DE DIPUTADOS, CENTRO DE ESTUDIOS DE LAS FINANZAS PÚBLICAS. 2007. “Presupuesto de Gastos Fiscales, 2002–2007.”
- MINARIK, J. 2008. “Tax Expenditures in OECD Countries.” OECD, Washington Center.
- OECD (ORGANIZATION FOR ECONOMIC COOPERATION AND DEVELOPMENT). 1996. “Tax Expenditures. Recent Experiences.” OECD, Paris.
- . 2004. “Best Practice Guidelines – Off Budget and Tax Expenditures.” OECD, Paris.

- PERU, MINISTERIO DE ECONOMÍA Y FINANZAS. (Several Years). “Marco Macroeconómico Multianual.”
- PODDAR, S. 1988. “Integration of Tax Expenditures into the Expenditure Management System. The Canadian Experience.” In BRUCE, N., ed., *Tax Expenditure and Government Policy*. Kingston, Ontario: Queens University.
- SEGUIN, M. AND S. GURR. 2004. “Federal Tax Expenditures in Canada.” In: BRIXI, H. P., C. M. A. VALENDUC and Z. L. SWIFT, eds. *Tax Expenditures: Shedding Light on Government Spending through the Tax System. Lessons from Developed and Transition Economies*. Washington, DC: World Bank.
- SLEMROD, J. 1989. “Complexity, Compliance Costs, and Tax Evasion”. In: ROTH, J. and J. SCHOLZ (Eds.). *Tax Payer Compliance: Social Science Perspectives*. Philadelphia, Pennsylvania: University of Pennsylvania Press.
- SURREY, S. S. 1970. “Tax Incentives as a Device for Implementing Government Policy: A Comparison with Direct Government Expenditures.” In *Harvard Law Review* 83 (1970): 705.
- SWIFT, Z. L., H. P. BRIXI, AND C. M. A. VALENDUC. 2004. “Tax Expenditures: General Concept, Measurement, and Overview of Country Practices.” In: BRIXI, H. P., C. M. A. VALENDUC and Z. L. SWIFT (Eds.). *Tax Expenditures – Shedding Light on Government Spending through the Tax System. Lessons from Developed and Transition Economies*. Washington, DC: World Bank.
- TOKMAN R., M., J. RODRÍGUEZ C. AND C. MARSHALL S. 2006. “Las excepciones tributarias como herramienta de política pública.” In *Estudios Públicos* N. 102.
- VILLELA, L. 1981. “Gastos tributários e justiça fiscal: o caso do IRPF no Brasil.” Master’s Dissertation for the Economics Department of the Catholic University, Rio de Janeiro.