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Challenges for Measuring Tax Expenditure[1]

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1. Introduction

Tax expenditures, understood as that revenue the public tax administration ceases to collect by virtue of the application of concessions or special tax regimes, is one of the several tools governments have available to execute their public policies. Its purpose is to favor or stimulate specific economic sectors, activities, regions or agents. This variable is also known as "tax waiver", referring to the fact that, in this manner, the public tax administration partially or wholly waives applying the general tax regime, in view of a higher economic or social policy objective.

The tax expenditure concept appeared in the early sixties, practically simultaneously in Germany and in the United States, countries that were the first ones to prepare tax expenditure budgets, as a way to provide transparency to public actions executed by these means, as is normally done with direct expenditure. Afterwards, during the eighties, this practice was extended to almost all la Organisation for Economic Co-Operation and Development (OECD) countries and to a few developing countries.

The international community's demand for greater transparency in tax policy matters, along with a growing trend to use tax concessions, particularly in developing countries that seek to attract investment, spread the interest on the tax expenditures topic to the rest of the world. In 1998, The International Monetary Fund launched its Code of Good Practices on Fiscal Transparency, which, along with OECD recommendations on tax expenditures, contributed to disseminate the problem and call attention to the importance of its estimation in several countries.

However, in spite of such efforts, it must be admitted that tax expenditure continues to be a matter that has not been studied in depth, especially in developing countries, and that we cannot yet count with systematic analytical methodologies that allow us to evaluate the dimension of tax expenditures and make comparisons and analysis between countries. Especially in Latin America — region that has used tax expenditures as a tool to attract investments—, this is an essential topic to know the practice of granting incentives and its effects. It is also an essential tool for prior evaluation of tax reforms, when seeking to increase collection, simplify procedures or improve equity.

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The purpose of this paper is to present some of the main guidelines related to the elaboration of tax expenditure budgets.[2] The same particularly underscores practical aspects related to the estimation of tax expenditures, which are illustrated by means of the experiences of OECD member countries and of the Latin American countries with respect to which there is data and information available.

2. Tax expenditures budget: conceptual aspects

2.1. What are tax expenditures?

The primary objective of a tax system is to collect the necessary revenues to finance government expenditure. Each citizen must contribute a proportion either of their revenue, consumption or wealth, which will be destined to financing public goods, social expenditure or other activities that have positive economic effects for society.

However, the manner of collection is not irrelevant. The tax structure must have certain qualities, such as efficiency, equity and simplicity. Efficiency is linked to the fact that taxes must be collected interfering as little as possible with persons' decisions. Equity is understood in a double meaning: horizontal and vertical. Taxes tend to be horizontally equitable, that is to say, they must equally affect persons with like ability to pay taxes. In turn, they must be vertically equitable, in the sense that persons with a greater ability to pay taxes have to proportionally pay more taxes. Lastly, it is preferable to have a simple tax structure rather than a complex one, because simplicity lowers other costs associated to taxes, such as those related to administration and compliance, which at the same time reduces space for evasion and avoidance.

Frequently, governments also use taxation systems to promote certain economic policy targets, such as promoting savings, stimulate employment or protect national industry. In such circumstances, the tax system plays a role similar to government expenditure, but through the State waiving all collections, or part of them, that it was entitled to from specific taxpayers or activities. This waiver is what is known as *tax expenditure*.

It must be pointed out that tax expenditure may affect differently the tax structure's efficiency, equity and simplicity qualities. However, in the measure that a specific group of taxpayers or activities is favored, this will necessarily translate into a loss of horizontal equity. From this point of view, it may be said that tax expenditure budgets also constitute, in a certain way, reports that show the degree of horizontal inequity of taxes.

[2] The discussions carried out at the International Seminar on Tax Expenditures, carried out on November 2008 in Washington, D.C. have been useful for this study. The Seminar, which counted with the attendance of 71 participants from 19 countries and 6 international organizations, fostered the exchange of experiences on the topic in Latin American and Caribbean countries.

The OECD (2004) defines tax expenditures as a transference of public resources carried out by means of the reduction of tax liabilities with respect to a reference tax (*benchmark*), more than through direct expenditure. One of the main difficulties at the time of defining and identifying tax expenditures within a specific legislation lies, precisely, in agreeing on a reference tax or standard against which tax legislation provisions may be compared. This matter will be dealt with in depth below. For the time being, it suffices to point out that tax expenditure quantifications may be radically different depending on the definition adopted, which includes, among other things, the impossibility of performing reliable comparisons of the tax expenditure magnitudes between different countries.

In some countries other characteristics are added to the foregoing definition, which constitute additional requirements demanded from tax treatments for a tax expenditure to be considered as such. In any event, there is no consensus with respect to whether those should be taken into account or not. In the OECD report (1996), the following are mentioned as examples of the requirements demanded by some countries: (i) tax concessions must benefit a specific industry, activity or class of taxpayers; (ii) they must have a specific purpose (other than the efficient operation of the system), that can be readily identifiable with an objective that may be carried out alternately with other instruments; (iii) the tax in matter has to be sufficiently broad in order to have an adequate reference tax against which to measure the value of the concession; (iv) it has to be administratively feasible to change the tax system to eliminate tax expenditure, and (v) there must be no other provisions in the tax system that broadly compensate the benefits of tax expenditure.

From the tax technique point of view, tax expenditures may take different forms, as the following:

- Exemptions: Earnings or transactions that are excluded from the tax bases. They are found in the legal standards under different denominations, such as “exemptions”, “exonerations”, “non-levied events”, etc.
- Deductions: Amounts that may be discounted from the tax bases.
- Credits: Amounts that may be discounted from the taxes.
- Reduced rates: Tax rates lower than those generally applied.
- Deferrals: Postponements or delays in the payment of a tax.

According to the 1996 OECD report on tax expenditures, the identification of these constitutes a classification exercise, which consists in dividing tax provisions into those that are part of a reference tax or standard and other that are deviations with respect to that standard. When a tax provision deviates from the reference or standard, it is said that there is a tax expenditure. The same report points out that, in general, the reference tax includes: the rates structure, accounting conventions, the deduction of coercive payments, the provisions that facilitate administration and the provisions related with the international tax liabilities.

2.2. Disadvantage of the tax expenditures

Tax expenditures constitute an additional instrument among the different public policy tools available to governments, such as direct budgetary action or regulatory action over specific activities. In this sense, they should be permanently subjected to assessment, both in what respects to the justification of a specific state intervention and its relative efficiency in comparison with the other available instruments.

The main disadvantages of tax incentives with relation to direct budget expenditures when trying to implement a public policy are:

(i) **Focalization**: From the beneficiaries' point of view, tax franchises have a simpler access than direct subsidy, because they operate in a relatively automatic manner, while a subsidies program requires a beneficiaries' application and selection system. On the contrary, from the State's point of view, being automatic, tax franchises are less focalized, because they benefit the target group as well as any other that meets or simulates meeting legal regulations.

(ii) **Horizontal inequity**: Tax expenditures usually generate inequity horizontally, because not everybody has the same consumption preferences or needs. Thus, for example, when exemptions are established with respect to VAT, either to improve progressiveness or to promote the consumption of merit goods, there is a greater proportional reduction of the tax burden of families that express a preference for assets that are exempted, in detriment of other families with equal level of earnings but that privilege the consumption of non-favored assets.

(iii) **Incentives for evasion and avoidance**: The application of tax expenditures makes the tax structure more complex, which increases evasion and avoidance. Slemrod (1989) summarizes the reasons for that into the following four ones: first, the uncertainty caused by said expenditures regarding the correct interpretation of the legal standards; second, the decrease in the tax administration's capacity to assess, because the audit demands more time as the regulations become more complex; third, the greatest difficulty imposed on taxpayers to meet their tax liabilities, which leads them to default on part of them, either due to lack of knowledge or to compensate the costs imposed on them by the system; and lastly, the greater opportunities to manipulate the tax system, given that the greatest spaces for evasion and avoidance that open up as the complexity of tax regulations increases.

(iv) **Increase in tax compliance costs**: In general, the greater the number of tax incentives, the greater the costs in time and money taxpayers must face to meet their tax liabilities, and these costs not always fall on the incentive beneficiaries. For example, exemptions with respect to VAT benefit end consumers, but the higher compliance costs derived from the special records needed for accounting for VAT credits and exempt sales fall on the sellers. Regarding income tax, franchise control, in many cases, requires counting with information that must be provided by third parties.

2.3. Tax expenditures budget

In general, direct budgetary expenditure is permanently subject to public scrutiny. The elaboration of an annual budget that must be subject to parliamentary approval allows this. On the contrary, tax expenditures remain hidden in earnings forecasts and are subject to parliamentary only in the event of their initial approval

From the strictly budgetary point of view, the difference between direct expenditure and tax expenditure is that the first one is developed in two stages: the receipt of revenues and the payment of the subsidy or the transference; in turn, in the second one, payment is compensated with the revenue, therefore omitting those two stages. In this sense, the traditional manner of presenting earnings, net of tax expenditures, violates the budgetary principle of non-compensation of earnings and expenditures.

From the public policies point of view, tax expenditures are an alternative state intervention tool, that is after results similar to those that could be obtained by means of direct government expenditure. Therefore, they should be subject to the same transparency controls and criteria as the latter. As is pointed out in OECD (2004), a less rigorous control of the tax expenditures in relation with direct expenditures creates incentives to establish subsidies and transferences in the form of the former, aside from objective considerations that could justify such choice. This endangers the distributive, macroeconomic and administrative functions of the budget and may endanger the tax system's primary earnings collection function.

Tax expenditure budgets are financial reports that account for the aforementioned problems. In effect, they grant transparency to the use of tax concessions and facilitate the adequate control of these and the more efficient allocation of the resources.

There is no standard format for tax expenditure budgets, therefore their structure and contents differ a lot from one country to another. However, the following are some elements that are frequently included in them: (i) definitions, concepts and coverage; (ii) reference taxes description; (iii) tax expenditures description; (iv) assessments of historical tax expenditures (one or more years); (v) tax expenditures projections (one or more years), and (vi) assessment methodologies.

What can be found is such budgets are some international good practices guidelines that stress the importance of assessment and of filing tax expenditure budget reports.

3. Tax expenditure assessment challenges

The effective implementation of the tax expenditures budget is a complex task that involves different aspects, among which we highlight here[3]: (i) an adequate institutional and legal structure; (ii) the application of a coherent and transparent assessment methodology; (iii) information management; and (iv) the control and examination function by the tax administration.

3.1. Institutional and legal structure

Assessment, monitoring and control of tax expenditures constitute complex administrative activities because they are multifunctional (they encompass different areas of interest or *expertise*) and intergovernmental (they involve different ministries and, in the case of federative countries, different governmental levels). With relation to the functions they encompass, in general, agencies that work in tax policy, tax administration, budget and program evaluation intervene in the process. In what respects to intergovernmental aspects, they have participation in the legislative branch as well as in the executive branch, national, state and/or municipal governments, and regulatory agencies.

An example of the amplitude of this network of agencies is the participation of free zone administrators, of economic sectors monitoring agencies or of national development agencies (for example, tourism, foreign investment), which count with detailed information on the operations of many companies that receive tax benefits. Consequently, it becomes necessary to establish a clear division of tasks and powers, and promote a close coordination between the agencies involved in the task.

To that end, it becomes essential to count with a clear legal framework in what respects to tax expenditures. In general, this framework is established in the fiscal responsibility laws, in the budget laws and/or in the tax laws or codes. There are several points this legal framework must cover; for example, the very determination of the obligation to estimate the tax expenditures budget, as well as the responsible agency, the calculation frequency and the presentation of the assessments. It is common practice and advisable that the tax expenditures budget be estimated annually and presented together (or integrated) with the budget proposal. Another important determination is that every benefits concession be granted only by legal action (and not through decrees or other infra-legal measures, for example). It is also common to determine that draft laws requesting the granting of new benefits be accompanied by assessments of losses and suggestions for the compensation of resources. The more complete and well determined the legal framework is, the greater the security of all administrative acts and procedures in the assessment and control of tax expenditures.

[3] Among other important aspects that will not be covered in this study we can mention a) the integration with the countries' budget process; and b) the systematic assessment of costs and benefits if tax expenditures are granted.

3.1.1. Agency responsible for the tax expenditures budget

An important aspect and that deserves special attention is the assignment of work for the coordination and final assessment of the tax expenditures to a single office. Even when there is a series of agencies involved in the process, it must be determined which one will, at the end of the day, the one responsible for the coordination of the work, in order to avoid methodological inconsistencies and unnecessary expenditures due to overlapping of administrative tasks. The OECD recommendation is that this responsibility must be under the Ministry of Treasury.

In fact, there are many reasons that make it preferable to delegate this responsibility on the Ministry of Treasury. According to Minarik (2008), the first one of them is that the centralization of the assessments allows taking advantage of economies of scale. For example, the development of a simulation model allows to simultaneously estimate several tax expenditures. On the contrary, the decentralization of the assessments would force the implementation of multiple models, at least one for each program agency, adding their development and maintenance costs. In second place, the centralization of assessments brings about methodological consistency benefits.

We may also add to the above reasons that the main sources of information for assessments are the tax databases. In this sense, The Ministry of Treasury personnel has a relative advantage in terms of knowledge and access to that data. Without detriment to the foregoing, program agencies will have to collaborate in obtaining the necessary data to carry out the assessments when it is not possible to obtain them from tax sources.

Hence, once the responsibility of the tax expenditures assessments has been assigned to the Ministry of Treasury, it must be defined what specific area or agency of said ministry will be in charge of preparing the information and carrying out the assessments. There are two natural candidates for this task: the tax administration and the office in charge of earnings projections, and both display positive and negative aspects. On the one hand, the main advantage of the tax administration is its direct access to the tax statement databases, which constitute the source of basic information to perform the assessments. The administration also has greater knowledge of the tax system and benchmarks in what the tax expenditure is legally granted. On the other hand, the budget offices are the most appropriate to integrate tax expenditures in the budget cycle, but will have difficulties to access data broken down by company (even in matters related to the fiscal secret in many countries).

The advisable thing would be to assign the data search and access task, analysis and assessment to the tax administration, which would send the calculations for the budget office to include them in their budget proposal. And to that end, cooperation and the exchange of information between agencies is essential.

3.1.2. The challenge in federative countries

In federative countries or those where there is a strong decentralization, sub-national levels are in many cases, significantly responsible for tax pressure and also for tax expenditures. In these countries, tax expenditures budget assessments should include information of the states (provinces or departments) and municipalities. The central (federal) government is the natural candidate to take over the coordination for this work, ensuring harmonization of the methodology, exchange of information and the aggregation of national returns

This is an issue where not even the federative countries with developed economies have made much progress. In some countries, sub-national levels are involved in a sort of tax competition, which creates difficulties even to see the full list of benefits granted. A fiscal responsibility law with national scope can, at least, provide a legal framework to try to systematize data aggregation and give greater transparency to the tax expenditures budget.

To this end, in countries such as Brazil and Colombia, fiscal responsibility laws[4] impose the compulsoriness of estimating the fiscal cost of the tax exemptions granted in the past, as well as of making explicit the fiscal impact of any Bill, order or agreement that orders any expenditure or provides tax benefits. However, since these countries have not set a standard assessment methodology, sub-national governments that meet the obligation of estimating tax expenditures use different and possibly inadequate criteria. Furthermore, in the case of Colombia, formally a unitary organization country, many lawyers believe that a national standard could not impose the use of a specific methodology without adversely affecting the autonomy guaranteed to sub-national governments.

It is possible that a feasible alternative in this sense would be the cooperation between the central Government and the sub-national governments, as well as work to generate awareness among citizens and the legislative bodies and sub-national control regarding the need for accountability.

3.2. Application of a coherent and transparent methodology

Progress in the systematic elaboration of tax expenditure budgets requires a reliable assessment of the latter. The following must be sought in order to succeed in this challenge: (i) adequate identification of the tax expenditures, and (ii) development of specific assessment methodologies.

3.2.1. Identification of the tax expenditures

A list of all expenditures associated to the different encumbrances of the tax system must be made for the correct identification of tax expenditures. To that end,

[4] Art. 14 of Complementary Law 101, of May 4, 2000, in Brazil, and arts. 5 and 7 of Law 819, of July 9, 2003, in Colombia.

it is necessary to previously define the standard or reference tax that will be used with relation to each tax, to then identify the deviations with respect to that standard or reference. This reference tax is a sort of “ideal”, that is to say, a tax without any type of exceptions that is applied over an ample base, such as revenue or consumption. It is also necessary that taxes for which the tax expenditure will be measured be defined. However, in this stage it is convenient to be as thorough as possible, to avoid the a priori exclusion of apparently minor taxes that could have important concessions.

In what respects to the election of the reference tax, it will become necessary to choose between a broad and comprehensive focus, the so-called *conceptual focus*, or a more restrictive one, such as the *legal focus* (the following section includes detailed information on each focus). It must also be decided what information will be incorporated in tax expenditures budget. On one hand, it may be chosen to include only those line items that have previously been defined as tax expenditures. On the other hand, all legal provisions that imply a lesser tax collection will be included, identifying, of course, those that, in the criteria of the authority, correspond to such expenditures. From the fiscal transparency point of view, the broad focus with an abundant amount of information[5] appears as the best alternative.

Three general focuses

Craig and Allan (2001) point out that there are three general focuses used by the countries to define reference taxes and identify tax expenditures.

In this paper they will be given the following names: (i) **conceptual focus**; (ii) **legal focus,** and (iii) **analog subsidy focus**.

The **conceptual focus** attempts to link the reference tax with a “standard tax structure”, which does not necessarily bear relation with the legal definitions of the tax. For example, many countries use the Haig-Simons tax concept to define the

[5] In this respect, Canada, for example, has chosen to present reports with the greatest possible amount of information, reporting any deviation with respect to a conceptual reference tax system, which only incorporates the basic structural elements. Therefore, the Canadian tax expenditures report also includes many tax provisions that are generally not considered tax expenditures. These assessments, which are added to the report separately and are known as “memorandum items”, are classified into three groups: (i) measures that are considered part of the reference system (for example, credits to avoid double taxation on dividends); (ii) measures that generate discussions on whether they should be considered tax expenditures (for example, the deduction of the cost of business meals, which can be taken as a necessary expenditure to generate revenue or 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 is part of the reference tax system (for example, the deduction of the cost of meals of a certain class of workers). Although this focus has the virtue of contributing the most information possible, it also implies risks. Seguin and Gurr (2004) point out that with such abundant information there is the risk of inducing the report user to consider that all items are tax expenditures or potential sources of increased earnings.

reference in income tax.[6] That is to say, the reference tax is defined as that whose tax base is the Haig-Simons revenue, into which some adjustments are introduced to reflect situations where it is not administratively feasible to apply the pure concept. Thus, taxation on capital gains on realized based is often considered part of the tax reference, even though in the pure Haig-Simons concept such income should pay taxes on the accrued base. Consequently, every time that the actual tax is not applied on this conceptual income, or applied to a smaller amount, a tax expenditure appears. In the case of VAT, the standard tax structure might be a pure VAT, which taxes all end consumption, without exceptions

The **legal focus** takes tax legislation in force as the basis for defining the reference tax and, therefore, to identify the tax expenditures. In order to illustrate the difference with respect to the conceptual focus, it can be assumed that a given country's VAT law defines as a taxed fact the sales of movable property and services, and expressly exempts health services. Under the legal focus, there would be a tax expenditure associated to the health services, which are explicitly exempt in legislation, but there would not be one associated to real estate, since these are not part of the legal definition of the tax base. However, with the conceptual focus there would be two tax expenditures: one associated with health services and another to the use of owned real estate, as both represent consumption.

Finally, **analog subsidy focus** identifies only those tax concessions that are clearly analogous to a direct subsidy as tax expenditures. In practice, this approach leads to an identification of tax expenditures that is very similar to the legal focus.

In short, the conceptual focus is more comprehensive definition than the one of the other two approaches, which will result in a more extensive list of tax expenditures and a greater cost for these.

The main problem of the legal focus, with relation to the conceptual focus, lies in that many tax concessions may remain hidden due to the tax technique applied by legislators. In effect, from the economic point of view, it is the same thing if when properly determined it is not subject to the VAT because it lies outside the definition of taxed fact or because the law expressly exempts it. In both cases there is a benefitted product, an activity or a group of taxpayers. However, under the legal focus, only the second case will be made transparent as a tax expenditure. This is the reason why one of the OECD guidelines for best practices in tax expenditures points out that the reference tax has to be global and unique, and that it must not necessarily represent the tax base regulations (see OECD, 2004).

According to the study by Craig and Allan (2001), among the OECD countries, six apply the conceptual focus (Australia, Belgium, Canada, Finland, Ireland and Spain), five choose the legal focus (Austria, France, Holland, Korea and Portugal)

[6] According to this concept, a person's revenue is defined as the variation his/her equity experiments between two points in time, plus the consumption made during this period.

and two choose the analog subsidy focus (Germany and the United Kingdom). In turn, the United States uses two reference taxes: one according to the conceptual focus and another that follows the legal focus (see table 2). In Latin America, Chile follows the conceptual focus, while Argentina, Brazil, Colombia, Ecuador, Guatemala and Peru choose the legal focus (see table 3).

Other distinctive characteristics of the reference taxes

The three above-mentioned focuses are related to the tax base, which is one of the characteristics that define reference taxes. However, these encumbrances have other features, which need to be defined.

In the case of the income tax a decision must be made, among other things, regarding the structure of the tax reference rates, taxation unit, taxation period and accepted deductions. Common practices of the countries include the following:

- **Rates structure**: It is considered that the progressive rates structure contained in the law is part of the reference tax. This means that the usual exempt traunch in the rates scales does not gives rise to a tax expenditure, as well as the marginal rates less than the maximum.
- **Tax unit**: in general, tax units accepted in the law (for example, individual, marital or family statement) are taken as part of the reference tax. That is to say, the lesser (or greater) taxation derived from the marital statement, instead of the individual one, does not give rise to a tax expenditure.
- **Tax period**: It is considered that the tax periods defined in the law are part of the reference.
- **Deductions**: Deductions of the expenditures needed to generate revenue are usually taken as part of the reference tax —which is consistent with the Haig-Simons definition of revenue—, as well as the deductions of compulsory payments.
- **Others**: Accounting conventions to determine revenue, the provisions that attempt to facilitate tax administration, those that attempt to avoid double taxation, those related to international taxation, and the deduction of losses from previous periods are generally included as part of the reference.

In the case of VAT and other indirect encumbrances, the reference tax must specify, among other characteristics, the tax rate, the treatment of the carryovers and refunds accepted.

- **Rates**: The customary practice is to consider the generally applied legal rate as part of the reference. Consequently, reduced rates will give rise to tax expenditures and surtaxes will produce negative tax expenditures (although not all countries record them).
- **Carryovers**: In general, it is assumed that the legal treatment of carryovers is part of the reference. In the case there is a sector or group de taxpayers privileged with a carryovers refund, undoubtedly, said treatment must constitute a tax expenditure.

- **Refunds**: It is customary that VAT refunds to exporters be considered as part of the reference tax. This is consistent with a VAT at destination with consumption base.

The "specific group" requirement

Some countries (Australia, Belgium, Korea and Argentina) establish that a tax concession is only considered a tax expenditure if it favors a specific industry, activity or class of taxpayers. From this point of view, a tax provision that deviates from the reference tax, but is applied to most taxpayers, would not be a tax expenditure, but a structural characteristic of the tax. In principle, this requisite seems reasonable, because in the measure that a provision benefits all taxpayers equally, it may be thought that it keeps relation with the design proposed for the tax, in terms of efficiency and equity qualities. For example, the traunch exempt from personal income tax is a provision that favors most taxpayers, which follows equity criteria in the tax design and that is usually considered part of the reference tax.

However, we must warn that few tax concessions have this characteristic, therefore some precautions must be taken in their identification. In first place, some tax provisions are of general application but within a subset of taxpayers, therefore they should be considered tax expenditures. For example, an accelerated depreciation system, which is available for all companies, could be considered in some countries as part of the reference tax. Notwithstanding, said criteria does not take into account that such benefit is specific for the subset of taxpayers that develop business activities and who determine their income on the complete accounting basis, but is not available for the rest of the taxpayers, such as workers or companies subject to other income determination regimes. In second place, some concessions are available for most taxpayers but not necessarily benefit all equally. For example, a VAT exemption in favor of a good from the basic food basket may be qualified as general, in the sense that all households consume said good. However, the exemption favors in greater measure households for which this good represents a greater share of their consumption, therefore it should also be considered as a tax expenditure.

It is likely that it was the foregoing considerations the ones that led several countries to define tax expenditures as those treatments that deviate from the reference tax, without making reference to the specific nature of the same.

3.2.2. Methodologies to estimate the cost of tax expenditures

3.2.2.1. The three assessment methods

In the specialized bibliography, three "methods" are identified for estimating the cost of tax expenditures, methods that in reality correspond to three different concepts, which may be measured: **waived income**, **earned income** and **equivalent direct expenditure**.

Before explaining the difference between them it is convenient to bear in mind that the application of a tax expenditure induces changes in the behavior of taxpayers. For example, if earnings generated by specific savings instruments are exempted from taxes, there will be a greater demand for such instruments and, therefore, revenues of that type will be higher to those that would have been produced without the application of the preferential treatment. Likewise, if an income tax deduction is annulled, it is likely that, to compensate for the loss of the benefit, taxpayers use in a greater measure other deductions allowed in the law. The recognition of these and other changes in behavior in tax expenditures assessments makes evident the differences between the three methods pointed out.

The **waived income method** measures the loss of earnings that takes place after introducing a tax expenditure. It supposes that there is no change of behavior whatsoever in taxpayers, that is to say, that their behavior is the same one they exhibited during the application of the tax expenditure. This method is also known as *ex post measurement*.

In turn, the **earned income method** tries to estimate the additional collection that is possible to obtain with the annulment of a tax expenditure. Unlike the previous method, in this one —also called *ex ante measurement*— changes in taxpayers' behavior are taken into account. In practice, the application of this method is quite limited, because it poses the difficulty that assessments must be available for the supply and demand elasticity of the goods or revenues favored with a preferential tax treatment. This method must also consider the changes in behavior with respect to evasion. A part of the potential revenue derived from the annulment of a tax expenditure will end up being evaded, as it happens with a portion of the collection of all taxes.

Lastly, the **equivalent direct expenditure method** estimates the subsidy or the transference that would leave taxpayers with a net tax revenue similar to the one they obtain with the existence of the tax expenditure.

To understand the difference between this method and the previous ones it is convenient to distinguish between two types of tax expenditures: the "tax subsidies" and the "tax transfers" (see OECD, 2004). The first ones are those that are linked to the purchase of specific goods, like for example VAT exemptions. The second ones are those that are not linked with the purchase of goods, such as, for example, reduced rates.

The equivalent direct expenditure takes into consideration the fact that transferences normally are part of taxable earnings. Therefore, if we want to estimate tax expenditure on the same base as a direct transference, we must add the amount of the tax that would affect said transference. However, in the case of those tax expenditures that qualify as tax subsidies, the above adjustment is not necessary, because direct subsidies generally do not increase the taxpayers' taxable income.

The choice of the best method depends on the desired outcome. If we wish to obtain a precise assessment of the greater collection that may be obtained with the elimination of a specific tax expenditure, the most adequate method is the earned income one. In turn, if we want to establish a parallel between the direct expenditures budget and the tax expenditures budget, the best thing to do is to use the equivalent direct expenditure method.

In that respect, OECD (2004) points out that the "best practice" consists in estimating tax expenditures by the waived income method, but correcting the results by an equivalent tax margin, in those cases where the equivalent transference is subject to taxes. According to what is explained in the above paragraphs, this practice is equal t the application of the equivalent direct expenditure method. The basis for the OECD's recommendation is that the utilization of a different method would give rise to the false idea that the tax expenditure is an alternative that is relatively cheaper than the direct expenditure.

However, tax expenditure reports are also commonly used to look for alternative tax reforms. In these cases, assessments by means of the equivalent direct expenditure method may feed wrong expectations regarding increases in collection that could possibly be expected with the annulment of some tax expenditures. Likewise, it may be convenient to elaborate complementary assessments that show figures closer to the increase in collections that may be obtained with the annulment de los tax expenditures. To achieve that it is possible, for example, to adjust the waived income figures applying the constant total expenditure assumption, used in Chile and Argentina. Likewise, it is reasonable to also consider that a portion of the waived income will be evaded. If there are tax compliance assessments for the main taxes, the waived income may be weighed by the compliance rate of the respective tax.

It must be pointed out that practically all countries that prepare tax expenditures reports use the waived income system, which is the simplest estimating methodology and the one suggested for beginning. The United States applies the waived income method as well as the equivalent direct expenditure method. In Latin America, both Chile and Argentina use a supposed change in behavior: the constant total expenditure assumption. According to this one, the annulment of a franchise translates into a lower income available for taxpayers and, therefore, in a lower consumption and VAT payment.

Now then, once the waived income assessments are available it is not difficult to elaborate assessments for the equivalent direct expenditure. To that end, tax expenditures must be classified into two categories: those that could eventually be replaced by a transference subject to taxes and those that could be replaced by a subsidy or a transference not subject to taxes. Then, the waived income assessments of the first group must be increased in the value of the tax equivalent transferences would have to pay, following the procedure described in the previous chapter. In the case of personal income taxes, an additional calculation will be required to determine the average weighed marginal rate with which transferences would be taxed, which can be estimated without great difficulties if statistics on the beneficiaries of each tax expenditure disaggregated by revenue traunches are available.

Table 1

Definition and measurement of tax expenditures (OECD)

Country	Definition and measurement		
	Definition of tax expenditure	Focus	Concept being measured
Germany	There is no explicit definition. References to benefits received by the companies or economic sectors.	Analogous subsidy.	Cash based waived income.
Australia	Tax law provisions that tax certain classes of taxpayers or types of specific activities in a manner different from the reference structure chosen.	Conceptual.	Accrual based waived income.
Austria	Earnings waived by the federal government by means of exceptions to the general tax standard, which benefit natural persons or bodies corporate for private activities performed in the interest of the public at large.	Legal.	Accrual based waived income.
Belgium	Earnings waived through tax incentives in the shape of exceptions from ordinary taxation, which are granted to certain taxpayers or economic, cultural or social activities, and that could be replaced by direct subsidies.	Conceptual.	Waived income, cash based.
Canada	Deviations with respect to the reference tax.	Conceptual.	Waived income, cash based.
Korea	Reduction of national tax earnings resulting from the application of special provisions, such as exceptions to the normal tax system, to reduce the tax burden of a specific group of taxpayers.	Legal.	N.I.
Spain	There is no formal definition.	Conceptual.	Waived income, cash

Country	Definition and measurement		
	Definition of tax expenditure	Focus	Concept being measured
			based.
United States	It is a preferential exception to the reference standards of the tax structure.	Conceptual and legal.	Waived income, subsidy equivalent and present value, cash based.
Finland	Deviation from the normal basic taxation structure to support specific purposes.	Conceptual.	Cash based waived income.
France	Legal provisions whose implementation induces lower tax earnings for the State in comparison with the application of the reference or standard, which is the basic tax calculation principle.	Legal.	Cash based waived income.
Holland	Deviations with respect to the reference tax system.	Legal.	Accrual based waived income.
Ireland	There is no formal definition.	Conceptual.	Waived income.
Italy	Favorable tax treatment, which, although structural, is an exception to the principles of tax generality, uniformity and progressiveness.	N.I.	Accrual based waived income.
Portugal	There is no formal definition.	Legal.	Waived income.
United Kingdom	Tax reliefs that are alternatives for government expenditure and that have similar effects.	Analogous subsidy.	Accrual based waived income.

Source: OECD (1996), Craig and Allan (2001), Swift *et al*. (2004) and reports from the countries.
S.I.: No information.

Table 2

Definition and measurement of tax expenditures (Latin America)

Country	Definition and measurement			
	Definition of tax expenditure	**Focus**	**Concept being measured**	**Unit responsible for assessments**
Argentina	Amount of earnings the public tax administration ceases to collect, in a definite manner, by granting a tax treatment that strays from the one of a general nature established in the tax law, with the purpose of benefitting specific activities, zones or taxpayers.	Legal.	Waived income, corrected for the constant total expenditure assumption.	National Tax Research and Analysis Office, Treasury Secretariat, Ministry of Economy and Production.
Brazil	Indirect government expenditures made by means of the tax system, that seek to assist economic and social objectives.	Legal.	Waived income.	Receita Federal.
Chile	Collection that the public tax administration ceases to collect for the application of franchises or special tax regimes and whose goal is to favor or promote specific economic sectors, activities, regions or agents.	Conceptual.	Waived income, corrected for the constant total expenditure assumption.	Internal Taxes Service.
Colombia	Tax benefits granted to promote economic activities or less developed regions.	Legal.	Waived income.	DIAN.
Ecuador	N.I.	Legal.	Waived income.	SRI (since 2007).
Guatemala	Those situations in which the generating factor that should have given rise to the tax has been formalized and, however, there is no obligation to to pay the taxes, unlike the rest of the taxpayers. The generally	Legal.	Waived income.	SAT.

Country	Definition and measurement			
	Definition of tax expenditure	Focus	Concept being measured	Unit responsible for assessments
	applied concessions are considered part of the standard.			
Mexico	That amount that is not collected due to the existence of special fiscal treatments, administrative facilities, authorized deductions, exempt earnings, preferential rates, fiscal stimulus and specific resolutions.	S.I.	Waived income.	Treasury and Public Credit Secretariat.
Nicaragua	Transferences the State makes to specific groups or sectors, but instead of performing them by means of the budgetary expenditure it performs them by means of a reduction in the taxpayer's tax liability.	N.I.	N.I.	Ministry of Treasury and Public Credit.
Peru	Any tax measure that results in a loss of tax earnings for the State and the corresponding reduction of the tax burden for the taxpayer, which has not occurred under the application of a general tax law.	Legal.	Waived income.	SUNAT.

Source: Craig and Allan (2001), Swift *et al*. (2004) and reports from the countries.
N.I.: No information.

3.2.2.2. Forms of calculation

In what respects to the specific methodologies to calculate the waived income, these will depend on the type of tax expenditure that must be estimated and on the information available in each case. The experience of the countries shows that, in general, it is necessary to resort to an ample variety of forms of calculation (see table 4). However, in view of the common characteristics that are observed among those, it is possible to highlight the following four methodological types:

- Direct collection from earnings statistics

Even though it is uncommon, it is possible that certain tax expenditures, specifically some credits against the taxes, be declared in some specific item of the tax statement forms and be recorded in an account of the database of the earnings office. In these cases, the waived income will correspond exactly to the balance of said account.

- Assessments with aggregated statistics

These methodologies consist in the carrying out of simple arithmetic operations on aggregated statistics, obtained mainly from tax statements but also from other sources, such as national accounts. This focus is appropriate, particularly when the cost of the tax expenditure is a simple portion of the total transactions. This is the case, for example, of exemptions and deductions of the companies' the income tax, where the waived income is estimated as the aggregated amount of the deduction or of the exempt revenue multiplied by the tax rate. It is also convenient to use this method to estimate the income waived by the application of reduced rates, simply applying the rule of three on the effective collection of the respective rate.

This method is also used in some countries to estimate the cost of deductions and exemptions of the personal income taxes, in which case one must multiply the aggregated amount of the deduction or exempt revenue by a weighed average marginal rate. This rate must be previously calculated with data from some base year and updated every certain amount of of years. The ideal thing would be that there be a weighed average marginal rate for each deduction or exemption, given that the profile of the beneficiaries is not necessarily the same for each tax concession. With this focus we can achieve a good approximation of the waived income, although its results are less precise than those that would be obtained by means of an aggregated simulation or micro-simulation.

- Aggregated simulation models

In this focus, just like in the previous one, work is performed with aggregated statistics from mainly tax sources but also from national accounts, budget surveys and others. Yet, unlike the previous methodology, in this case a greater opening or stratification of the aggregated statistics is required, as well as the development of mathematical algorithms of a greater relative complexity.

Models of this type are applied to the calculation of deductions and exemptions of personal income taxes. For example, in Australia (Brown, 2004) this type of model is elaborated, same that is called "distributional modeling", from data on income distribution and tax concessions for taxable income traunches, using the administrative databases as sources of information.

Models based on input-output matrices to estimate the cost of VAT exemptions also fit under this category. In spite of the frequent lack of information on exempt activities in the administrative databases, the VAT methodology poses an additional difficulty, which makes it unadvisable to exclusively use data from taxpayers' tax statements to perform these assessments. In fact, the loss of collections associated to an exemption is determined not only by the added value of the exempt taxpayer, but also by the buyer's tax profile: there will only be collections when the buyer is an end consumer or an exempt intermediate consumer. Therefore, the best way to estimate these tax expenditures is to do so through models based on input-output tables, which allow calculation to be made with greater precision the potential non-deductible VAT that is not collected due to the application of an exemption. These models consider intersectorial sales and purchases and sales associated to the different goods and services. The tax expenditure is estimated as the difference between the non-deductible VAT under the assumption of annulment of the exemption and the non-deductible VAT under the legislation in force.

- Microsimulation models

Microsimulation models analyze data detailed at the individual level, that arise, in general, from tax statements, although sometimes alternative or complementary data sources are used, such as budget surveys or company financial statements. In some countries the taxpayers universe is incorporated in the models, while in others they choose to work with a statistically representative simple. In the former gains are achieved in precision, but response times are lengthier and technological tools with greater capacity are required.

La microsimulation essentially consists of recalculating the taxes each taxpayer should pay simulating changes in tax regulations. The waived income is obtained as the difference in collection between a situation with change in standards and another one without any changes whatsoever. Often, these models are elaborated with data from a base year, which are updated every certain amount of years. That is why at the time of performing the assessments, the model has to be adjusted so that it reflects the tax regulations in force. Likewise, the initial results must be updated to reflect the growth of the tax bases.

These models are especially useful to evaluate tax expenditures that benefit groups of taxpayers with unobservable characteristics in the aggregated statistics, as well as exemptions and deductions in taxes with progressive rates, and to quantify the joint or simultaneity effects of the tax expenditures. Microsimulation is also useful to determine the necessary parameters for the assessments with aggregated statistics or with aggregated simulation models, such as, for example, the weighed average marginal rates.

3.2.2.3. Choice of an accounting base

Assessments from the different countries may also differ with respect to the accounting base chosen, which may be cash based or accrual based. The first focus considers the impact of tax expenditures on the cash flow of the public tax administration in a specific period. The second one takes into account the impact on tax liabilities accrued in favor of the public tax administration in a specific period. In the choice of one or the other, agreement with the direct expenditure budget must be sought. If this has been elaborated with a cash focus, the tax expenditures budget must be prepared with a cash basis, and vice-versa.

3.2.2.4. The specific case of tax deferrals

Deferrals correspond to a specific case of tax expenditures, characterized by the postponement of the payment of the corresponding obligations. An example of deferral is the accelerated tax depreciation schemes, which allow to move to expenses the cost of fixed assets quicker than it would be reasonable in accordance with the loss of their economic value or with the financial accounting standards. These schemes give rise to a lower income tax payment during the first years of useful life of physical investments, in relation with a normal depreciation scheme. Yet, said situation reverts in the following years, when the assets are already fully depreciated and, therefore, the payment of income tax is higher to the one that would be produced with the application of the normal regime.

In most countries a cash criteria is applied to measure the tax expenditure of the deferrals. That is to say, the collection that would have been made in the analyzed period if there had been no deferral whatsoever is estimated, and the effective collection for the period is subtracted from this figure. Evidently, the return in a specific period may be positive, when the postponements of the period are greater than the recoveries, or negative, when the recoveries are greater than the postponements.

An alternative manner to quantify deferrals is to do so according to the present value method. In this case, collection differences that will take place in the future due to the deferrals originated in the analyzed period are estimated, and then the present value of that cash flow profile is calculated. In such circumstances, the figure will be obviously positive. This methodology is only used in the United States for the deferrals.

3.2.2.5. Problems for calculating the total tax expenditure

Another methodological aspect that must be taken into consideration is the one of the interactions between the different tax expenditures, which can be summarized by saying that the tax expenditure of A plus B is not necessarily equal to the tax expenditure of A plus the tax expenditure of B.

This becomes particularly relevant in the personal income taxes with progressive rates. In effect, if A and B are tax base deductions for a specific taxpayer, it may happen that the individual annulment of A keeps the taxpayer in the same revenue traunch, just like the individual annulment of B. However, the simultaneous annulment of A and B could place it in a higher revenue and marginal rate traunch. Under this assumption, the joint tax expenditure would be greater than the sum of the individual tax expenditures.

In the case of VAT exemptions there are also interactions, although in the opposite sense. The annulment of exemption A reduces exempt intermediate purchases and, therefore, the transfer of the non-deductible VAT for the production of B, and vice-versa. Therefore, the joint tax expenditure will be less than the sum of the individual tax expenditures.

In view of the above, most of the OECD countries —like Austria, Belgium, Canada, Finland, France, Ireland, Italy, United Kingdom and the United States— directly omit the total lines in their returns tables.

3.2.2.6. Coverage, frequency and classification

In what respects to the coverage of tax expenditure budgets, this is, the taxes that are included in the assessment, in practically every country income tax is taken into account, both for persons and companies. Among OECD countries, only Austria, Ireland and Holland perform measurements for this tax. A good part of them also incorporate VAT, although sometimes restricted only to exemptions. Canada, Portugal and Spain measure tax expenditure in the VAT and in income tax, exclusively. The rest of the countries also incorporates other taxes, both direct and indirect (see Annex I).

Among Latin American countries that measure tax expenditure, all incorporate at least the income tax and the VAT. Chile and Colombia only measure these two taxes. Argentina, Brazil, Guatemala, Mexico and Peru also include other taxes, such as, for example, duties to imports and specific consumptions.

With respect to the frequency of the assessments, it is annual in the vast majority of the cases analyzed. The exceptions are Germany, where the frequency is biannual, and Italy, that performs sporadic measurements.

The ways to classify or group tax expenditures in the budgets are diverse and change from one Country to another. As may be appreciated in Annex I, tax expenditures are classified according to the tax, the tax technique used to grant the benefit (exemptions, deductions, credits, deferrals and reduced rates), the budget function, the objective sought, the benefitted economic sector and the geographic zone.

3.3. Information management

A basic requisite to perform reliable assessments of the tax expenditures is to count with sufficient good quality and timely information. However, in many countries the importance of that matter is not perceived and the collection and analysis of the same is not organized in integrated systems; in addition, most of them continue to appeal to manual and biased collection.

There are three well-defined stages in the information management process: data collection, treatment and analysis.

3.3.1. Data collection

Basically, there are two types of tax data sources: internal sources (statements and special forms for tax benefits) and external sources (information from third parties and from other agencies involved, such as the administrators of duty free zones). In the case of external information, in general, it is necessary that information exchange agreements be signed.

Information from internal sources

In general, the main source of information to perform the tax expenditure assessments is the data contributed by the taxpayers themselves, through their tax statements and the complementary information required by the tax administration.

If the agency responsible for the assessments is the tax administration itself, there will then be a more expedite access to that whole volume of information, which will enable the development of, for example, the microsimulation models. On the other hand, when the responsibility for the assessment falls on a different agency, access to this data may be limited. In effect, the legislation usually imposes reserve with respect to the data of the taxpayers that tax agency manages. In such case, alternative manners to access the la information will have to be found, such as, for example, through nameless databases or else by means of aggregated statistics.

It may also happen that the agency responsible for the assessments delegates the management of the microsimulation models on the tax administration. In this work scheme, the responsible agency defines the model design requirements and the simulations that must be made, while the tax administration executes the design, carries out the simulations and delivers the results.

Customization of the tax statement forms

In many countries, the assessment of tax expenditures becomes difficult due to the shortage of appropriate data at the corresponding information sources. In effect, tax statement forms not always collect all the information that would be desirable for these purposes. It is common, for example, that fully exempted taxpayers be freed from the obligation of filing statements, which leads to seeking alternate sources or make strong assumptions to obtain assessments, or simply omit them.

In view of the above, a strategy to increase the availability of information lies, precisely, in customizing the tax statement forms, or create new sworn statements, in such a way to as to collect a greater volume of background related to the concessions. In that sense, the very exercise of elaborating the tax expenditures assessments allows to identify the lack of information.

It must be underscored that the collection of information related to tax concessions is useful not only for the tax expenditures assessments, but it also allows for a better control of these activities by the respective administration, which results in a double benefit. Obviously, requesting a greater volume of information implies costs both for the taxpayers and for the administration, but, on the other hand, the massive use of Internet as a means to relate to these has allowed the lowering of such costs for both parties.

Information from external sources

A matter of the greatest importance for tax assessments is the autonomy in the access and processing of the information. Thos who have worked in their elaboration know that the lack of autonomy is one of the greatest problems to achieve timely and quality assessments, because it means to depend both of the “good will” of the owner of the information and the skill to adequately process the data. Therefore, it is advisable that the unit responsible for the assessments counts with the highest degree of autonomy possible in the access and processing of the information.

In general, even in countries where agencies foreign to the Ministry of Treasury or specifically to the tax administration (for example, other ministries, duty free zone administrators, regulatory agencies) already regularly provide the information, often the same comes printed on paper, or else it has been collected in a non-systematic manner or by means of a non-specified methodology. This constitutes a very serious problem for the implementation of the tax expenditure budgets, although it is a customary practice in many countries.

One way to make progress and achieve expedite and timely access to the information from other agencies is to do so by means of the formalization of data delivery. To that end, a useful instrument is the signing of information exchange agreements, which specify, among other things, the specific and detailed information requirements, the means that will be used for its transfer, the periodicity and delivery dates, those responsible for the administration of the agreement in each institution. It must be underscored that this type of agreement is useful even in the case that the tax administration is the entity responsible for the assessments, because, as it has already been pointed out, there is a series of sources of non-tax information that are necessary to perform specific tax expenditures assessments, such as, for example, national accounts statistics, input-output matrices, budget surveys and the financial statements of the companies.

3.3.2. Treatment of the information

One of the challenges posed by the treatment of the information is the coordination between the I.T. unit that has the data and the unit responsible for the assessments. Frequently, access to those is not adequate and demands a lot of definition work between both areas. Fortunately, technological alternatives are available, which are more and more accessible, which allow autonomous access of the user areas to manage the information, such as data warehouses. These tools integrate in a standard format the diverse operational databases, allowing access to and the processing of microdata, either for the elaboration of microsimulation models or aggregated simulation models, or for the generation of aggregated statistics.

A computerized system information capture and treatment is the best solution for an effective implementation of the tax expenditures budget. For example, we may think about the possibility of developing an government intranet web portal where all agencies involved (defined in the exchange agreements) directly feed the tax expenditures information system, with direct access to a centralized database. In this manner more timely access to the data would be secured, without depending on the availability of resources from the agency that owns the information. This system could even be the administrator of all the concession stages of a tax benefit, for example, in cases where prior authorization from some ministry or agency is needed (in some cases the benefits are granted by list of companies or economic sectors).

Lastly, data precision and detection of inconsistencies must also be taken into account, in such a way that the information that must be analyzed be of the best possible quality. The use of the information in tax assessments always requires a previous stage for preparing the data obtained from the operational bases. For example, information consistency must be checked, out of range data must be eliminated and evident errors must be corrected. In the measure that controls in collection procedures are improved, we may count with better quality information and the time needed to obtain the assessments will be reduced.

In the context of tax statements, the reception of these via Internet has had a positive effect with relation to the quality of the data, which evidently favors the tax administration’s audit tasks, but also has an indirect positive effect for the use of the information for other purposes, such as tax expenditures assessments. In this case, the better quality is the result of consistency controls made in the applications for the sending of statements, which avoid frequent errors in manual procedures, such as, for example, the differences between the totalizing values and the sums of the partial values, or the omission of mandatory information. In some occasions, this type of control is applied only on the section of the forms that contain the determination of the taxes to be paid, but is unfortunately omitted in others that contribute complementary information and that quite often are useful to estimate tax expenditures.

3.3.3. Data analysis

After date collection and treatment we may move on to the analysis phase of these, where fiscal transparency measures are supported as well as the decision-making regarding changes in the tax policy. With the purpose of offering the greatest guarantees regarding those functions, in general, the tax expenditures budget is presented per type of tax, budget function, geographic region and economic sector. In some countries tax expenditures are also already analyzed by revenue profiles, in such away so as to determine their impact on equity.

3.4. Control and examination by the tax administration

The tax administrations have the function of controlling the correct use of the concessions in their scope of action, because tax expenditures introduce greater complexity in tax legislation, creating new possibilities for abuse and new types of fraud in the incentives system. Thus, the tax administration must verify that taxpayers make use of the tax expenditures pursuant to the law, avoiding the exploitation of the evasion spaces that are normally generated when establishing exceptions to the pertinent regulations. Classic examples of controls related to tax expenditures are the examinations linked to duty free zones operations, exemptions and reduced VAT rates, income tax deductions, presumed credits and erroneous subjective classification (for example, third sector, non-governmental organizations, universities).

To that end, the administration must make use of the habitual examination tools, such as mass cross-referencing of information and the selective audits. The choice of one tool or another will depend on the specific characteristics of each tax expenditure. For example, some personal income tax deductions or exemptions— such as pension funds contributions, mortgage interests or savings in specific financial instruments— may be easily controlled through mass cross-referencing, by means of computerized systems, between the amounts declared by the taxpayers and those reported by the receiving institutions. This type of information cross-referencing eliminates the possibility of evading resorting to the fictitious engrossing of deductions or exempt revenues, except in the case of collusion with the receiving institution.

Other types of tax expenditures —generally those that benefit companies or VAT exemptions— must be controlled by means of selective audits. The knowledge of the design specificities of each one of those is key for defining the revision programs that aim at controlling specific evasion spaces. For example, VAT exemptions open up possibilities for evasion by means of manipulating the ratio of exempt and taxed sales, which determine the VAT percentage of the inputs that is recoverable as credit. Therefore, an audit to a taxpayer with exempt sales must include, among other things, the revision of these proportionality calculations.

Cabe señalar que la mayor efficiency de la tax administration en el control de los tax expenditures reduce los costs relativos de éstos, mejorando su desempeño en relación con tools alternativas de public policy, como son los gastos directos. Por otro lado, también es importante que la administration sea capaz de transparentar los mayores costs operativos que derivan de la aplicación de las concessions tributarias, and que las autoridades, a su vez, tengan en consideración esos mayores costs a la hora de definir el budget de la entidad. De otra manera, una examination deficiente de un nuevo tax expenditure redundará en un menor control, and por ende una mayor evasion, de las demás tax provisions.

Likewise, it must be highlighted that it is essential that work be performed with an aim to a greater integration between the tax expenditures assessment and control activities. Assessments may and must be the first step for a more efficient examination of their correct use. In other words, tax expenditures assessments do not need to be constrained to the study areas of the tax administration, but there should be a systematic feedback with the examination areas. The tax administration has to work with tax expenditures risk profiles (for example, type of benefitted taxpayer, area or sector, duty free zone) and assign personnel specialized in the control of said expenditures.

4. Conclusions, challenges to be solved and next steps

When this work is over, reference should be made to three general references and some important challenges for the future agenda. The first one of those stresses that there has been great progress in the treatment of these topics in Latin America, especially in what respects to assessments of the magnitude of the tax expenditure. There are variations in the methodologies, but in en general the assessments are based on the *ex-post* methodology, of loss of collection. The second observation stresses that the treatment of tax expenditure is essentially focused in the transparency of expenditures in general, but there is still no generalized perception that tax expenditures are equivalent to direct budget expenditures. The third observation underscores that there is still no work to evaluate the benefits that should result as an offsetting item of the tax expenditures. Work is just beginning to measure the costs of tax concessions, but very little is being done to measure results.

It is clear that there is still a long road ahead in the future, with many challenges. Some of these challenges are the result of internal circumstances of the countries, such as, for example, moving from the calculation of tax expenditures at the federal level to the sub-national levels. There is also consensus in what respects to counting with more and better information to perform the assessments.

Other challenges are related to the effort to harmonize or make homogeneous the methodologies and procedures adopted among the different countries, both in the VAT —the most important tax in the countries of the region— and in the companies' income tax, especially those related to the promotion of investments.

Said methodological harmonization is very important in order to make it possible to make comparisons. Total uniformity is not possible, because tax expenditures reflect the idiosyncrasy of each one of the countries.

It is also primordial that progress be made in the analysis of the economic policy underlying tax expenditures, in order to look for ways to limit their proliferation, which weaken taxation systems and makes the corresponding administration complicated. Lastly, a greater effort to integrate tax expenditures with the budget is essential. It is also essential that there be limits on the tax expenditures like the ones on direct expenditures.

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ANNEX I

Coverage and structure of the tax expenditure reports in Latin America.

Country	Coverage		Reports				
	Taxes measured	**Government levels**	**Inclusion**	**Purpose and utilization**	**Legal require ment**	**Frequency**	**Classification**
Argentina	VAT, profits, contributions to Social Security, fuel, foreign trade	Federal Government	Includes all tax expenditures according to the definition.	Fiscal transparency.	No.	Annual.	By tax, by modality and by sectorial or regional promotion regime.
Brazil	Taxes on imports, on income, on industrialized products, on financial operations and on rural property, and contributions to Social Security	Federal Government	Includes all tax expenditures according to the definition.	N.I.	Yes.	Annual.	By budget function, by region, by modality and by tax.
Chile	Income tax and VAT.	Central Government	Includes all tax expenditures according to the definition.	Fiscal transparency.	Yes	Annual.	By tax, by modality and by benefitted sector or objective.
Colombia	Income tax and VAT.	Central Government	Includes all tax expenditures according to the definition.	N.I.	N.I.	Annual.	By tax.

Country	Coverage		Reports				
	Taxes measured	Government levels	Inclusion	Purpose and utilization	Legal require ment	Frequency	Classification
Guatemala	Income tax, VAT, financial products, duties, oil, tobacco, beverages, circulation of vehicles and cement.	Central Government	Includes all tax expenditures according to the definition.	Fiscal transparency.	No	Annual.	By tax and by economic sector.
Mexico	Company and physical persons income tax, value added tax (VAT); special taxes: production and services (IEPS), new automobiles (ISAN) and on posession and use of vehicles (ISTUV), fiscal stimulus.	N.I.	N.I.	N.I.	Yes	Annual.	By tax and by modality.
Peru	VAT, income tax, tax selective consumption, *ad valorem*	Central Government.	Includes all tax expenditures according to the definition.	N.I.	N.I.	Annual.	By tax, by modality and by sector.

Source: Official reports from the countries.
N.I.: No information