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Off-budget and Tax Expenditures

by

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1. Purpose and scope of the project

This paper reports the work that has been done by the OECD Secretariat on the project on off-budget and tax expenditures. The paper makes use of information that was provided at an expert meeting held in Paris in February 2004.[1] The participants provided written information in response to a questionnaire and made presentations at the meeting.

The purpose of the project is to study ways of ensuring that off-budget and tax expenditures do not impair the proper functioning of the budget. Four functions of the budget are involved:

- The authorisation function: that all money spent from the public treasury be subject to legislative authorisation.
- The allocative/distributive function:[2] that the budgetary authorities (executive and legislative branches) be able to compare and trade off all changes in expenditures and revenues.
- The macroeconomic function: that the budgetary authorities (executive and legislative branches) be able to decide on the impact upon the economy of totals and composition of expenditure, revenues and the deficit.
- The administrative function: that the budgetary authorities (executive and legislative branches) be able to control the cost efficiency of all public service delivery.

The word "budget" has a different meaning in different countries.[3] For the purpose of the present project, the budget is considered as the law or collection of laws authorising expenditures and/or the incurrence of obligations to make expenditures, to be financed from taxes or levies, as well as the specification of the sources of revenue from which expenditures are to be financed. The laws authorising the expenditures or the incurrence of financial obligations will be called appropriations laws in this paper.

In the course of the 19th and 20th centuries, a gradual development took place in many OECD member countries in the direction of more efficient budget institutions. This development has focused on three principles, which can be considered as preconditions for the fulfilment of all budget functions:

- All expenditures financed by taxes or levies and all revenues collected through taxes or levies should be in the budget (the **universality** principle).

- All expenditures in the budget to be made during a certain period of time (usually one or two years) and all revenues in the budget to be collected during that period should be presented to the budgetary authorities for the purpose of decision making in a single document (the **unity** principle).
- Expenditures and revenues should be specified separately in the budget ("gross recording") and at a level of detail required by the budgetary authorities (the **specificity** principle).

In spite of the gradual development of budget institutions in accordance with these budget principles, in most OECD member countries there remain forms of expenditure that are difficult to reconcile with these principles and thereby threaten the proper functioning of the budget. These forms of expenditures are known as off-budget expenditure and "back door" expenditure. Off-budget expenditures are financed by taxes or levies that are not in the budget (violating the universality principle). "Back door" expenditures are financed by public taxes or levies that are in the budget, but that are materially authorised by substantive laws outside the budget process (violating the unity principle).

The main forms of off-budget expenditures that can be found in OECD member countries are:

- off-budget funds;
- direct loans;
- guarantees;
- public-private partnerships (PPPs).

All these forms can potentially impede one or more function(s) of the budget.[4]

PPPs are a new development in many OECD member countries, thus making it difficult to put forward best practice proposals at this stage. If the use of PPPs continues – which is not yet sure since there is also some reluctance among a number of countries – it may be worthwhile to dedicate a special best practice study to this theme. In this paper, PPPs are not further considered.

The main forms of "back door" expenditures are entitlements (financial obligations created by substantive law) and tax expenditures (tax reliefs created by tax laws). Entitlements and tax expenditures do not necessarily create a problem for the proper functioning of the budget as long as the budget procedure provides for the opportunity to change the substantive laws creating the entitlements and tax expenditures in the course of the budget process. If that is the case, the trade-offs required by the allocative/distributive function, the control of the totals required by the macroeconomic function, and the control of cost efficiency required by the administrative function are ensured, whereas the legislative authorisation required by the authorisation function is automatically ensured because entitlements and tax expenditures are created by substantive law in the first place. Nevertheless, tax expenditures may cause a problem for the proper functioning of the budget, for two reasons. First, tax expenditures may escape the budgetary control of the prevailing fiscal rule and thereby hamper the macroeconomic and allocative/distributive functions of the budget. Second, tax expenditures are typically the responsibility of the Minister of Finance in the executive branch and the tax or financial committee in the legislative branch; this may impede the trade offs required by the allocative/distributive function and the control of cost efficiency required by the administrative function. For these reasons, this paper will consider tax expenditures separately.

2. Off-budget expenditures

2.1. Off-budget funds

Off-budget funds are special funds owned by the government that are not part of the budget and that receive revenues from earmarked levies, possibly next to other sources such as fees and contributions from the general tax fund. Earmarked levies are different from fees in that they do not reflect the market value of the services that are financed from the revenues. In particular they may be lower or higher in view of social considerations (capacity to pay or equality regardless of costs).

Off-budget funds can mainly be found in European OECD member countries. Of the countries that provided information to this project, the Czech Republic, France,[5] Greece, Hungary, Italy, and the Netherlands reported the existence of off-budget funds, sometimes large numbers of them. Off-budget funds mainly occur in the areas of social security, health care, transport, and pensions. Central and Eastern European countries report the establishment of off-budget funds in order to facilitate the privatisation process. Off-budget funds seem to be used especially in a number of European countries with a strong tradition of syndicalism or private initiative in the non-profit sector (France, Greece, Italy, and the Netherlands).

The government ownership of off-budget funds refers to economic ownership, not ownership in the legal sense. Economic ownership appears from the fact that the government can dispose of the assets of the fund, if necessary by changing the law by which it is established, without compensation. Economic ownership in this sense usually appears from the fact that a government official, possibly a minister, administers the fund or appoints the board or some member(s) of the board. In a legal sense the fund is sometimes an independent public corporation.

With respect to off-budget funds, there seem to be two distinct traditions in the OECD area, which could be termed the Anglo-Saxon tradition and the continental tradition. In the Anglo-Saxon tradition, there is, at least in theory, no place for off-budget funds. In this tradition all expenditures that are financed by taxes or levies should be in the budget. However, even in countries adhering to this tradition, exceptions occur. For example, in the United States two off-budget funds were created in the 1980s to resolve the problems of failed thrift institutions (savings and loans). In the continental tradition, off-budget funds are numerous and based on principled argument. The clearest cases are the social security and public health care funds; in these cases, the reasoning is that the premiums are paid by the social partners (employers and employed) and that the funds thus "belong to them" at least to the same degree as to the government. For the same reason, the social partners are often represented in the board of the funds.

Even in the continental tradition not all expenditures that are wholly or partially financed by earmarked levies are off-budget. If the revenue from the levy constitutes a relatively small contribution to the funding of the service or if there is no clear, organised segment of the population that pays the levy and benefits from the service, the expenditures are usually on-budget, regardless of whether the agency supplying the service is an independent public corporation in the legal sense. In a number of OECD member countries, this applies to public universities and other public establishments of higher education (partially paid by educational levies) and to public broadcasting institutions (partially paid by broadcasting levies).

On the other hand there may also be funds and independent public corporations that are not financed by earmarked levies at all, but rather by fees that are supposed to reflect market values – or at least not to exceed market values – possibly supplemented by contributions from the general tax fund. These funds or corporations are "outside the budget". They are not "off-budget" in the sense of the definition given above (because they are not financed by earmarked taxes). This applies to public universities and other establishments of higher education in countries where these establishments are funded by fees.[6] It applies also to pension funds in countries that have a largely or fully funded pension system for public employees. In these cases the expenditures of these funds are not only outside the budget, but also netted with the fees, so that only the public contributions and employer fees appear in the budget. In these cases the funds or public corporations concerned are treated on an equal footing with private corporations, for instance private schools that receive subsidies.[7]

The protection that off-budget funds offer to those who have paid the earmarked levies need not be eliminated, but ought to depend on a strict condition, namely that expenditures and revenues of the funds are subjected to regular budgetary control. This implies among other things that expenditures and revenues are published in the budget documentation, that the totals are subjected to the prevailing fiscal rule, that the rules of budgetary discipline regarding compensation of overspending apply, and that expenditures and revenues of the funds are subject to annual review as part of the budget process.

If these conditions are met, the step towards integration into the budget, as the Anglo-Saxon tradition requires, is not very large. However, it is not solely a question of presentation. The essential point is that special funds are based on the idea that certain services are to be paid by the users, although considerations of solidarity require that the prices paid do not reflect market value (are not "fair" in that particular sense) but rather cross-subsidising. This implies that, in so far as macroeconomic, allocative/distributive or administrative considerations require adjustments in connection with the budget process, these adjustments should in principle always apply to levies and service levels simultaneously and not to levies and service levels viewed in isolation. The protection offered by the special fund consists in the special way in which it is to be co-ordinated with the budget (levies and service levels simultaneously and not in isolation). It does not consist in the fact that expenditures or revenues are immune to budgetary control. If the special fund is an independent public corporation, this form of protection gets special emphasis, because its board can then speak out against changes in earmarked levies that would unduly increase its deficit or surplus or increase its dependence on contributions from the general tax fund.

As far as the application of fiscal rules is concerned, the revenues and expenditures of the funds should be presented in the budgetary documentation in consolidated form with the revenues and expenditures that are on-budget. As far as the European countries are concerned, the rules in the 1995 European System of Accounts (ESA 95) prescribe that off-budget funds should be consolidated. Social security (including public health insurance) should be presented separately according to ESA 95, but in such a way that summing does not lead to double counting.[8]

2.2. Direct loans

Direct loans are loans financed from taxes or levies. In general, the conditions of direct loans are more favourable to the borrower than those of bank loans in the private sector because otherwise there was no reason for public lending. It may also be the case that the risk is so high that no loan could be obtained in the private sector at all. The subsidy element in public loans may concern interest rates below market rates or default risk and favourable repayment conditions in so far as they are not reflected in the interest rate or special risk fees (for instance acquittal under certain specified conditions, such as study loans).

Many OECD member countries have gone through successive stages of credit reform in the last two decades. This applies, for instance, to the United States and various countries of the European Union. In a somewhat stylised way, these stages can be described as follows:

- traditional cash budgeting;

- credit budgeting;
- credit subsidy budgeting.

In **traditional cash budgeting**, all cash streams associated with the loans are recorded in the budget at the moment they are expected to occur and in the accounts at the moment they actually occur. The cash outflow includes the disbursement of the principal; the cash inflow includes interest, risk fees (possibly included in the interest) and repayments of the principal. This procedure has important disadvantages: depending on the wording of the appropriations legislation, loan programmes can be continued on a revolving fund basis without legislative authorisation; disbursement and repayment of loans have different macroeconomic effects than regular expenditure and receipts; the real subsidy costs of loan programmes are not revealed so that such programmes cannot be traded off against other programmes on an equal basis; and the real subsidy costs of loans cannot be scrutinised in the budget process, for instance by cost-benefit analysis.

Some OECD member countries have put credit programmes in separate sections of the budget (**credit budgeting**). Disbursements of loans and repayments are excluded from the domain of the fiscal rule, not only if the fiscal rule is on an accruals basis but also if it is on a cash/obligations basis.[9] On the other hand, loan disbursements and repayments are on-budget and therefore still subject to budgetary control (albeit not at full costs). Credit budgeting has solved the problem of different macroeconomic effects and has eliminated improper elements from the public deficit. It has also made an end to the automatic authorisation of revolving funds. However, it has not removed the other disadvantages inherent to traditional cash budgeting. In particular it does not lead to the revelation of real subsidy costs, which impedes the allocative/distributive and administrative functions of the budget.

Credit subsidy budgeting is the final stage of reform toward which some countries have evolved (New Zealand, United States).[10] Under credit subsidy budgeting, the expected incoming and outgoing cash flows during the lifetime of the loans are all discounted and the resulting balance is authorised as subsidy costs at the moment the loan is made.[11] The financial account on which the cash flows related to the loan are recorded is excluded from the domain to which the fiscal rule applies.[12] These cash flows include the appropriated subsidy costs (as a receipt). Credit subsidy budgeting implies that programme funds require authorisation for the new loans made in each year. Furthermore, it makes it possible to compare the costs of credit programmes to the cost of other programmes. Finally, it makes it possible to review the subsidy costs of credit programmes in the course of the annual budget process, for instance by cost-benefit analysis.

Although credit subsidy budgeting is the proper way of treating credit programmes, in practice it is not always easy to execute. Some difficulties are:

- Administrative costs remain excluded (because they can supposedly be controlled during the lifetime of the loan), but this complicates trade-offs and cost-benefit analysis.
- There are the usual problems of choosing the appropriate public discount rate (no proper risk margin).
- Default risk and other risk elements of the loan are hard to estimate; this requires in theory statistical models for each type of loan and advanced risk assessment methods such as options pricing.[13]
- The system requires periodic re-estimation and additional appropriation of subsidy cost increases which leads to administrative costs. New Zealand and the United States both provide the additional appropriation automatically. The United States experience shows that re-estimates can be very large, larger than the initial costs of new loans. These difficulties suggest that estimates are subject to considerable uncertainty. However, studies by the Congressional Budget Office and the General Accounting Office have not found evidence of systemic bias in the United States. The reason may be the checks and balances built into the United States budgetary institutions. This does not rule out bias in particular programmes or at certain times. Other countries that try credit subsidy budgeting may be confronted with less reliable estimates. This could lead to using robust estimating rules (or rules of thumb) which are easily comprehensible to politicians and citizens even if less sophisticated than desirable.

2.3. Guarantees

Loan guarantees are guarantees by the government to non-governmental lenders in case of debtor default. Loan guarantees are supposed to include public insurance of loans by non-governmental lenders against an insurance fee. Loan guarantees are also supposed to include the implicit guarantee that is inherent to loans by public enterprises like government-owned banks.[14]

All countries that provided information to this project report the amounts of loan guarantees in their budget documents, but not so many report subsidy costs when the guarantees are made. New Zealand,[15] Norway and the United States include the subsidy costs in the expenditure estimates. Germany includes a provision in the budget, when there is a “strong possibility” that fees will not cover the default risk.

Table 1 shows the amount of outstanding guarantees of selected OECD countries in 2003 as a share of total expenditure of general government (consolidated expenditure of central government, subnational government and the social insurance sector).

Table 1. **Outstanding guarantees as share of total general government expenditure (2003)**

	Percentage of total general government expenditure
Australia	58.2
Canada	1.1
Czech Republic	36.3
Germany	30.9
Greece	14.7
Hungary	14.4
Japan	29.8
Netherlands	38.0
New Zealand	1.0
Norway	8.6
Poland	9.0
Spain	3.5
United States	31.1

Source: OECD.

If subsidy costs are not reflected in the budget at the moment the loans are made, guarantee programmes cannot be traded off against other programmes on an equal basis and the real costs of such programmes cannot be scrutinised in the budget process, for instance by cost-benefit analysis.

The same reasoning that motivates credit subsidy budgeting provides the motive for **guarantee subsidy budgeting**. This reform requires similarly that the expected incoming and outgoing cash flows during the lifetime of the guarantee are all discounted and that the resulting balance is authorised as subsidy cost at the moment the guaranteed loan is made by the private lender. Again, the financial account on which the cash flows related to the guarantee are recorded is excluded from the domain to which the fiscal rule applies. The incoming cash flow includes risk fees and the appropriated subsidy costs; the outgoing cash flow includes compensation to the private lenders for default.

Guarantee subsidy budgeting implies that guarantee programmes require authorisation at each occasion that new guarantees are made. Furthermore, it enables comparison of the costs of guarantee programmes to the costs of other programmes (for instance, direct loans to the same borrowers, provided that direct loans are also budgeted on a subsidy cost basis). Finally, it enables scrutiny of the subsidy costs of guarantee programmes in the course of the annual budget process, for instance by cost-benefit analysis.

Although guarantee subsidy budgeting is the proper way of treating guarantee programmes, in practice it is not always easy to execute for the same reasons that credit subsidy budgeting is not easy to execute: administrative costs remain excluded, the public discount rate may not reflect a proper risk margin, default risk may be hard to estimate, and the system requires annual re-estimation and additional appropriation – which in some countries, however, may be automatically provided.[16] Again this could lead to using robust estimating rules (or rules of thumb) which are easily comprehensible to politicians and citizens even if less sophisticated than desirable.

A major reason why the government may prefer a guarantee programme to a direct loan programme is that a guarantee programme can assign part of the risk originally associated with the loan to the private lender. The government steps in only if the risk is exceptionally high or of a nature that private lenders are not willing to cover (for instance, political risk in case of export credit). In order to prevent abuse of guarantee programmes, it is therefore necessary that the private lender shares at least a part of the risk.[17]

3. Tax expenditures

3.1. Identification of tax expenditures

Tax expenditures can be used as an instrument of government policy and may often be substitutes for direct expenditures. At the beginning of the 1970s, only Germany and the United States recorded tax expenditure in special accounts and reported them to parliament. By 1983, Australia, Austria, Canada, France and Spain were also regularly identifying tax expenditures and reporting them. In 1996, almost all OECD member countries reported tax expenditures. The OECD published studies on tax expenditures in 1984 and 1996 (OECD, 1984; OECD, 1996), and issued a special feature about tax expenditures and tax/GDP ratios in the 2003 edition of the revenue statistics (OECD, 2003). The *OECD Best Practices for Budget Transparency* (OECD, 2002) contain some basic guidelines for the treatment of tax expenditures.

A tax expenditure can be defined as a transfer of public resources that is achieved by reducing tax obligations with respect to a benchmark tax, rather than by a direct expenditure.[18] It has often been observed that this definition has not led to international comparability of tax expenditures, because of differences of opinion about the benchmark tax.

Tax expenditures may take a number of different forms:

- exemptions: amounts excluded from the tax base;
- allowances: amounts deducted from the benchmark to arrive at the tax base;
- credits: amounts deducted from tax liability;
- rate relief: a reduced rate of tax applied to a class of taxpayer or taxable transactions;
- tax deferral: a relief that takes the form of a delay in paying tax.

The transfer of resources emanating from a tax expenditure may be bound to the purchase of a certain good (in which case the tax expenditure is a tax subsidy) or unbound (in which case it is a tax transfer).

The identification of tax expenditures is a classification exercise: dividing the provisions of the tax laws into a benchmark tax and a series of deviations from that benchmark tax. According to the 1996 OECD report, the benchmark tax includes: the rate structure, accounting conventions, the deductibility of compulsory payments, provisions to facilitate administration, and provisions relating to international fiscal obligations. However, these indications leave open many questions.The problem is more profound than the lack of agreement about the types of provisions that belong to the benchmark tax; it is rooted in different views of **the normative tax base**. The normative tax base is the monetary sum in the hands of private households to which the tax ought to be applied, for instance: income, value added, profit, sales. Views of the appropriate normative tax base not only differ between national tax systems, but also between interpretations of the same national tax system by citizens and politicians. If the benchmark for the identification of tax expenditures is equated with the normative tax base, differences of opinion concerning the normative tax base will necessarily translate into differences of opinion about the identification of tax expenditures. Since this approach (equating the benchmark with the normative tax base) has proved to be less fruitful in the past, it is proposed here to distinguish between the benchmark and the normative tax base.

The distinction can be illustrated by the concept of "income" which serves as a normative tax base in many income tax systems. In principle it is possible to define this concept quite precisely. The standard is the Haig-Simons or accretion definition of income which states that income is the difference in wealth of a household between two points in time, plus the value of consumption during that period. However, many citizens and politicians would view income in this sense only as a first approximation of what the fiscal system really ought to tax. Therefore the tax code needs provisions to bridge the difference. The normative tax base may, for instance, take into account:

- Capacity to pay: In this view, special provisions have to exclude everything from the tax base which diminishes the capacity to pay, in particular all costs of necessities for which the taxpayer cannot or should not be held responsible: exceptional health costs, maintenance of dependent family, study costs of children, etc.
- Consumption: In this view, the actual income tax is intended to be a compromise between a comprehensive income tax and a comprehensive consumption tax; in this view special provisions have to exclude certain forms of saving from the tax base (pension premiums, saving plans, etc.) as part of the compromise.[19]

- Analytical income: In this view, income should only be taxed if the tax cannot easily be evaded; this leads to taxation at the source and the application of different rates to different sources of income reflecting the costs of evasion; in this view special provisions concerning rate differences between sources of income have to be seen as inherent to the aims of the tax.

The provisions required to bridge the difference between the comprehensive concept of income and a particular normative tax base are part of the definition of the normative tax base and not exceptions to it. However, if opinions differ about the normative tax base, opinions will also differ about what the exceptions are.

Differences of opinion may also occur with respect to the normative base of other taxes, for instance the VAT. In one view, special provisions are required to ensure that a lower rate is applied to the necessities of life (or to exclude the necessities of life from the regular tax base and to include them in a special tax base), taking into account the typical composition of consumption packages of family households and based on capacity to pay. In another view, however, the VAT is considered as a tax that has value added by definition as its exclusive tax base. A special provision for the necessities of life is not a part of the definition of the normative tax base but an exception to it.

Similarly, differences of opinion may occur with respect to the normative base of excise taxes. In one view, such taxes not only have allocative effects but are also aimed at these effects (regulatory taxation). In particular, they may be supposed to decrease the demand for goods that have negative external effects on third parties (for instance, the gasoline tax) or on the consumers themselves (for instance, the levies on alcohol and tobacco). In this view, special provisions are required to ensure that a lower rate is applied to a less harmful product (or to exclude a less harmful product from the regular tax base and include it in a special tax base), for instance, lead-free gasoline. A different view is that excise taxes are not considered as regulatory taxes. A special provision for a less harmful product is not part of the definition of the normative tax base but an exception to it.

Apart from the nature of the normative tax base, its interpretation may be controversial. A well-known dispute in this respect is the treatment of mortgage interest. One interpretation of family income says that a family receives a flow of housing services from an owner-occupied home equal in value to the rent that the property could earn in the market. After deducting the costs of earning that income, including mortgage interest, the remainder – an imputed net rent – is part of Haig-Simons income. In this view, exemption of the mortgage interest is not an exception to the normative tax base, but exemption of imputed rent is. Another interpretation of family income says that the purchase of the family home is the purchase of a durable consumption good. In this view, mortgage interest should be included in the tax base, but imputed rent should not. In this view, exemption of mortgage interest is an exception to the normative tax base, but exemption of imputed rent is not.

It appears then that the definition of the normative tax base is a very political exercise. For this reason, attempts in the past to define tax expenditures in terms of the normative tax base ("tax expenditures are exceptions to the normative tax base") have not been very successful. They have led to neither international nor domestic agreement about the concept of tax expenditure. Thus the definition of a tax expenditure proposed above abstracts from the normative tax base. The definition uses rather the more neutral yardstick of the "benchmark tax". Tax expenditures in this sense are deviations from the benchmark tax. The benchmark has no normative significance. Deviations from it in order to arrive at the normative tax base may be perfectly appropriate. Tax expenditures may thus also be appropriate.

Characteristics of the benchmark are that it is comprehensive and unique. Examples of benchmarks are: comprehensive income (the Haig-Simon concept), comprehensive consumption, value added, sales in a certain product class. If an excise is levied on a harmful product (for example, pure alcohol), no exceptions for less harmful products are necessary. In practice excises are almost never levied on the harmful ingredient *per se*. The normative tax base will then deviate from the benchmark.

The purpose of tax expenditures is not only to demarcate the normative tax base as it is seen in a particular country at a particular time, but also to ensure that the tax office executes certain subsidies and transfers. Indeed there may be good reasons for the administration of subsidies and transfers by the tax office:

- It precludes unnecessary transfers of resources, thus reducing administrative costs.
- It diminishes the incentives for tax evasion.
- The tax office has unique expertise in the administration of transfers and subsidies and unique information about the characteristics of households and businesses which may be relevant for the administration of transfers and subsidies, such as address, income, household composition, and nationality.
- Concentration of the administration of subsidy and transfer entitlements in the tax office leads to economies of scale.

On the other hand, there may also be good reasons why subsidies and transfers should not be enacted as tax expenditures:

- Exemptions, allowances, rate reliefs and deferrals provide benefits in proportion to the tax base of a family or business household. For instance, a high-income household benefits more from an exemption in the income tax than a low-income household; it only makes sense to enact a subsidy or transfer as a tax expenditure if this effect is desired.

- Tax credits provide equal benefits to households, regardless of the tax base, but can easily lead to negative tax liabilities, which may be difficult to administer: if they are non-wasteable (refundable), they should actually be paid out.
- It is important that the tax office not be overloaded with the administration of tax expenditures which may endanger its primary task, namely the collection of revenues.

Although it seems premature to formulate a best practice list of criteria in this respect, policies in a number of OECD member countries suggest that the following considerations may be relevant:

- The comparative advantage of the tax office has to be sought primarily in the area of means-tested (income-dependent) subsidies and transfers, where tax return data can be used to determine eligibility and the amounts transferred.
- Tax expenditures should only be used for entitlements (not for programmes with administrative discretion in providing subsidies or transfers).
- It is questionable whether the tax office should be used for the administration of entitlements that may lead to net payments by the government to family and business households. This might imply among other things that subsidies and transfers to persons or households that do not pay tax should be enacted as regular expenditures rather than as tax expenditures.

3.2. Budgetary control of tax expenditures

Although there may be good reasons for tax expenditures, it is also important that tax expenditures be subjected to budgetary control in the same way as regular expenditures are. A less rigorous control of tax expenditures than of other expenditures will create an incentive to enact subsidies and transfers in the form of tax expenditures, regardless of the objective considerations that could justify such a choice. This would jeopardise the allocative/distributive, macroeconomic and administrative functions of the budget and could endanger the primary revenue collection function of the tax system.[20]

For all functions of the budget it is important that all tax expenditures are estimated in addition to tax revenues and integrated into the expenditure documentation that is presented for consideration to the budgetary authorities. Most countries that provided information for this project provide tax expenditure estimates as part of the annual budget documentation, often including multi-annual estimates.

As far as the macroeconomic function is concerned, it is important that tax expenditures do not escape the control of the fiscal rule. There are basically six types of fiscal rule in OECD member countries:[21]

1. Nominal overall deficit rules;
2. Structural overall deficit rules;
3. Medium-term deficit rules with multi-annual expenditure caps;
4. Nominal operating or current[22] balance rules;
5. Structural operating or current balance rules;
6. Medium-term operating or current balance rules with multi-annual expenditure caps.

These fiscal rules offer different opportunities to escape budgetary control through the use of tax expenditures.

Under nominal or structural deficit or operating/current balance rules (types 1, 2, 4 and 5), a total expenditure cap is set annually in view of tax revenue estimates. Since tax expenditures are reflected in revenue estimates, they cannot escape the fiscal rule if changes in estimates are taken into account when the expenditure cap is set. However, during budget formulation, expenditures tend to be treated differently than revenues. In general, taxes are less flexible than expenditures, and in periods of fiscal stress the first effort is usually directed at the adjustment of expenditures rather than of revenues. Also, overspending on expenditures during the fiscal year or budget period is treated differently than shortfall of revenues.[23] In order to treat tax expenditures in the same way as regular expenditures rather than as (a negative) part of revenues, it is therefore important that under such rules tax expenditures are included in the total expenditure cap or – what amounts to the same – that a special cap is set for tax expenditures and that under nominal deficit and operating/current balance rules, overspending on tax expenditures during the fiscal year or budget period is fully compensated.

Under medium-term rules with multi-annual expenditure caps (types 3 and 6), the caps for total expenditures cannot be changed in the annual budget process.[24] The annual deficit or operating/current balance is allowed to fluctuate (possibly under the proviso that a critical ceiling is not exceeded).[25] Without special provisions, tax expenditures under such rules can escape the control of the fiscal rule. Therefore it is necessary that under such rules tax expenditures are included in the total expenditure cap of each year or – what amounts to the same – that a separate cap is set for total tax expenditures of each year and that all changes in tax expenditures are fully compensated, at least in so far as they originate in policy change (change of the tax laws)[26] and regardless of whether they occur during the fiscal year or budget period or in the annual budget process.

For both the allocative/distributive and administrative function of the budget, it is important that tax expenditures are reviewed in the same way as regular expenditures. This applies to annual scrutiny in the course of the regular budget process as well to special evaluation procedures. Annual scrutiny in the course of the budget process concerns the activities of financial staff of ministries which may lead to advice to the spending ministers, and the activities of the central budget bureau which may lead to advice to the minister of finance, the prime minister or the president. Special evaluation procedures may concern studies under the responsibility of the spending minister or studies under the responsibility of the budget bureau or the office of the prime minister or president. In the latter case, evaluations often have a broader aim than the control of cost efficiency. They also look at allocative efficiency and typically ask questions such as: what would happen to this programme if funding is reduced by 10 or 20% or if the problem were abolished (this is sometimes called "programme review" as a type of evaluation). Canada, the Netherlands, New Zealand and the United Kingdom apply special evaluation procedures and/or programme review to their tax expenditures.

For all functions of the budget it is important that tax expenditures are assigned to ministries and that individual ministers are made responsible for them. Since tax expenditures must not undermine the efficiency and effectiveness of the tax system, the minister of finance should always be co-responsible. The minister of finance can also be the (only) responsible minister for tax expenditures in his/her own area of responsibility. Legislative proposals concerning tax expenditures should always be signed by the responsible minister and the minister of finance together. Objections of the minister of finance against changes of a specific tax expenditure can never be used as an argument against adjustment of other (tax) expenditures if a ministry is required to diminish its expenditures or find compensation for overspending.

3.3. Estimation of tax expenditure

Tax expenditure estimates can be made by three different methods:

- Initial revenue loss (gain):[27] the amount by which tax revenue is reduced (increased) as a consequence of the introduction (abolition) of a tax expenditure, based upon the assumption of unchanged behaviour and unchanged revenues from other taxes.
- Final revenue loss (gain):[28] the amount by which tax revenue is reduced (increased) as a consequence of the introduction (abolition) of a tax expenditure, taking into account the change in behaviour and the effects on revenues from other taxes as a consequence of the introduction (abolition).
- Outlay equivalence: the direct expenditure that would be required in pre-tax terms, to achieve the same after-tax effect on taxpayers' incomes as the

tax expenditure, if the direct expenditure is accorded the tax treatment appropriate to that type of subsidy or transfer in the hands of the recipient.

The method of **initial revenue loss (gain)** is based upon the assumption that the introduction or abolition of tax expenditure does not affect the behaviour of taxpayers and the revenues from other taxes.[29] It is therefore the easiest estimation method. In general, taxpayers will change their behaviour in reaction to the introduction of a tax expenditure (increase their demand for the tax-subsidised good or increase/decrease their demand for income[30]). This change in behaviour is often also intended by the government. Furthermore, there may be second-order effects on other sectors or on the economy as a whole. Tax expenditures may for instance lead to increased growth due to a lower general tax level. Behaviour will be affected in the opposite direction when a tax expenditure is abolished. Taxpayers' behaviour should not be confused with interaction of tax expenditures with other parts of the tax system. For instance, some taxpayers may end up in a lower bracket of the income tax as a result of a new tax expenditure and consequently face a lower marginal rate. This will also imply that for these taxpayers the value of existing tax expenditures is reduced. When using the method of initial revenue loss (gain), it is often assumed that the exempted income is taxed at the same marginal rate as the remaining (*c.q.* restituted) taxable income, or in other words at the same marginal rate that the taxpayers face after the introduction (*c.q.* abolition) of the tax expenditure. Furthermore, this also implies that the value of the other tax expenditures is unchanged as a result of the introduction of the new (abolition of the existing) tax expenditure.

The method of **final revenue loss (gain)** takes the behavioural change and the change in tax interaction into account.[31] Of course this makes the method much more complicated to apply in practice. Although the method is superior in principle, many governments seem to assume that the accuracy that may be gained is not worth the efforts required to apply the method.

Outlay equivalence is a measure that leaves the net budget impact (on the surplus or deficit) and the after-tax incomes of taxpayers the same in the situation with tax expenditure and in the situation with equivalent outlay but without tax expenditure. Outlay equivalence takes into account the fact that regular transfers are sometimes estimated gross of the tax paid by the recipient, whereas tax transfers are by definition net of tax. In order to estimate these tax expenditures on the same basis as regular expenditures, it is necessary in those cases to add the tax that is typically levied upon the regular transfer. Otherwise, it appears as if the tax expenditure is a cheaper way to get the same amount of cash into the hands of the recipient than the regular expenditure. In general, tax equivalence only differs from initial revenue loss (gain) in the case of tax transfers (as opposed to tax subsidies).[32]

Moreover, both methods only differ if the analogous expenditure transfer is taxed.

Table 2 illustrates the various measurement methods for the case of an income of 100, a tax exemption of 25 and a progressive income tax with rates 40% and 50% below and above the threshold of 75. The large size of the tax exemption and the choice of the threshold serve to highlight the differences between the estimating methods. In reality the differences will be less dramatic.

Table 2. **Estimation methods for tax expenditure**

		With tax expenditure	Without tax expenditure		
			Initial revenue gain	Final revenue gain	Outlay equivalence
1	Before tax income	100	100	100	100
2	Exemption	25	0	0	0
3	Equivalent outlay	0	0	0	25
4	Taxable income (1-2+3)	75	100	100	125
5	Tax revenue	30	40	42.5	55
6	After-tax income (4-5+2)	70	60	57.5	70
7	Budget impact (5-3)	30	40	42.5	30
8	Tax expenditure		10	12.5	25

Source: OECD.

It is sometimes said that tax expenditures **cannot be added up**. This would appear in the case of a multi-bracket income tax and two tax exemptions. If one exemption is introduced (or removed), some taxpayers would be moved into a different tax bracket and thus the second tax expenditure would be decreased (or increased). If two exemptions are introduced (or removed) at the same time, the change in tax liability would be more (or less) than the sum of the two separate tax expenditures, because each is estimated assuming that the other remains in force. If the rate structure of the tax is progressive, which is usually the case, tax expenditures except tax credits will have a larger value to the extent that more tax expenditures apply to the same tax base. This effect, however, should be kept in mind while interpreting sums of tax expenditure but need not be seen as an impediment against adding up.[33] In this connection, estimates of regular expenditures are also dependent on the existence of other expenditures, apart from behavioural effects. For instance, a reduction of unemployment benefits will immediately increase the obligations concerning welfare (without any intervening behavioural change). Nevertheless expenditures are routinely added up. However, the interdependence of the estimates has some consequence if the tax expenditures are assigned to the ministries. In general the responsibility for the estimates cannot be left to the spending ministries, but should remain with the ministry of finance.

Notes

1. The following countries were represented at the expert meeting and provided written information: Canada, the Czech Republic, France, Germany, Greece, Hungary, Italy, Japan, Mexico, the Netherlands, New Zealand, Norway, Poland, Spain, Sweden, and the United States. Australia and the United Kingdom provided written information.
2. The allocative/distributive function is often called the "allocative" function (in a broad sense). However, in view of the important role of the budget in the redistribution of income, it seems preferable to distinguish the distributive aspect. For the role of the "distributive branch" of the budget, see Musgrave (1959).
3. For instance, in the United Kingdom the "budget" has a different meaning than in the United States. In the United Kingdom, the budget is a statement by the Chancellor of the Exchequer that treats taxation and tax estimates (Likierman, 1988). In the United States, the term "budget" commonly means the estimated or proposed receipts, outlays, deficit and authority to incur obligations for a year or a period of years. The term may also be used for the documents that transmit the President's proposal.
4. It has been observed that certain regulations have much in common with off-budget expenditures, especially when they put financial burdens on private sector households such as business enterprises and families. However, there is an essential difference, namely that these financial burdens do not take the form of taxes or levies. It seems preferable, therefore, to consider regulations as forms of government intervention *sui generis*, which do of course require control, but separate from budgetary control (regulatory control).
5. France has reported a "very large number" of *administrations publiques* (APU), but not all of these are off-budget funds (many not being financed by earmarked levies). However, there are also a large number of off-budget funds in France.
6. The distinction between educational fees and levies may be subtle, especially since fees, too, may be regulated by law. An important indication is whether they are paid to the government or to the establishment.
7. The same reasoning underlies the rule in the United States that the expenditures of governmental agencies that are partially or fully funded by fees should appear on a net basis (netted with the fees) in the budget.
8. Net public contributions to the funds are neither counted as central government expenditures nor as fund revenues.
9. If the fiscal rule is on an accruals basis, disbursements and repayments are excluded from the deficit automatically (because they are financial transactions). For instance, the ESA 95 rules for the computation of the general government deficit exclude financial transactions.
10. Germany includes the interest subsidy in the budget, but this does not seem to take into account the real risk margin that should be included in the interest.
11. The loan transaction date is evident if the estimates are accruals based or obligations based in a cash/obligations based budget (for instance, in the United States, where budget authority or the authority to incur obligations is

appropriated). It may be less evident if the estimates are cash based (regardless of whether cash is appropriated, as in most European countries, or whether it is provided as information, as in the United States). However it is logical to include subsidy costs also upfront in cash estimates, because that is the year when the costs are made and the (only) year to which the estimates apply.

12. In the United States, the financial accounts that record the cash flows are considered as outside the budget (in concept, thus not off-budget) but this need not necessarily apply to other countries.

13. See, for instance, Duffie and Singleton (2003).

14. The *Manual on Fiscal Transparency* of the International Monetary Fund (IMF, 2001) treats loans by the central bank, government-owned financial institutions and public enterprises under the heading of "quasi-financial activities" (together with activities of those enterprises that resemble subsidies). The *Manual* recommends in essence the same approach for those loans as proposed here for guarantees.

15. In New Zealand, not all guarantee costs are quantified, but the most important ones are. Reporting about guarantees is very extensive: monthly in accounting statements; bi-annually in the Crown financial statements and the budget and December forecasts; immediately in the government "Gazette".

16. This might be realised through permanent indefinite appropriations. In countries that do not have the legal possibility of indefinite appropriations, it may be possible to create a special provision in the budget law that allows indefinite appropriation for credit programmes.

17. Norway holds the principle that guarantees should be "self-financing", meaning that risk fees should cover the costs. This raises the question of why the guarantee programmes cannot be left to the private insurance sector.

18. OECD (2003).

19. For the differences between taxing income and consumption, see Bradford (1984).

20. The authorisation function raises no particular problem because the tax side of the budget is subjected to annual budgetary review anyway.

21. Other classifications are also possible. See Banca d'Italia (2001) for various approaches, classifications and surveys. OECD (2004) presents a survey of the fiscal rules of all OECD member countries.

22. Operating balance allows borrowing only for investment net of depreciation. Current balance permits borrowing to finance gross investment. Operating balance is defined in terms of an accruals-based budget, current balance is defined in terms of a cash/obligations based budget.

23. Tax expenditures are comparable to entitlement expenditures. The treatment of setbacks and windfalls (lower or higher expenditures than estimated in the budget) in entitlement expenditures differs between countries that use nominal or structural deficit or operating/current balance rules. In general, it would seem logical that overspending on entitlements and tax expenditures due to setbacks would have been compensated under nominal rules and that it could be left uncompensated under structural rules. Spending on entitlements and tax expenditures often fluctuates with the business cycle, and structural norms aim to accommodate the business cycle. Since deficit and operating/current balance rules set ceilings, not targets, windfalls need not allow new expenditures.

24. The cap for total expenditures is usually divided over sectors or ministries. The sectoral or ministerial sub-caps can be changed in the annual budget process through reallocation to accommodate new developments.
25. In Sweden and the Netherlands, the expenditure caps can and must be decreased if the critical ceiling would be exceeded.
26. The treatment of setbacks and windfalls in entitlements expenditures differs between countries that use medium-term rules with expenditure caps. In the United States under the Budget Enforcement Act, setbacks in entitlements did not need to be compensated under the PAYGO rule, and windfalls could not be used for new expenditures. In the Netherlands, there is asymmetric treatment of setbacks and windfalls in entitlements expenditures: setbacks have to be compensated; windfalls can be used for compensation of setbacks but not for new expenditures.
27. In previous OECD studies (OECD, 1984; OECD, 1996) this method was called "revenue forgone". This name was not very illuminating and has therefore been abandoned.
28. In previous OECD studies (OECD, 1984; OECD, 1996) this method was called "revenue gain". This name was not very illuminating and, when applied to the introduction of a new tax expenditure, was incomprehensible; it has therefore been abandoned.
29. This method yields different estimates depending on whether the tax expenditure is introduced (initial revenue loss) or abolished (initial revenue gain). The reason is that in general tax expenditures do affect behaviour and tax interaction, so that behaviour and tax interaction will be different with and without tax expenditure. In general, initial revenue loss will lead to a higher estimate than initial revenue gain because with tax expenditure, behaviour tends to lead to a larger tax base (this effect being stronger than tax interaction which may lead to a lower marginal rate).
30. If a tax transfer is introduced, the substitution effect will work in the direction of more income and less leisure. However in the case of the leisure *vs.* income choice, the income effect tends to be strong and may overwhelm the substitution effect.
31. The method of final loss yields the same estimate if it is applied to the introduction or the abolition of a tax expenditure. This is the case because the behavioural situation and tax interaction of both situations (with and without tax expenditure) are compared.
32. Tax subsidies do not differ from regular subsidies in the way the subsidised goods or the incomes of those who sell or purchase them are taxed. VAT and sales taxes are levied on market prices after subsidy. Income or corporate tax on sellers is levied on profit after subsidy. Income tax on purchasers is levied on income before the purchase of the subsidised good.
33. See, for instance, Perry (1995).

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