TAX EXPENDITURES

Between accuracy and practicality

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Kalle Määttä

1 INTRODUCTION

The issues raised are related to the theory and practice of tax expenditure policy. Presentation is divided into following parts: definitional problems, reporting of tax expenditures, legal issues regarding tax expenditures, and evaluation of tax expenditures. The questions have been overlapping and hence there is no distinction between economic and legal general report.

The general report will show, among other things, that even though the first tax expenditure analysis was presented in *Germany* more than 50 years ago and even though the concept of tax expenditures has spread worldwide, there are still sticky problems regarding even the definition of tax expenditures in a consistent way. For instance, extending tax expenditure analysis to excise duties has culminated the definitional problem. If the diesel fuel tax rate is lower than the petrol tax rate, is the first one a source of tax expenditure, or the latter one a source of tax sanction? Or would it be more clear-cut to pass over excise duties in the tax expenditure analysis?

Moreover, the measurement of the magnitude of tax expenditures is a manifold problem. In public discussion, the total amount of tax expenditures is often referred to in spite of the fact that summing up the estimates of individual tax expenditures to arrive at a total is a wrong method. All-important is that the revenue foregone method – most often applied calculation method in OECD countries - does not take into account the behavioral responses of these expenditures. For example, tax expenditure for household services under personal income taxation may lead to large losses of tax proceeds if behavioral impacts will be omitted from the calculation. But what is the net impact if this tax expenditure has reduced shadow economy significantly?

In general, tax expenditure analyses around the world differ widely both when comes to definitions and applied methodology. This can make tax expenditure analyses from different countries incomparable and a comparison of the number and amount of tax expenditures can be rather misleading. As *Tax Expenditures in the Nordic Countries* (2010) mentions, the general principles in defining and calculating tax expenditures are quite similar, but there are differences in reporting practices and the reasoning behind tax expenditure calculations. Moreover, the data used may be of varying quality, which calls for caution when interpreting magnitudes of tax expenditures. Hence, the core is the same but the details vary.

The purpose is to highlight the place of Nordic Countries among OECD countries in tax expenditure policy. Against this background, the tax expenditure analysis in the general report is – or it attempts to be -

comparative in nature.[1] On the other hand, any comparison of data across countries is subject to profound limitations, as *OECD* (2010d) notes. One reason is that benchmark tax systems vary across countries and also within countries over time, making comparisons demanding and difficult. There is no consensus on this definition, and thus, some tax provisions that are regarded as tax expenditures in some countries may not be in others.[2] Moreover, countries differ as to whether they use a broad or narrow definition of tax expenditures and whether the definition of tax expenditures should be limited to selective benefits to favored activities or taxpayers or to provisions that substitute for a spending program.[3] *Rigsrevisionen* (2007) – Danish National Audit Office - has stated in this respect as follows: "It cannot, due to differences in the countries' tax systems, be concluded that what is considered a tax expenditure in one country is also treated as such in the next country."

In addition, there are many other difficulties in international comparability. For example, while most countries use the revenue forgone method for calculating tax expenditures, *Denmark* and *Sweden* have applied the outlay equivalent method for a number of tax expenditures and *Australia* has included some estimates using the revenue gain method from 2008.[4] Moreover, some differences in tax expenditure values across countries may reflect different statutory rates rather than divergences in the number and extent of provisions.[5] Furthermore, countries differ in preferences regarding income redistribution, in the strength of their tax administration, and in their tax revenue requirements. All these different factors have an impact on the choice between a broad base and use of tax expenditures, making international comparison even more difficult. Additional limitations to comparability include, among other things, that while some countries report tax expenditure estimates for all levels of governments, others only report those related to central government. Moreover, the range of taxes covered in tax expenditure reports tends to be incomplete. For example, only few countries include tax expenditures related to social security contribution regimes in tax expenditure reports.[6]

On the other hand, the analysis of tax expenditures in the Nordic countries is possible to be related to the "*ideal – but realistically implementable - tax expenditure reporting*." To achieve its goals of improving transparency, encouraging accountability, and saving money, a tax expenditure report might have following features.[7]

Accessibility. The report should be:

- Published regularly.
- Incorporated into the budget process.
- Available on the Web.

[1] See also Whitehouse (1996), 68 – 69, who mentions that considerable variability across countries exists in the determination of tax expenditures.
[2] See e.g. OECD (2010b), 39.
[3] See e.g. Toder (2005).
[4] See also OECD (2010b), 49.
[5] See also Valtion taloudellinen tutkimuskeskus (2010), 7, which emphasizes that differences in tax systems make international comparison difficult.
[6] OECD (2010b), 50.
[7] Levitis et al. (2009). See also Leachman et al. (2011).

Scope. The report should include:

- Tax expenditures related to all taxes.
- All tax expenditures, including those with lower costs or those benefitting few taxpayers.
- Explicit and implicit tax expenditures.

Details. The report should include:

- The cost of the tax expenditure, using current data.
- The cost in future years, to allow comparison with other proposed expenditures.
- A description of the tax expenditure.
- The relevant legal citation and year of enactment.
- Detail on the taxpayers who benefit from the tax expenditure.
- Separate reporting for the state and local revenue losses, where applicable.

Analysis. The report should:

- Classify tax expenditures using the same categories as direct spending.
- State the purpose of each tax expenditure.
- Evaluate the extent to which that purpose has been accomplished.
- Analyze the distribution of benefits by income level and size of business.

2 DEFINITIONAL ISSUES

2.1 Tax Expenditures Defined at a General Level

2.1.1 General Remarks about the Definition of Tax Expenditures

Martin Feldstein (1980) has mentioned that "the fact that experts disagree about which provisions should be considered tax expenditures does not reduce the usefulness of any estimates of particular tax subsidies." Is it really so, it is one of the questions in this report.

There is a Finnish saying that 'a good child has many names,' and it is also so with respect to tax expenditures. They have been called often '*tax subsidies*'.[8] On the other hand, *Joint Committee on Taxation* (2008) – in the United States - has defined tax expenditures broader than tax subsidies.[9] Moreover, *OECD* (2010b) refers to *targeted tax reliefs* covering – among others - allowances, exemptions, preferential rates and tax deferrals. In addition, tax expenditures are known as *tax breaks*. However, the use of multiple

[8] For instance, in *Finland*, the concept tax subsidy (*verotuki*) – not tax expenditure (*veromeno*) - is usually used. See also Valtion taloudellinen tutkimuskeskus (2010) and Viitanen (2012).
[9] See also EUROSAI (2008a, b, c & d), which speak about tax subsidies, not about tax expenditures.

concepts may cause confusion. Moreover, it is not clear-cut whether e.g. the targeted tax reliefs are synonym to tax expenditures. In principle, in this general report only the term 'tax expenditure' is used.[10]

Defining what is and is not a tax expenditure has been controversial. Briefly defined, tax expenditures are financial benefits provided through the tax system.[11] Or alternatively, tax expenditures are deviations from the benchmark tax system.[12] The term "tax expenditure" was first used by *Stanley Surrey* (1967). According to *S.S. Surrey* and *P.R. McDaniel* (1985), tax expenditure analysis consists of two elements, the first element consisting of structural provisions necessary to implement a normative tax (or benchmark tax system), and second element consisting of special preferences, i.e. departures from the normative tax.[13] Surrey and McDaniel (1985) note, too, that tax expenditures "represent government spending for favored activities or groups, affected through the tax system rather than through direct grants, loans, or other forms of government assistance." According to *Leonard E. Burman* (2003), "the term "tax expenditures" refers to departures from the normal tax structure designed to favor a particular industry, activity, or class of persons."[14] According *to R. Altshuler* and *R.D. Dietz* (2008), tax expenditure can be seen as a public expenditure implemented through the tax system by way of a special concession (exclusion, exemption, preferential rate or tax deferral) that results in reduced tax liability for certain group of taxpayers. *Barry Anderson* (2008) mentions that tax expenditures are "provisions of tax law, regulation, or practice that reduce or postpone revenue for a comparatively narrow population of taxpayers relative to a benchmark tax."[15]

The definition of tax expenditures varies across different countries, too. For example, in the *Netherlands* reduction in tax revenue and deviation from the benchmark structure are sufficient to characterize tax expenditure. A limitation to provisions that reflect non-fiscal policy goals, convertibility into direct expenditures, and application to a limited group of taxpayers should not be part of the tax expenditure definition.[16]

Every Nordic country defines tax expenditures in the tax expenditure reports. On the other hand, no Nordic country has formal definition of tax expenditures in the legislation.[17] In *Denmark*, tax expenditures have been defined as follows: "*Skatteudgifter defineres som afvigelser fra klart identificerbare skatteregler i lovgivningen, der medfører et umiddelbart lavere provenu end den generelle regel.*"[18] In *Finland*, tax expenditures are defined as tax provisions imposed for support purposes in order to subsidize certain

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[10] Moreover, the term '*tax privilege*' has been mentioned sometimes in this respect, see e.g. EUROSAI (2008a), 6.
[11] See e.g. Solbu and Kristiansen (2012).
[12] See e.g. Rauhanen & Venetoklis (2012).
[13] See also Surrey (1973), 6, Kraan (2004), Schick (2007) and OECD (2010d), 12. Concerning the problems in outlining tax expenditures, see e.g. Bittker (1969a), 244 ff and (1969b), 538 ff, Burman (2003), Weisbach & Nussim (2004) and Joint Committee on Taxation (2008). Cf. Surrey and Hellmuth (1969), 533. Some of these references show that the controversy about tax expenditure analysis is as old as the idea of tax expenditures.
[14] See also Mattsson (2009), 160 – 161.
[15] See also International Monetary Fund (2007), 115, EUROSAI (2008a) and OECD (2010b), 39.
[16] See Toder (2005).
[17] See also OECD (2010d), 148.
[18] www.skm.dk. See also Terkilsen et al. (2012).

actions or actors; and which are deviations from the benchmark tax. The benchmark tax is in its purest form a tax system with only fiscal goal.[19] In *Norway*, tax expenditures are defined as deviations from the general rules in the tax system that makes the tax revenue lower due to a more gentle taxation of certain groups or activities.[20] In *Sweden*, tax expenditures have been defined as follows: "*Skatteutgifter är avvikelser I skattesystemet som innebär att visa grupper av skattebetalare harlägre skatt än en given norm och effekten på skatteintäkterna av dessa avvikelser.*"[21]

2.1.2 Characteristics of Tax Expenditures

OECD (1996) has provided certain criteria for a provision to be considered as tax expenditure. First, the objective of the tax expenditure could be achieved by a direct subsidy; second, the tax in question is sufficiently broad in range such that a norm can be established;[22] third, there is no offsetting provision elsewhere in the tax system.[23] Moreover, a distinctive characteristic of tax expenditures is that "it would be administratively feasible to alter the tax system to eliminate the tax expenditure."[24]

According to *OECD* (2010b), the definition of tax expenditures shares implicitly or explicitly four elements. All approaches identify a special tax concession as tax expenditure when it implies a reduction of tax revenue (tax liability); it results in deviations from a benchmark tax structure; it targets a particular group of taxpayers or economic activity; and, it could be replaced by direct spending. What is worth noting is that 14 years earlier – OECD (1996) – characteristics mentioned were quite different.

Following characteristics may be of importance with respect to the definition of tax expenditures, even though it is not clear whether the characteristics below have been applied systematically:[25]

- non-fiscal goal: the pursuit of a non-fiscal policy goal;
- substitutability criterion: convertibility of the tax expenditure into a direct expenditure;
- selectivity criterion: the benefit of a limited group of taxpayers;
- revenue loss criterion: the reduction of tax proceeds;
- deviation criterion: deviation from a benchmark tax system;
- manageability criterion.

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[19] Valtion taloudellinen tutkimuskeskus (2010).
[20] Solbu & Kristiansen (2012).
[21] Kjellqvist et al. (2012).
[22] If above-mentioned characteristic is taken seriously into account, it is questionable whether excise duties should be a target of tax expenditure reporting. However, nowadays excise expenditures are familiar e.g. in Nordic countries.
[23] See also Tax Expenditures in the Nordic Countries (2010), 6 fn. 1.
[24] OECD (1996), 10. See also Surrey and McDaniel (1985), 10, NORD 1987:11, 101 and Kraan (2004). In Finland, Valtion taloudellinen tutkimuskeskus (2010) has referred to the characteristics mentioned above.
[25] See also OECD (2010d), 148, which shows great variation across OECD countries in this respect. Cf. Minnesota Department of Revenue (2011).

Non-fiscal goal. For example, *Tax Expenditures in the Nordic Countries* (2010) emphasizes that the tax expenditure should serve some specific policy goal. Moreover, these provisions pursue a wide range of objectives.[26] However, the issue is much more manifold. Non-fiscal aims of taxation are used to distinguish tax expenditures between two broad categories, those that deal with distributional aspects and those that pertain to an efficient use of resources.[27] We may speak about *social tax expenditures* and *tax incentives* in this respect. More specifically, the goal of an equitable distribution of income and wealth is characterizing social tax expenditures, whereas tax incentives promote the behavior desired by the government, e.g. investments to the business.[28]

A critical problem regarding the criterion concerned is that the objectives of the tax expenditure may not be well-defined in the preparatory drafts of legislation.[29] Against this background, it cannot be said that provisions resulting in revenue losses are not tax expenditures, since they do not reflect decisions to use tax system to pursue specific objectives.[30] Additionally, this is not only a problem with respect to the definition of tax expenditures but also with respect to the evaluation of tax expenditures: How is it possible to analyze whether the tax expenditure has accomplished its objectives if it does not have well-identified objectives? For example, has the low assessment value on housing property accomplished its objectives?[31]

For example, in *Denmark*, tax expenditures are generally defined as measures used as instruments to achieve certain political objectives.[32] In *Finland*, tax expenditures refer to tax provisions departing from the basic structure of taxation for *support purposes*[33] or more generally, the pursuit of non-fiscal goals is seen as included in the concept of tax expenditures.[34] *Sweden* uses an informal definition of tax expenditures as provisions that reduce revenue relative to a re-defined norm, either to pursue a specific policy objective or to facilitate the efficient operation of the tax system.[35] Thus, it may be made a distinction between *political* and *administrative tax expenditures* in this respect.

Substitutability criterion. Some analysts have argued that a tax expenditure report should include only tax provisions that substitute for potential spending programs.[36] For example, the *German* government limits the concept of tax expenditures to concessions that may be considered as a substitute for a direct subsidy.[37] On the other hand, some analysts emphasize that all deviations from benchmark tax should be

[26] See e.g. Bratic (2006), 114.
[27] See e.g. Lindhe & Södersten (2009), 20 – 21.
[28] See also OECD (2010b), 11 and 43.
[29] See e.g. Gunnarsson (2009), Valtion taloudellinen tutkimuskeskus (2010), 4 and Minnesota Department of Revenue (2011).
[30] Cf. Pogue (2009).
[31] The above-mentioned question is quite critical, since the low assessment value of the housing property is e.g. in Norway one of the largest tax expenditures. See e.g. Solbu & Kristiansen (2012).
[32] Rigsrevisionen (2007).
[33] Tax Expenditures in the Nordic Countries (2010), 35 and Valtion taloudellinen tutkimuskeskus (2010), 5. Cf. Valtiovarainministeriön julkaisusarja 2/1988.
[34] Rauhanen & Venetoklis (2012).
[35] OECD (2010d), 120.
[36] See e.g. Fiekowski (1980) and Pogue (2009).
[37] See e.g. OECD (2010b), 40 fn. 3.

taken into account irrespective of their nature. In addition, sometimes it has been emphasized the distinction between tax expenditures which are subsidies in nature and other kinds of tax expenditures which are, in any case, deviations from the benchmark tax.[38] In summary, tax experts have divergent views on whether the tax expenditure reports should be narrowly defined to focus on spending through the tax law or broadly defined to display the costs of departures from the benchmark tax.[39]

In *Denmark, Rigsrevisionen* (2007) has emphasized that the impact of tax expenditures is to a considerable extent comparable to the impact of direct transfers of public resources or government subsidies. In *Finland*, tax expenditures refer to tax provisions departing from the basic structure of taxation for support purposes.[40] On the other hand, *Rauhanen* & *Venetoklis* (2012) mention that the convertibility of tax expenditures into direct expenditures has not really been discussed or considered. In *Norway*, most tax expenditures can be considered as tax provisions with a clear element of subsidy, and many of these could be replaced by spending programs.[41] In *Sweden*, the revenue losses due to the tax expenditures have been estimated, on the one hand, by taking into account all tax expenditures, and on the other hand, by taking into account tax expenditures that are directly comparable to spending programs.[42] In other words, convertibility of the expenditure into a direct expenditure is not a necessary condition in Sweden.

Selectivity criterion. By selectivity criterion is sometimes referred to that tax expenditures benefit limited group of taxpayers. However, this definition is misleading. *Taxpayer-related tax expenditures* benefit only certain group of taxpayers, such as SMEs. Moreover, *expense-related tax expenditures* should not be passed over. For example, deductibility of membership fees in labor organizations represent a tax expenditure which may benefit, in principle, every taxpayer under personal income taxation, but concerns only specific expenses.[43] More specifically, tax expenditures arise from special tax provisions that spend revenues by reducing the tax liabilities of taxpayers who meet specified criteria. Examples of such criteria are the sources or amount of taxpayers' income, their spending on specified products, their age and capabilities, their employment or lack thereof, the products they produce, the inputs and technologies they employ in production.[44]

Selectivity criterion has created problems of interpretation.[45] For example, in some countries *accelerated depreciation* is not regarded as tax expenditure, because of its general applicability.[46] Instead, reduced corporate income tax rates of SMEs and R&D tax credits are, in addition to being generally targeted at a

[38] See also Surrey & McDaniel (1985), 195.
[39] See e.g. Toder (2005).
[40] See e.g. Tax Expenditures in the Nordic Countries (2010), 35 and Rauhanen & Venetoklis (2012).
[41] See e.g. Solbu & Kristiansen (2012).
[42] OECD (2010d), 125.
[43] See also Bratic (2006), 114.
[44] Pogue (2009).
[45] See e.g. Valtion taloudellinen tutkimuskeskus (2010), 18 regarding PIT expenditures. See also Schön (1999), 927 – 936 about the selectivity of tax measures.
[46] OECD (2010b), 43.

group of taxpayers/activities, clear examples of reliefs that could be replaced by subsidies, while achieving the same objectives, and they should be thus considered as tax expenditures.[47]

In *Denmark*, one of the characteristics mentioned has been that tax expenditures reduce or defer taxes payable by taxpayers.[48] On the other hand, *Rigsrevisionen* (2007) has referred to the possibility that a broader definition of tax expenditures is adopted than has been applied by the Ministry of Taxation. For instance, general tax deductions, like interest deductions, could be included and that would increase the amount of tax expenditures significantly. In *Finland*, tax expenditures are regarded as tax provisions that benefit certain taxpayers or activities.[49] In *Iceland*, a good example about the application of the selectivity criterion is seamen's exemption, which qualifies seamen for extra deductions compared with other occupational groups.[50] In *Norway*, too, it has been referred to that tax expenditures imply a more gentle taxation of certain groups or activities.[51] In *Sweden*, tax credits are included in the benchmark if they are general and do not favor specific groups of taxpayers.[52]

Revenue loss criterion. Revenue loss is, by definition, characteristic for tax expenditures everywhere, among them the Nordic countries. For example, in *Denmark*, one characteristic of tax expenditures is that they result in loss of revenue for the public sector. In *Finland*, the reduction of tax revenue is taken into account as the most important characteristic in defining tax expenditures.[53] In *Norway*, one characteristic of tax expenditures is that they imply lower tax revenue.[54]

However, some issues are worth noting here. First, revenue loss is not unambiguous in practice, e.g. due to the different methods to estimate them. For example, the revenue foregone method may result in completely different estimate about the tax expenditures as revenue gain method. Second, the revenue loss of tax expenditures varies significantly case by case. For example in *Finland*, some tax expenditures result only to losses of few hundred thousand euros, while the revenue loss of "biggest" tax expenditures has been over one billion euros. Hence, it is understandable that a distinction has been made between small, medium-sized and large tax expenditures.[55] In addition, so-called *triviality limit* may be applied, like *Denmark* does: tax expenditures the revenue loss of which is very small are passed over in the reporting of tax expenditures. On the other hand, in *Finland*, for example, all the tax expenditures notwithstanding their magnitude are included in the tax expenditure report.[56]

[47] OECD (2010b), 43.
[48] Rigsrevisionen (2007).
[49] Valtion taloudellinen tutkimuskeskus (2010) and Rauhanen & Venetoklis (2012). See also Valtiovarainministeriön julkaisusarja 2/1988.
[50] Matthiasson (2012).
[51] See e.g. Solbu & Kristiansen (2012).
[52] Tax Expenditures in the Nordic Countries (2010), 47.
[53] Rauhanen & Venetoklis (2012) and Viitanen (2012).
[54] Tax Expenditures in the Nordic Countries (2010), 40. See also Pogue (2009).
[55] Määttä (2007).
[56] Valtion taloudellinen tutkimuskeskus (2011).

Deviation criterion. In OECD countries, a common element is some notion of deviation from benchmark tax system.[57] Moreover, OECD has recommended the application of a broad definition of tax expenditures, according to which all deviations from a benchmark tax are defined as tax expenditures. Problem confronted with is whether e.g. certain tax allowance represents a deviation from a benchmark tax – and thereby tax expenditure – or is considered a general feature of the tax system in that particular country.[58] In all of the Nordic countries, too, tax expenditures are generally defined as deviations from a benchmark tax system.[59] Thus, the definition of benchmark tax system is all-important in defining the tax expenditures. On the other hand, the conception of a benchmark tax system provides great degree of room for difference of judgment.[60]

Manageability criterion. As *Surrey* and *McDaniel* (1985) have suggested, deductions or relieves that are grounded on simplification of tax administration or the tax law may be defined as parts of the benchmark. But under which circumstances preferential tax treatment is not regarded as tax expenditure due to the problems of administration? For example, high administrative and compliance costs regarding the determination of the VAT base are often adduced to explain the VAT preferential tax treatment of financial services and immovable property.[61] Another example is offered by the low VAT threshold for small enterprises which can be justified by the administrative costs, and it may not be regarded as tax expenditure but as a part of the benchmark system. But what is the situation if the VAT threshold is high? Should it be completely regarded as tax expenditures or should it be regarded only partially as tax expenditure?[62] Moreover, neutral taxation requires, for example, taxation of capital gains on an accrual basis rather than on a realization basis when assets are sold. This would require taxpayers and tax administrations to determine market values even where no observable market transactions had occurred; and it would generate tax liabilities that could create cash flow difficulties for businesses if they had not actually realized gains in the period.[63] In addition, fringe benefits are in some cases valued using average values to reduce administrative costs, and, thus, they are regarded as part of benchmark e.g. in Denmark.[64] In summary, it is far from easy to say which tax provisions simplify the tax system, and, thus, do not generate tax expenditure.

2.1.3 Classifications of Tax Expenditures

Tax expenditures differ in many ways, e.g. target, tax base, volume, recipients and type of tax measure. Nevertheless, the most common methods are to classify them according to their taxable base, their

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[57] OECD (2010d), 15 – 16, which refers to the discussion in the Netherlands. See also Pogue (2009).
[58] See also Rigsrevisionen (2007).
[59] Tax Expenditures in the Nordic Countries (2010), 20 in which tax expenditures in Denmark, Finland, Norway and Sweden – but not Iceland - were discussed. See also Valtion taloudellinen tutkimuskeskus (2010), Solbu & Kristiansen (2012) and Viitanen (2012).
[60] OECD (2010d), 16.
[61] See further OECD (2010b), 18 and 44.
[62] See also Valtiontalouden tutkimuskeskus (2010) and Rauhanen & Venetoklis (2012).
[63] See e.g. OECD (2010b), 26 and 44.
[64] Terkilsen et al. (2012).

objective or the type of measure.[65] Tax expenditures have been classified in several ways in tax expenditure reporting in the Nordic countries. A reference can be made to the classification according to the taxable base and according to the purpose or objective, i.e. budget function, recipients, and related type of direct spending. The usefulness of different types of classifications may vary. For example, sometimes they are simple, but they do not provide additional information.[66]

Tax expenditures can be defined both from *instrumental point of view* by taking into account the design of the tax expenditure, and from the functional point of view by taking into account the underlying motivation of tax expenditure.[67] From instrumental point of view, the term tax expenditure refers in general to provision in the tax law that gives favorable tax treatment for an activity or group of taxpayers. Tax expenditures may take a number of forms like exemptions and deferral rules.[68] More specifically, *OECD* (2010d) has divided the different types of tax expenditures as follows:[69]

- *Tax allowances* are amounts deducted from the benchmark to arrive at the tax base.
- *Tax exemptions* are amounts excluded from the tax base.
- *Tax credits* are amounts deducted from tax liability.
- *Rate relieves* are reduced rates of tax applied to a class of taxpayer or taxable transactions.
- *Tax deferrals* are delays in paying tax.

From *functional point of view*, tax expenditures are, in effect, policy instruments of government to promote specific social or economic policies and thus they are closely related to direct spending programs.[70] From functional point of view, tax expenditures can be divided into incentive tax expenditures, i.e. *tax incentives*, and to *social tax expenditures*.[71] In *Norway*, for example, there are few examples of tax incentives, e.g. R&D expenses and savings schemes.[72] Related to the above-mentioned, *Eric Toder* (1998) has made a distinction between social and business tax expenditures. Social tax expenditures are tax provisions that support social policy goals, such as providing income support for low-income families. Business tax expenditures are provisions generally aimed at promoting saving, investment, and economic growth, including e.g. accelerated depreciation for capital investment and the R&D tax credit.

One specific way to classify tax expenditures is still worth of mentioning. In *Sweden*, tax expenditures are divided into two broad categories: expenditures which would affect the budget balance if they were abolished and expenditures which do not. For the former category, both the revenue forgone and the outlay equivalent are calculated, for the latter category, only the outlay equivalent is calculated.[73]

[65] Tax Expenditures in the Nordic Countries (2010), 12.
[66] See e.g. Tax Expenditures in the Nordic Countries (2010), 13 – 14.
[67] See also Määttä (1997), 63.
[68] See e.g. Tax Expenditures in the Nordic Countries (2010), 6 and Terkilsen et al. (2012).
[69] See also OECD (2010d), 73 about the categorization of tax expenditures by their purpose. Cf. Matthiasson (2012) regarding Iceland and Viitanen (2012) regarding Finland.
[70] Tax Expenditures in the Nordic Countries (2010), 6. See ib., 40 about the situation in Norway.
[71] NORD 1987:11. See also Smith (2003).
[72] Tax Expenditures in the Nordic Countries (2010), 40 and Solbu & Kristiansen (2012).
[73] These methods are defined later in the general report.

Moreover, the tax expenditures are classified with respect to their general purpose. In this respect, a distinction is made between technically or administratively motivated tax expenditures and politically motivated tax expenditures.[74]

2.2 Benchmark Tax System: General Remarks

As *John Mikesell* (2010) has mentioned, before measuring the tax expenditures as deviations from the benchmark tax system, the benchmark must be clearly defined. A preliminary point of view is that definition of the benchmark and, thus, the definition of tax expenditures is tax-specific. For instance, *Sweden* allows for different norms for different types of taxes, all of which are based on uniform taxation.[75] In *Norway*, the reference tax system is described as a system based on the general rules in the tax system where equal persons, activities and goods etc. are taxed according to the same principles and at the same rates.[76]

According to *OECD* (1996), the benchmark tax includes following elements or components:

- the rate structure,
- accounting conventions,
- the deductibility of compulsory payments,
- provisions to facilitate administration, and
- provisions relating to international fiscal obligations.[77]

Simplifying, a distinction may be made between *benchmark tax rate* and *benchmark tax base*. The former determines the tax rate in the benchmark system, e.g. benchmark rate of VAT in Sweden is 25 %. The latter determines e.g. incomes and products which are taxable under the benchmark tax system, e.g. that fringe benefits are taxable under the benchmark of PIT.

According to *OECD* (2010b), virtually all benchmark definitions recognize elements to address taxpayer's *ability to pay*. Therefore, benchmark systems typically admit progressive tax rate schedules, basic/standard deductions, zero-rate bands, and deductions for expenses in earning income, perhaps subject to a cap.[78] Provisions addressing vertical equity are thus considered to be part of the benchmark system. Nevertheless, this approach to define the benchmark systems, and, thus, tax expenditures, is far from clear-cut in practice. As a general rule, on the other hand, all provisions that may have an impact on the

[74] Tax Expenditures in the Nordic Countries (2010), 24 and 49 and Kjellqvist et al. (2012).
[75] OECD (2010d), 121. see also Pogue (2009).
[76] See closer Solbu & Kristiansen (2012).
[77] See also Kraan (2004), 131.
[78] Cf. OECD (2010b), 71 fn. 2.

neutrality and horizontal equity of a tax system or whose objectives could be achieved by alternative public expenditure policies are identified as tax expenditures.[79]

These thoughts are not far away from the guiding principles of good tax policy. Tax policy has – according to one point of view - three guiding principles*: efficiency, equal treatment of equals, and simplicity*.[80] These may be regarded, in principle, cornerstones of the benchmark tax system.

1) A mark of effective tax policy, therefore, is the preservation of incentives for individuals and businesses to make decisions on the basis of productivity rather than for pure tax benefit.
2) Equal treatment of equals is a second guiding tenet for tax policy. Under this principle, those with equal incomes should pay equal income taxes regardless of the source of their income, for example. Similarly, taxpayers with equal consumption should pay equal consumption tax no matter what items they buy. Violating this standard gives taxpayers incentives to seek low-taxed sources of income or buy untaxed products for tax rather than economic reasons.
3) Simplicity is the third principle that directs good tax policy. The simpler the system, the more easily taxpayers can comply with it. A simple tax system is also easy to administer and enforce, thus preserving public resources. A simpler tax system is also likely to be more transparent.

These three basic principles may conflict, of course. Efficiency and equal treatment of equals both favor broad tax bases with low rates. Justified tax expenditures would include only tax provisions that offset a market failure or externality or that decrease the cost of tax administration by enough to offset lost efficiency or equity.[81] Against this background, it is easy to understand the critique against tax expenditures: it is impossible to find any agreement about what should and should not be included in the benchmark tax system.[82]

In general, some OECD countries have very elaborately specified or *explicit* benchmarks while others have only *implicit* definitions of tax expenditures from which their benchmark systems are inferred.[83] Another critical question is how *general or detailed* benchmark system is applied. A country with a very general benchmark could consider many provisions of the actual law to be tax expenditures. In another country, a more elaborate benchmark might include some of those provisions, which therefore would not be considered tax expenditures.[84] Moreover, given difficulties in agreeing about a benchmark, certain countries take a *more flexible and inclusive approach*, for example by identifying two benchmark systems and measuring tax expenditures with respect to both baselines.[85]

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[79] OECD (2010b), 42.
[80] See also Minnesota Department of Revenue (2011).
[81] Minnesota Department of Revenue (2011).
[82] See e.g. Joint Committee on Taxation (2008).
[83] OECD (2010d), 149. See also OECD (2010b), 40.
[84] OECD (2010d), 150. See also OECD (2010b), 40.
[85] See e.g. OECD (2010b), 40.

Craig and *Allan* (2001) mention three broad approaches which may be identified when defining a benchmark. First, a *conceptual approach* uses a “normal” tax system based on a theoretical concept of income, consumption, or value-added (depending on the tax) modified to address data limitations or technical problems in implementing the concept. Second, a *reference law approach* uses for the most part a country’s own tax laws as a basis to define the benchmark, isolating special concessions judged as tax expenditures. Finally, an *expenditure subsidy approach* refers only to those concessions that are clearly analogous to an expenditure subsidy.

According to *OECD* (2010b), most OECD countries follow some form of conceptual baseline. Several other countries use a reference law approach. *Denmark* has been mentioned to apply a reference law approach, *Finland* a conceptual approach as well as a reference law approach, and *Sweden* both conceptual benchmark for income taxes and a reference benchmark for consumption taxes.[86] *Solbu* and *Kristiansen* (2012) characterize *Norwegian* approach as pragmatic in nature by using the general rules in the tax system as the benchmark tax system, instead of the more theoretical benchmark. The pragmatic approach has implied that tax expenditures have been interpreted primarily as subsidy indicators.

In addition, the benchmark may *differ between countries and over time*. Differences may include:[87]

- the definition of the tax base or the tax-paying unit
- whether it is adjusted for inflation
- what degree of integration between corporate and individual taxation is considered the norm
- which accounting period is appropriate
- whether a realization or accruals basis is used for assessment, and
- how tax sanctions are assessed.

The stability of the benchmark system varies across OECD countries. In some countries, like in *France*, the definition of the benchmark is allowed to evolve over time. Long-established provisions can be integrated into the tax norm, thereby losing their tax expenditure status.[88] According to *Tax Expenditures in the Nordic Countries* (2010), the general features of the benchmark systems have been fairly stable, although as they are to a large extent based on the prevailing tax systems, they do change, when the general tax systems change. For instance, in *Finland*, when the prevailing tax system undergoes changes, the benchmark system may also change. However, the need for this is scrutinized case by case. For example, the reform of the energy taxation in from 2011 onwards, changed the benchmark system.[89] In *Norway*, the general features of the benchmark system for direct taxes have been fairly stable since the 1992 tax reform, as has the general features of the tax system itself. One major change has been that the shareholder model has been included in the benchmark since the 2006 tax reform. Another change has been that the definition of income and the benchmark is stricter, so that more exemptions and allowances are regarded as tax expenditures.[90] In 2011, stamp duty and custom duty went from being included in the benchmark tax

[86] See closer OECD (2010b), 39, 51 and 53.
[87] See e.g. Smith (2003).
[88] OECD (2010b), 40.
[89] Rauhanen & Venetoklis (2012).
[90] Tax Expenditures in the Nordic Countries (2010), 42.

system to be seen as tax sanctions.[91] In *Sweden*, the benchmark evolves with the tax system and is constantly under revision. For instance, in 2003 there was a major overhaul of the excise duty benchmark.[92]

Summa summarum: Tax expenditure analysis has been subject to much *criticism* for a long period of time. The source of criticism has been in particular that the benchmark tax system is a compromise between the theoretical ideal and the actual tax system.[93] It has even been mentioned that: "Tax expenditure analysis no longer provides policymakers with credible insights into the equity, efficiency, and ease of administration issues raised by a new proposal or by present law, because the premise of the analysis (the validity of "normal" tax base) is not universally accepted."[94] Moreover, the differences in benchmark tax systems are regarded so severe that tax expenditure reports do not provide comparative data in the cross-country survey.[95] In addition, many tax academics and policy experts have argued that the ideal "normal" tax system from which tax expenditures are identified does not correspond e.g. to any generally accepted formal definition of net income.[96] In the Nordic countries, on the other hand, the methodologies are to a larger extent based on pragmatic choices and prevailing tax laws. Therefore, Nordic systems are less vulnerable to the general criticism regarding the normative assessment of the benchmark.[97]

2.3 Different Taxes, Different Benchmarks and Different Kinds of Tax Expenditures

In general, tax expenditure reporting covers at least income taxation. Otherwise, the scope of reporting varies across OECD countries. One reason for the narrow scope of reporting has been the difficulties to calculate the magnitude of tax expenditures. Another reason has been that tax expenditures initially implemented at central level have been shifted to local level.[98]

2.3.1 PIT Expenditures

The absence of a single accepted methodology for defining the benchmark for the personal income tax has led to *considerable differences between countries as to what elements are considered to be in the benchmark*. Elements that are normally regarded as part of the tax structure include, for example, the tax unit, the taxation period, the tax rate structure, and provisions for deduction of expenses to earn income.[99]

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[91] Solbu & Kristiansen (2012).
[92] Tax Expenditures in the Nordic Countries (2010), 47.
[93] See e.g. Bittker (1969a and b) and Tax Expenditures in the Nordic Countries (2010), 7. See also Matthiasson (2012).
[94] Joint Committee on Taxation (2008).
[95] OECD (2010d), 16 and the literature mentioned in that context.
[96] Joint Committee on Taxation (2008), 7.
[97] Tax Expenditures in the Nordic Countries (2010), 5.
[98] See e.g. Valtion taloudellinen tutkimuskeskus (2010), 8.
[99] Craig & Allan (2001).

The so-called *Schantz-Haig-Simons (SHS)* economic income concept has been an influential tool when specifying the norm for the income tax base. It defines one period's income as consumption plus the change in net wealth during the period. The concept is, however, abstract and leaves several important aspects of a benchmark tax system open. Therefore, the benchmark tax system usually is a combination of elements from theoretical abstract and the actual tax system.[100] In any case, SHS income definition is not easy to apply straightforward in practice. For example, how to treat imputed income, in-work deductions or what kind of expenses constitutes cost of earned income?

In all of the Nordic countries, the underlying idea behind the definition of the benchmark system is the concept of *comprehensive income tax*, a broad based system where all income is largely taxable. For pragmatic reasons, the benchmark system is in all Nordic countries more or less based on the prevailing tax system.[101] In *Denmark*, the applied benchmark tax base includes capital income and gains, labor income and fringe benefits.[102] In *Finland*, the underlying principle behind the benchmark tax system is that all income is taxable and the tax base is thus as wide as possible.[103] The benchmark tax system includes – among other things - imputed income and income transfers. However, fringe benefits, such as free or subsidized meals, accommodation and company car have been a manifold problem. As a starting point, they are regarded as taxable income; they are usually valued at a more lenient amount, benefiting the individual taxpayer. Notwithstanding, assessment values deviating from real values create tax expenditures only concerning meals. Moreover, other kinds of fringe benefits, such as employer's subsidy for cultural or leisure activities, create tax expenditures, but they are not calculated due to unavailability of data.[104] All exemptions from the income tax are considered tax expenditures.[105] Tax unit determined in the legislation has been regarded as compatible with the benchmark tax system.[106]

In *Norway*, in the benchmark tax system all types of income and assets should be taxed, and the tax base should be as close to real value as possible. The reference system is defined in an appendix to the National Budget 2001.[107] The personal income has two tax bases: personal income and ordinary income. Personal income is defined as income from labor and pensions. Personal income is a gross income base from which no deductions are made, and is subject to a progressive rate schedule. Ordinary income is subject to a flat rate and includes all types of taxable income from labor, pensions, business and capital exempt any deductions or allowances. This is in line with the principles of the dual income taxation.[108] Under personal income taxation the main tax expenditures include additional personal allowance for one-income families and sole parents, childcare expense deduction and tax allowance for commuters' daily work travel and visits to main residence.[109]

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[100] See also Rauhanen & Venetoklis (2012) regarding Finland.
[101] Tax Expenditures in the Nordic Countries (2010), 20.
[102] See e.g. Tax Expenditures in the Nordic Countries (2010), 27 and Terkilsen et al. (2012).
[103] Valtion taloudellinen tutkimuskeskus (2010), 16 – 18 and Rauhanen & Venetoklis (2012).
[104] Rauhanen & Venetoklis (2012).
[105] Tax Expenditures in the Nordic Countries (2010), 35 – 36 and Valtion taloudellinen tutkimuskeskus (2010), 11.
[106] Valtion taloudellinen tutkimuskeskus (2010), 16.
[107] Tax Expenditures in the Nordic Countries (2010), 40.
[108] Tax Expenditures in the Nordic Countries (2010), 40. See also Solbu & Kristiansen (2012).
[109] See closer Tax Expenditures in the Nordic Countries (2010), 45.

In *Sweden*, the benchmark is based on the idea of uniform taxation, i.e. each type of tax should be levied uniformly and without exemptions. The benchmark nevertheless allows for exemptions and can thus also be perceived as pragmatic.[110] More specifically, the benchmark for income taxation does stipulate that the taxable income should correspond to the SHS income concept, but empirically the SHS income is hard to measure and in order to make it operational several clarifications have been made. For example, the value of non-wage household work and leisure shall not be part of the tax base, but public payments are part of taxable income.[111] Moreover, Sweden accepts different tax rates for different tax bases, i.e. different sources of income. Hence Sweden's different tax rates for capital income and labor income are considered compatible with the norm, and, thus, different tax rates are not considered tax expenditures.[112]

The literature pays considerable attention to the *choice between income tax and consumption tax* as the benchmark for tax expenditure purposes under the income taxation.[113] In theory, this question has enormous importance. In practice, it has not.[114] According to *OECD* (2010d), for example, all countries studied either explicitly or implicitly use an income tax benchmark. On the other hand, in the *United States* tax expenditures were examined with respect to two alternative baselines. What was interesting was that from the 30 largest tax expenditure items, just over half of the items would probably be tax expenditures against both baselines.[115] In addition, as *Leonard E. Burman* (2003) has mentioned, displaying tax expenditures against both income and consumption tax benchmark may be helpful, but it may also contribute to overall confusion.

Realization principle is usually accepted in the benchmark tax system. In other words, usually only realized income is subject to individual income tax.[116] This is the situation in spite of the fact that the SHS income definition might suggest the deferral of tax until realization as tax expenditure.[117] On the other hand, this approach has been criticized since accelerated depreciation of investments is treated as tax expenditure. However, in both of the cases it is question of taking advantage of the time value of money. They are two sides of the same tax minimization strategy, but only accelerated depreciation is usually accounted as tax expenditure.[118]

In *Denmark*, taxation on an accrual basis – as opposed to taxation upon realization – is not calculated as tax expenditure.[119] In *Finland*, capital gains taxation in realization without taking inflation into account is

[110] Tax Expenditures in the Nordic Countries (2010), 20 and 46.
[111] Tax Expenditures in Nordic Countries (2010), 47.
[112] OECD (2010d), 121.
[113] See e.g. Carroll et al. (2008).
[114] OECD (2010d), 149 – 150.
[115] Burman (2003), 618.
[116] Tax Expenditures in the Nordic Countries (2010), 7.
[117] See also Minnesota Department of Revenue (2011).
[118] Burman (2003), 617.
[119] Tax Expenditures in the Nordic Countries (2010), 27.

considered part of the benchmark.[120] In the *Swedish* benchmark for income taxation, capital gains and losses should be taxed on accrual and not at realization.[121]

The tax rate schedule is usually accepted in the benchmark.[122] *Progressive income taxation,* including standard deductions, is part of the benchmark also in all Nordic countries.[123] For instance, in *Norway* the basic allowances in income, which contribute to a progressive tax structure, are considered as part of the benchmark.[124] In *Denmark* and *Sweden in-work deductions* are also considered part of the benchmark.[125] All the Nordic countries use the *dual income tax system*, although with great individual variations. This system is part of the benchmark in all countries mentioned.[126]

One problem within this context is what kinds of expenses constitute cost of earned income. Differentiation between private expenses and expenses to acquire and maintain income are not always simple in the real world, not even in the Nordic countries. In *Denmark*, as a practical solution, only deductions targeted to specific groups are calculated as tax expenditures.[127] Other Nordic countries only allow for deductions of costs directly linked to generation of income.[128] In *Sweden*, the deductibility of costs of *travels between work and home* has been the largest category of tax expenditures in the income tax base of labor.[129] On the other hand, in *Finland* this deduction has not been regarded as tax expenditure.[130]

Interest deductibility has been mentioned as one problem in defining the benchmark tax system, too, i.e. whether it should be included in the benchmark or regarded as tax expenditure.[131] *Denmark, Norway* and *Sweden* include interest rate deductions in the benchmark, but not *Finland*.[132] More specifically, e.g. in *Sweden* only interest payments made for loans where the investment return is taxable should be deductible in the benchmark tax system. Nevertheless, tax deductions due to interest payments are part of the benchmark.[133]

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[120] Rauhanen & Venetoklis (2012). See also Valtion taloudellinen tutkimuskeskus (2010) about the implementation of realization principle.
[121] Tax Expenditures in Nordic Countries (2010), 47.
[122] See e.g. Tax Expenditures in the Nordic Countries (2010), 7, 27 and 35 - 36.
[123] See e.g. Tax Expenditures in the Nordic Countries (2010), 20, Valtion taloudellinen tutkimuskeskus (2010), 9 and 18 and Terkilsen et al. (2012).
[124] Solbu & Kristiansen (2012). In general, see e.g. Pogue (2009).
[125] Tax Expenditures in the Nordic Countries (2010), 20.
[126] Tax Expenditures in the Nordic Countries (2010), 20. See also Valtion taloudellinen tutkimuskeskus (2010), 16 and Rauhanen & Venetoklis (2012) regarding Finland.
[127] Tax Expenditures in the Nordic Countries (2010), 27. See also Terkilsen et al. (2012).
[128] See e.g. Valtion taloudellinen tutkimuskeskus (2010), 11. Membership fees of labor unions are not linked to the generation of income, and, thus, they are regarded as tax expenditures, Valtion taloudellinen tutkimuskeskus (2010), 18.
[129] See e.g. Gunnarsson (2009), 114 – 115.
[130] See closer Valtion taloudellinen tutkimuskeskus (2010).
[131] Tax Expenditures in the Nordic Countries (2010), 20.
[132] Tax Expenditures in the Nordic Countries (2010), 21 and 36. See also Rauhanen & Venetoklis (2012) regarding Finland.
[133] Tax Expenditures in the Nordic Countries (2010), 47.

A well-known dispute in this respect is the treatment of *mortgage interest*.[134] One interpretation of personal income is that a household 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 SHS income. In this view, exemption of the mortgage interest is not an exception to the benchmark tax base, but exemption of imputed rent is. Another interpretation of personal income is 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. From this point of view, exemption of mortgage interest is an exception to the benchmark tax, but exemption of imputed rent is not.

In general, one problem regarding the definition of SHS income is how to measure *imputed income* when there is no "physical" profit or payout.[135] Imputed rent from owner-occupied housing is considered as real income in all Nordic countries. On the other hand, tax expenditure treatment of non-taxation of imputed rent from owner occupied housing shows well how the situation varies across countries. In *Finland*, non-taxation of imputed rent has been regarded as tax expenditure, and the revenue loss caused by it has been calculated, too. The estimated revenue loss was 2,050 million euros in 2011.[136] On the other hand, the deductibility of mortgage interest is not anymore regarded as tax expenditure.[137] In *Denmark*, non-taxation of imputed rent has also been regarded as tax expenditure, but due to difficulties in defining the benchmark, the revenue loss has not been calculated.[138] In addition – outside of the Nordic countries -, the imputed income that individuals receive from the use of owner-occupied homes has not sometimes been classified as tax expenditure, because it is administratively difficult to measure the imputed income for tax purposes.[139]

The PIT expenditures are related closely to the *flat tax*, too. The flat tax is an attempt to provide a comprehensive tax base. All the extraneous, non-tax elements of current tax law would be removed.[140] The flat tax is said to be very simple, and it may be if one looks only at the tax system. But limiting the tax system to promote only fiscal goal will force other government programs to promote non-fiscal goals. Viewing the flat tax as simple requires ignoring the rest of legislation and regulation, "relegating the complexity and mess of government spending and regulation to somebody else's backyard."[141] Against this background, it is not from administrative and other points of views self-evident, whether flat tax is as transcendent as it may at first glance seem to be.

2.3.2 CIT Expenditures

[134] See e.g. Kraan (2004), 132 – 133.
[135] See also Rosen & Grayer (2008).
[136] Valtion taloudellinen tutkimuskeskus (2011). See closer Viitanen (2012).
[137] Valtion taloudellinen tutkimuskeskus (2010), 13 and 71. See closer Viitanen (2012).
[138] Tax Expenditures in the Nordic Countries (2010), 27.
[139] Joint Committee on Taxation (2008), 23.
[140] See e.g. Hall & Rabushka (1995).
[141] Weisbach & Nussim (2004).

Like with respect to PIT expenditures, the absence of a single accepted methodology for defining the benchmark for the corporate income tax has led to *considerable differences between countries as to what elements are considered to be in the benchmark*. Elements that are normally regarded as part of the tax structure include, for example, international tax obligations (such as double taxation arrangements) and loss carry-over arrangements. However, at the margin, differences in approach in such areas as depreciation allowances and double taxation of dividends lead to major difficulties in making international comparisons.[142]

In *Denmark*, a standard corporate tax rate is the general benchmark rate for corporate taxation. For instance, R&D tax incentives are treated as tax expenditures. Imputation systems for taxation of dividends are a part of the benchmark system.[143] In *Finland*, the definition of tax expenditures in the taxation of business profits and income from professional activities is based on the principle that income is largely subject to tax.[144] Furthermore, the allocation of income and expenses is closely linked to the accounting principles.[145] A standard corporate tax rate is the general benchmark rate for corporate taxation.[146] The prevailing system of partial double taxation of dividends is considered part of benchmark system, too. In *Norway*, in the corporate income taxation all deviations from the ordinary tax rate are regarded as tax expenditures. Dividends and capital gains to persons are taxed according to the shareholder model, where dividends or capital gains exceeding a risk free rate of return is taxed as ordinary income. The allowance consisting of risk free rate of return is considered as a part of the benchmark, and so are interest rate deductions as they ensure neutrality in the capital taxation.[147]

In general, *depreciation allowances* more generous than true depreciation should be identified as tax expenditure. Nevertheless, there is no agreement on a quantitative measure of true depreciation. [148] Moreover, in some countries accelerated depreciation is not regarded as tax expenditure.[149] These countries justify including accelerated depreciation as part of the benchmark either because of its general applicability or because of the absence of robust information about true economic depreciation to use as a benchmark. Some countries recognize the difficulties to calculate economic depreciation and, therefore, include in their tax expenditure report estimates for accelerated depreciation relative to no depreciation, although they do not consider this provision as tax expenditure, like in the *United Kingdom*. Other countries recognize and present accelerated depreciation as a tax expenditure but do not include any estimate, like *Canada*.[150]

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[142] Craig & Allan (2001).
[143] Tax Expenditures in the Nordic Countries (2010), 27 - 28.
[144] See e.g. Rauhanen & Venetoklis (2012).
[145] Tax Expenditures in the Nordic Countries (2010), 36.
[146] Valtion taloudellinen tutkimuskeskus (2010), 18.
[147] Solbu & Kristiansen (2012).
[148] OECD (2010d), 71 – 72. See also Minnesota Department of Revenue (2011).
[149] See e.g. OECD (2010b), 40.
[150] OECD (2010b), 43.

In *Denmark*, even though depreciations do not necessarily correspond the true economic value of the depreciation, they are not usually considered a tax expenditure. Nevertheless, particularly favorable depreciation rules are under some circumstances considered as tax expenditures.[151] In *Finland*, regarding the depreciation of buildings and machinery over their technical economic life, currently the tax expenditure is calculated based on the depreciation of machinery. The calculation, however, gives a biased amount on the true subsidy effect to the enterprises, since it only tells how much the public sector loses tax revenues in a specific year.[152] In the *Swedish* benchmark, depreciation allowances in businesses should be based on true depreciation.[153]

2.3.3 VAT Expenditures

The standard VAT rate defines the benchmark in all Nordic countries, and deviations from the standard rate create tax expenditures.[154] Moreover, VAT should be collected according to the destination principle, i.e. with exports exempted and imports levied a tax.[155] From the above-mentioned point of view, it may seem that the definition of the benchmark as well as tax expenditures is straightforward under value-added taxation, but it isn't. For instance, on one view, special provisions are required to ensure that a lower rate is applied to the necessities. In another view, special provision for the necessities is not part of the definition of the benchmark tax but an exception to it.[156] Nevertheless, Scandinavian countries have not confronted with this problem.

VAT exemptions have been mentioned as one problem in defining the benchmark tax system, i.e. whether they should be included in the benchmark or regarded as tax expenditures.[157] This difficulty is shown in the practice of tax expenditure analysis in the Nordic countries, too.[158] In *Finland*, all VAT exemptions required by the EC law are considered part of the benchmark. More specifically, exemptions from VAT, e.g. financing and insurance, education, public or publicly supervised social and health care are considered part of the benchmark system. On the other hand, if EC law only facilitates the exemptions, they are not regarded as tax expenditures.[159] Initially, tax exemption for enterprises with turnover below 8.500 euros, and without voluntary registration, as liable for VAT was not considered as tax expenditure, but the graduated relief for enterprises with turnover between 8.500 euros and 22.500 euros creates tax expenditure. [160] Today, also the former part of the exemption is defined as a tax expenditure.[161]

[151] Terkilsen et al. (2012).
[152] Tax Expenditures in the Nordic Countries (2010), 36 and Rauhanen & Venetoklis (2012).
[153] Tax Expenditures in Nordic Countries (2010), 47.
[154] Tax Expenditures in the Nordic Countries (2010), 21. See also Solbu & Kristiansen (2012) regarding Norway.
[155] See e.g. Kjellqvist et al. (2012) regarding Sweden and Rauhanen & Venetoklis (2012) regarding Finland.
[156] Kraan (2004), 132.
[157] Tax Expenditures in the Nordic Countries (2010), 20.
[158] See e.g. Matthiasson (2012) regarding Iceland.
[159] Valtion taloudellinen tutkimuskeskus (2010), 38.
[160] Valtion taloudellinen tutkimuskeskus (2010), 41.
[161] Rauhanen & Venetoklis (2012).

In *Sweden*, the VAT exemption on letting property is considered as a part of the benchmark since such taxation would imply unequal treatment of rented and owned housing; the VAT exemption of financial and insurance services is considered to be part of the benchmark; goods and services which are subsidized by public funds are not taxable when the net VAT is negative and not considered as tax expenditure.[162] In *Denmark* and *Norway*, VAT exemptions are considered to create tax expenditures.[163] In Denmark, this includes exemptions that follow the VAT Directive, too.[164] What is worth mentioning is that some of these exemptions are one of the largest tax expenditures in Denmark.[165]

In *Norway*, for example, zero rated sectors are normally treated as tax expenditures. It can be referred to zero-rating of newspapers, books and periodicals.[166] The reduced VAT rates are regarded as sources of tax expenditures in all the Nordic countries. A reference can be made e.g. to the reduced VAT rate of foodstuffs.

2.3.4 Excise Expenditures

According to *Bruce Davie* (1994), tax expenditures could also be defined with respect to excise taxes but it was not done on a systematic basis still during 1990s.[167] In recent years, tax expenditure reporting has covered excise duties, too.[168] Nevertheless, this may result to serious problems in defining the benchmark tax system and thereby excise tax expenditures. For example, according to *OECD* (1996), the tax in question has to be sufficiently broad in range such that a benchmark tax can be established. But excise duties are narrow-based, selective taxes in contrast to the income taxes and value added tax.

Regarding excise duties there would be endless debate about the benchmark tax, and consequently, how to define tax expenditures. An old example is the tax differentiation between unleaded and leaded petrol. Is lower tax rate of unleaded petrol tax expenditure or higher tax rate of leaded petrol tax sanction? Or would it be more clear-cut if tax differentiation concerned is left outside of the tax expenditure reporting?[169] What is worth noting, too, is that according to one view, excise duties may be regarded as regulatory taxes, whereas according to another view, they are fiscal taxes. Because of this, the opinions about the benchmark tax differ and the opinions about the scope of tax expenditures, too.[170]

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[162] Tax Expenditures in the Nordic Countries (2010), 47 - 48.
[163] Tax Expenditures in the Nordic Countries (2010), 21.
[164] Tax Expenditures in the Nordic Countries (2010), 27.
[165] Terkilsen et al. (2012).
[166] Tax Expenditures in the Nordic Countries (2010), 41 and 45.
[167] Craig & Allan (2001) refer to Australia, where tax expenditures have been defined for alcohol, tobacco and petroleum excises. See also Burman (2003), 614.
[168] See e.g. OECD (2010d), 109.
[169] See also TemaNord 1996:568, 33 and Kjellqvist et al. (2012).
[170] Kraan (2004), 132.

The Nordic countries define the benchmark with respect to excise duties in different ways and the scope of excise duties included varies as well. In *Norway*, for example, excise duties are treated individually, i.e. a reference rate is made for each tax. More specifically, there are different benchmarks for calculating tax expenditures related to different kinds of excise duties. Deviations from the standard rate are either regarded as tax sanctions or tax expenditures. *Finland* has no general benchmark for excise duties, but defines tax expenditures as deviations from the standard rate.[171] The same applies for *Denmark* and *Sweden*.[172]

Denmark and *Norway* include all, or most of the excise duties into the tax expenditure report.[173] In *Finland*, after the reporting reform in 2010 many excise expenditures have been included in the tax expenditure report.[174] In *Sweden*, tax expenditure reporting has covered only some excise duties. For excise duties only energy and carbon taxes including tax on thermal effect levied on nuclear reactors (a tax sanction) are considered when tax expenditures are calculated.[175]

2.3.5 Regulatory Taxes

Regulatory taxes are taxes the primary purpose of which is to reduce the undesired conduct, like smoking, drinking and polluting behavior. Incentive environmental taxes, such as carbon and waste taxes are examples of the taxes concerned. On the other hand, regulatory taxes may – and often do – generate tax proceeds. Fiscal taxes are taxes the primary purpose of which is to collect proceeds to the government. Of course, these taxes may also affect the behavior of the taxpayers but it is not the primary aim of the taxes mentioned.[176]

It is not out of question to determine tax expenditures under regulatory taxes, too.[177] What is worth noting then, however, is that the benchmark tax and thus, the scope of tax expenditures is different between regulatory and fiscal tax. A reference can be made to the energy tax.[178] First, if energy tax is regarded as a fiscal tax all the exemptions and rate reliefs of the energy products can be defined as tax expenditures. For simplicity, the energy tax benchmark can be defined as energy tax covering all the energy products, and all deviations from the standard rate do not belong to the benchmark tax. Second, if energy tax is regarded as a regulatory tax the purpose of which is to prevent carbon dioxide emissions, the benchmark tax is different compared with fiscal benchmark tax. Under this scheme, only fossil fuels should be taxed, and if non-fossil fuels were taxed, they are tax sanctions. Moreover, the tax rate should be determined according to the

[171] See also Tax Expenditures in the Nordic Countries (2010), 23 and 35.
[172] See closer Tax Expenditures in the Nordic Countries (2010), 27 and Terkilsen et al. (2012).
[173] Tax Expenditures in the Nordic Countries (2010), 21.
[174] See closer Valtion taloudellinen tutkimuskeskus (2010).
[175] See closer Tax Expenditures in the Nordic Countries (2010), 48.
[176] Above-mentioned definitions already indicate that in practice, it is far from clear-cut whether the tax is regulatory or fiscal in nature.
[177] Cf. Määttä (1997), 28 – 32.
[178] See also Valtion taloudellinen tutkimuskeskus (2010), 44.

carbon content of fossil fuels. If tax rates would be higher or lower than this benchmark rate, they are either tax sanctions or tax expenditures. In addition, it is possible to define two benchmarks for energy tax, i.e. fiscal benchmark for the fiscal tax component and regulatory benchmark for the regulatory tax component. In *Norway*, the problem concerned has been solved by assuming one main objective for the different taxes having several objectives. This main objective then determines the benchmark tax for the different taxes.[179]

Regulatory taxes are often implemented as excise duties. The definition of the benchmarks varies across the Nordic countries in this respect. According to *Terkilsen et al.* (2012), however, environmental taxes, which are not equal to the external costs are not perceived as tax expenditures in *Denmark*. On the other hand, carbon tax in sectors covered by the Emissions Trading Scheme is regarded as tax sanction. *Norway*, on the other hand, applies a benchmark that is based on the theory of optimal taxation. The benchmark is divided between fiscal and environmental excise duties.[180] For fiscal excise duties the exemption of taxes on production is part of benchmark and the environmental taxes are in line with external costs. In Norway, tax expenditures related to environmental taxes are calculated by deviations from the reference rate that normally is set in accordance with the estimated external costs. Areas that are exempted from taxes subject to other significant measures, e.g. quotas, are not normally treated as tax expenditures.[181] In *Sweden*, the carbon tax should according to the benchmark be levied proportional to emissions. The benchmark tax rate is the normal carbon tax rate regardless of the source of energy and usage. There are, however, exemptions to the benchmark tax rates. Tax exemption regarding the fuels used as an input in the industry is not considered tax expenditure.[182]

Regarding environmental taxes in *double regulation* as tax sanctions is not a solution without problems. First of all, it is very difficult to determine when it is question about double regulation. For example, if Emissions Trading Scheme is applied, is it question about double regulation only, if carbon tax is directed at the same sectors? Or is it question about double regulation, too, if energy tax determined according to the energy content is applied to the same sectors as Emissions Trading Scheme? Furthermore, it is possible to ask whether tobacco and alcohol taxes are illustrations about double regulation, since many other policy instruments are applied in order to reduce smoking and drinking. If the answer is yes, tobacco and alcohol taxes are tax sanctions!

2.3.6 Other Taxes

Real estate tax. In Denmark, real estate tax is covered by the tax expenditure reporting. Deviations from general tax rules favoring certain groups of taxpayers are considered as tax expenditures.[183] In *Finland*, the standard tax rate defines the benchmark, and lower rates or exemptions constitute tax expenditures, and

[179] Solbu & Kristiansen (2012). See also Kjellqvist et al. (2012) regarding Sweden.
[180] Tax Expenditures in the Nordic Countries (2010), 41.
[181] Tax Expenditures in the Nordic Countries (2010), 42.
[182] Tax Expenditures in the Nordic Countries (2010), 48. See also Kjellqvist et al. (2012).
[183] See closer Terkilsen et al. (2012).

higher than standard tax rates are tax sanctions.[184] Lower assessment value than real value is regarded as tax expenditure; however, it has not been calculated.[185]

Inheritance tax. In *Finland*, the inheritance and gift tax is covered in the tax expenditure report.[186] For example, the differentiation of tax rates between gift tax and inheritance tax is part of the benchmark system as well as the differentiation of the tax rates between relatives (and non-relatives).[187] On the other hand, for example, the part of the inheritance tax on business or farm that is not charged creates tax expenditure.[188] However, tax expenditures concerned have not been calculated due to the lack of data. Under reporting reform in 2010, the benchmark tax was updated, but there are still difficulties in calculating the revenue loss due to the tax expenditures.[189] In *Norway,* inheritance tax is covered by the report but the tax expenditures under inheritance taxation have not been calculated. Inheritance tax with lower rates for close relatives is included in the benchmark. The tax base is the assumed sales value of the inherited assets. Lower assessment values than sales values are regarded as tax expenditures.[190] Due to technical difficulties inheritance tax expenditures have not been calculated.[191]

Wealth tax. In *Norway*, wealth above a threshold is taxed. A wealth tax is included in the benchmark. Deviations from the standard rate or lower assessment values than real values are regarded as tax expenditures.[192] For instance, the substantial discount applied to housing for the wealth tax has been criticized;[193] it has been one of the largest tax expenditures in Norway.[194] Wealth tax has been removed in *Denmark* in 1997, in *Finland* and *Iceland* in 2006 and in *Sweden* in 2007. Thus, because wealth taxes are not in force, there are wealth tax expenditures neither. This is paradoxical to some extent, since in Norway taxpayers are subsidized according to the tax expenditure report even though they pay wealth tax, but in other Nordic countries taxpayers are not subsidized according to the tax expenditure report, even though they pay less, i.e. none, wealth taxes than in Norway.[195]

Social security contributions. In *Finland*, social security contributions were not originally covered in the tax expenditure reports, but after the reporting reform in 2010 they are.[196] The benchmark system is defined separately for different groups of social security contributions. On the other hand, only a few tax expenditures are recognized and they are connected e.g. with foreign experts working in Finland, seamen and start-up entrepreneurs.[197] In *Norway*, personal income is subject to a social security contribution. An

[184] Valtion taloudellinen tutkimuskeskus (2010), 34 and Rauhanen & Venetoklis (2012).
[185] Valtion taloudellinen tutkimuskeskus (2010), 35 and 95.
[186] See also Terkilsen et al. (2012) regarding Denmark.
[187] Valtion taloudellinen tutkimuskeskus (2010), 37.
[188] Rauhanen & Venetoklis (2012).
[189] Valtion taloudellinen tutkimuskeskus (2010), 16 – 18.
[190] Tax Expenditures in the Nordic Countries (2010), 23 and 41.
[191] Solbu & Kristiansen (2012).
[192] Tax Expenditures in the Nordic Countries (2010), 21 and 41. See also Minnesota Department of Revenue (2011).
[193] OECD (2010c).
[194] Solbu & Kristiansen (2012).
[195] See also Valtion taloudellinen tutkimuskeskus (2010), 18.
[196] Tax Expenditures in the Nordic Countries (2010), 23 and 39.
[197] Rauhanen & Venetoklis (2012).

employer's social security contribution is also included in the benchmark. For instance, the lower rate for agricultural income is considered as tax expenditure. Moreover, the contribution is geographically differentiated, and the lower rates are considered as tax expenditures.[198] An interesting comparative point of view is that the Norwegian geographical differentiations has resulted revenue losses annually over one billion euros, while in Finland, annual revenue losses have been only some million euros.[199] In *Sweden*, too, social security contributions are included into the tax expenditure reporting.

Transfer tax. In *Finland*, after the reporting reform 2010 the transfer tax is covered by the tax expenditure report. The benchmark tax is to large extent compatible with the principles of the transfer tax legislation. For example, asset transfer tax equals 1.6 % of the purchase price of the securities or of the value of another contribution. However, acquisitions of securities through the stock exchange are exempt from asset transfer tax, which is tax expenditure order of magnitude of 2,000 million euros (2011). Moreover, the exemption of first-time home buyers from the transfer tax is a deviation from the benchmark tax, and it constitutes tax expenditure of 95 million euros (2011).[200] In *Norway*, stamp duty is regarded as an additional tax on property and, thus, a tax sanction.[201] Comparison between Finland and Norway shows well how prone tax expenditure reporting is to misleading conclusions. In Finland, the second largest tax expenditure would not be tax expenditure at all in Norway.

2.3.7 Tax Sanctions

In general terms, negative tax expenditures are tax sanctions or tax penalties. Tax sanctions depart from the normative tax structure by penalizing the taxpayer and by requiring a greater tax payment than would occur under the benchmark tax.[202] Tax sanctions are also referred to mean the use of the tax system to discourage certain activities.[203] In general, an informal definition of tax sanctions is as follows:[204] they are provisions that increase tax proceeds relative to a re-defined norm; they are directed at specific group of taxpayers or activities; their purpose may be to discourage certain activities;[205] they have not been introduced in order to mitigate administrative difficulties;[206] and they are deviations from the benchmark tax. For instance, higher than regular VAT rate on certain goods and services could be regarded as tax sanction. On the other hand, higher rates were abolished in the early 1990s and since then no EU country has had a VAT rate above 25%.[207]

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[198] Tax Expenditures in the Nordic Countries (2010), 40 – 41 and Solbu & Kristiansen (2012).
[199] See Valtion taloudellinen tutkimuskeskus (2011) about the magnitude of tax expenditures in Finland. The figures mentioned above refer to Finnish tax expenditures during 2009 - 2012.
[200] Valtion taloudellinen tutkimuskeskus (2010), 31 - 33 and Valtion taloudellinen tutkimuskeskus (2011). See also Rauhanen & Venetoklis (2012) and Viitanen.
[201] Solbu & Kristiansen (2012).
[202] See e.g. Surrey and McDaniel (1985), 29 and Burman (2003), 617 - 618.
[203] OECD (1984), 18 and NORD 1987:11, 71.
[204] Cf. Solbu & Kristiansen (2012).
[205] See also OECD (2010d), 120.
[206] See also Valtion taloudellinen tutkimuskeskus (2010), 42.
[207] See e.g. OECD (2010b), 71 fn. 13. See about tax sanctions in real estate taxation. Valtion taloudellinen tutkimuskeskus (2010), 34 - 35.

Only few OECD countries identify tax sanctions.[208] On the other hand, some critics question the narrow focus on subsidies that are favorable to taxpayers, noting that there also are narrowly punitive provisions.[209] *Thus, is there need for tax sanction reporting*? In other words, what would be the functions of tax sanction reporting? First, it may help to control the measures by which undesirable conduct is regulated, since reporting of tax sanctions improves the visibility of these measures. Among other things, reporting may help to outline all the measures by which certain policy goals are attempted to be achieved.[210] Second, tax sanction reporting may serve planning of *tax reforms*. In a similar fashion as tax expenditure control tax sanction reporting may promote to outline tax provisions which are inconsistent with the goal of an equitable, efficient and simple tax system. For instance, if the neutrality of taxation is emphasized, tax sanctions are as "bad" as tax expenditures. On the other hand, the problems confronted with e.g. the identification of the benchmark tax system, are similar, too. A reference can be made to the discussion about tax sanctions under energy taxation in *Finland*. Initially, the approach was based on the assumption that each energy tax is a tax sanction because they were levied on top of the general consumption tax, i.e. VAT. Thereafter, the energy benchmark tax is based on an energy component and a carbon component, i.e. energy taxes as such are not anymore tax sanctions, but deviations from the benchmark are either tax expenditures or tax sanctions.[211]

Nordic countries calculate tax sanctions – at least to some extent - in case of unfavorable tax treatment of specific groups or activities. *Denmark*, however, only calculates tax sanctions when there is a close link to the tax expenditures, like when tax sanctions reduces a tax expenditure.[212] In *Finland*, four tax sanctions were calculated in 2012.[213] In *Norway*, the majority of the tax sanctions related to energy that has been reported stem from a higher-than-the-benchmark carbon tax rate. In total, *Swedish* report covers nine tax sanctions (2011).[214]

3 TAX EXPENDITURE REPORTING

3.1 The Stage of Development

Germany and the *United States* were the first countries to report tax expenditure information, Germany in 1959 and the United States in the late 1960s. These countries can be labeled as *forerunners* of tax expenditure reporting. By 1983, *Australia, Canada, France* and *Spain* were also regularly identifying tax expenditures and reporting them.[215] In 1996, almost all OECD member countries reported tax

[208] See e.g. OECD (2010d), 148, Tax Expenditures in the Nordic Countries (2010), 17 and Valtion taloudellinen tutkimuskeskus (2010), 9.
[209] Joint Committee on Taxation (2008), 7.
[210] See also Altshuler & Dietz (2008), who advocate for reporting tax sanctions.
[211] see also Rauhanen & Venetoklis (2012).
[212] Tax Expenditures in the Nordic Countries (2010), 20 and 28.
[213] Rauhanen & Venetoklis (2012).
[214] Skr. 2010/11:108.
[215] See e.g. Kraan (2004), 130.

expenditures.[216] The reporting of tax expenditures has now extended to most OECD countries, many emerging markets and developing countries.[217] Moreover, tax expenditure reports are produced at sub-national level. For example, 42 states produce tax expenditure reports in the *United States*.[218]

The introduction of reporting of tax expenditures has varied across the Nordic countries. In *Finland*, tax expenditures have been reported since 1988,[219] in *Sweden* since 1996, in *Denmark* since 1997, in *Iceland* since and in *Norway* since 1999.[220]

The development of tax expenditure policy can be divided into three periods. During the *identification period*, the discussion concentrated on the definition of tax expenditures, the functions of reporting, and the methodologies how to calculate revenue losses due to the tax expenditures. A good example about this kind of discussion has been "*Skatteutgifter. Rapport lämnad till Nordiska Ministerrådet (finansministratrarna) av den Nordiska Skatteutgiftsgruppen i juni 1986*."[221]

Second period may be labeled as the *reporting period* in which tax expenditure reports have been regularly produced and published. The estimate of the revenue losses due to tax expenditures has been in a critical position during this stage. On the other hand, the reporting period has not inevitably been stable. For example, tax expenditure reports may have become - and often have become - much more comprehensive than they initially were.[222]

Third period can be called *evaluation period*. It includes both *ex ante* assessments, i.e. before the provision has been implemented and periodical *ex post* evaluations, i.e. after the provision has been implemented.[223] However, evaluation of tax expenditures is not yet a general practice across OECD countries.[224] No systematic evaluation of tax expenditures has been carried out either in the Nordic countries. Nevertheless, some evaluations *in casu* have been carried out. For instance, prior to *Norwegian* tax reform in 2006, a government appointed Tax Committee which evaluated several tax expenditures.[225] Nordic countries are, in any case, far behind the *Netherlands,* which began with a program of evaluations of tax expenditures in 2004, with the goal of reviewing tax expenditures approximately every five years.

3.2 The Functions of Tax Expenditure Reporting

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[216] See e.g. Kraan (2004), 130.
[217] See e.g. International Monetary Fund (2007), 65.
[218] See closer Levitis et al. (2009), 1 – 2.
[219] Valtiovarainministeriön julkaisusarja 2/1988.
[220] Kjellqvist et al. (2012), Matthiasson (2012) and Solbu & Kristiansen (2012).
[221] NORD 1987:11.
[222] Cf. the reporting reform in Germany in 1977.
[223] See e.g. Pogue (2009).
[224] OECD (2010b), 76.
[225] Tax Expenditures in the Nordic Countries (2010), 24.

Stanley Surrey (1973) emphasized the connection between tax expenditure analysis and *tax reform*.[226] A related purpose of tax expenditure analysis mentioned by Surrey is the simplification of tax system. He mentioned that one significant source of complexity is the presence of the tax expenditures within the tax system. Moreover, tax expenditure analysis may facilitate the evaluation of newly proposed tax expenditures as well as existing tax expenditures. For instance, whether the financial assistance is desirable at all, or whether tax expenditures are accomplishing their objectives?

Tax expenditure reporting has been mentioned to be an instrument to build momentum for base-broadening tax reforms.[227] In general, tax reforms that broaden tax bases and lower rates would reduce the extent to which tax systems distort work, investment and consumption decisions, increasing output and enabling improvements in social welfare. On the other hand, tax expenditures entail a loss of revenue, which necessarily means that other taxes have to be higher than otherwise or government expenditure reduced. These higher rates may create additional efficiency losses, adverse effects on income distribution, and administrative and compliance costs.[228] Empirical evidence suggests that in most cases a broader tax base reform outweigh its costs.[229] However, this needs to be established empirically for each specific tax reform. In practice, many countries have implemented tax reforms over the past 20 – 30 years that have broadened tax bases and lowered rates. Nevertheless, tax expenditures continue to be significant in many countries.[230]

Another aim of tax expenditure analysis is widely shared, i.e. to improve the control of the use of government resources on the revenue side of the budget.[231] This approach emphasizes that tax expenditures are essentially spending programs, i.e. they serve ends which are similar in nature to those served by direct expenditures.[232] It is possible to speak about *expenditure control theory* within this context.[233] For example, *John L. Mikesell* (2002) has mentioned: "Tax expenditure budgets can close an information gap in the budget process."[234] On the other hand, tax expenditures are not only spending in nature, but sometimes regulatory – or incentive – in nature. For instance, accelerated depreciation rules under corporate income taxation provide incentives for investments for business purposes.

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[226] See also Toder (2005) and Pogue (2009).
[227] See e.g. OECD (2010b), 38.
[228] See e.g. OECD (2010b), 9. In standard economic theory the deadweight loss from taxation goes up by the square of the tax rate.
[229] See e.g. Heady (1993).
[230] OECD (2010b), 11.
[231] See e.g. Surrey (1973), Pogue (2009) and Tax Expenditures in the Nordic Countries (2010), 9. Regarding Finland, see e.g. Rauhanen & Venetoklis (2012).
[232] On tax expenditures from above-mentioned point of view, see Surrey (1973) and Surrey and McDaniel (1985). See also Mattsson (2009), 161.
[233] See e.g. Joint Committee on Taxation (2008), 2.
[234] See also Burman (2003) and OECD (2010d).

At best, tax expenditure reports also draw attention to tax expenditures that might otherwise go unnoticed.[235] Another matter is how well the *budget transparency* has been realized. According to *Joint Committee on Taxation* (2008) regarding the *United States*, budget transparency has not been realized. It has mentioned that the principal utility of tax expenditure analysis has been as a tool of tax policy and tax distributional analysis. On the other hand, some critics have questioned whether tax expenditure analysis serves any purpose at all.[236]

Finally, there is one critical and topical function for tax expenditure analysis. Many countries face serious long-term fiscal problems. If current tax and spending policies are maintained, expenditures are projected to rise significantly as a share of GDP while revenues will fall, driving deficits and debt to unprecedented levels that will threaten serious harm to the economy. Thus, it has been proposed that there is need to restrain tax expenditures as a part of *long-term budget solutions*.[237] However, there is another side of the coin, too. For example, *Levitis et al.* (2009) have emphasized that the goal is not to eliminate tax expenditures, which are neither good policy nor bad policy *per se*. Tax expenditures are one of a policymaker's tools for achieving policy goals; like other tools, they can be put to good use or abused, and like other tools, they should be transparent and accountable.

In Nordic countries, the functions of tax expenditure reporting have been manifold.[238] *Denmark* is an example where tax expenditures have been repealed in order to raise revenue. However, at the same time new tax expenditures have been introduced to offset some of the distributional effects of the tax reform.[239] On the other hand, the *Danish Ministry of Taxation* has indicated that the inclusion of tax expenditures in the budget is not crucial to ensure ongoing political scrutiny and prioritization of tax expenditures.[240] The discussion in Denmark has been interesting also otherwise when the need for tax expenditure reporting is analyzed. The Ministry of Taxation has had the opinion that tax expenditures should not be subjected to other reporting requirements than those applying to the tax system in general. The ministry points to the fact that total resources in the ministry are best utilized by focusing on the overall collection of taxes rather than on targeted assessment and control of tax expenditures. In that connection, the ministry has emphasized the ongoing efforts to develop tools to analyze the impacts of the tax system. The Ministry of Taxation is therefore of the opinion that tax expenditures should be assessed and controlled in conjunction with the legislation which they are a part of.[241]

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[235] See e.g. Levitis et al. (2009).
[236] See also Joint Committee on Taxation (2008), 7 and Pogue (2009).
[237] Huang & Shaw (2009). On the other hand, consistent budget surpluses may create pressure to increase both direct spending and tax expenditures, see e.g. OECD (2010d), 79 regarding Canada. See also Valtion taloudellinen tutkimuskeskus (2010), 1.
[238] See also OECD (2010b), 102 – 104 about the purpose and usage of tax expenditure reporting in different OECD countries. Cf. Mattsson (2009).
[239] Terkilsen et al. (2012).
[240] Rigsrevisionen (2007).
[241] Rigsrevisionen (2007).

In *Finland*, the reports on tax expenditures have been utilized for tax reform planning and amendments of tax legislation.[242] Moreover, they have enhanced transparency in public finances, and created prerequisites for alternative forms of subsidies.[243] Within the context of reporting reform in 2010, it was emphasized the need to control tax expenditures as a part of the budget process. Moreover, it was referred to the financial crisis as well as to the public deficit.[244]

In *Norway*, the purpose of reporting tax expenditures is to obtain a greater transparency regarding political priorities and financial support to different groups or activities.[245] On the other hand, the purpose of producing and reporting tax expenditure estimates is not very clear, and the list of tax expenditures is presented each year for informational purposes.[246] *Solbu* and *Kristiansen* (2012) mention that there is minimal awareness among the public what the tax expenditures actually express.

In *Sweden*, the main objective with the tax expenditure reports is to illuminate the implicit support given on the budget revenue side. Reports may hence serve as a basis for prioritizing among different policy areas. Tax expenditures are, however, not an integrated part of the budget process.[247] On the other hand, according to Swedish National Audit Office the Government ought to consider how tax expenditures should be treated in the fiscal process.[248] Moreover, it has been emphasized that tax expenditures shall be examined continuously in order to simplify the tax system as such and to broaden tax bases thereby getting financial space for cutting strategic tax rates.[249]

3.3 Production and Publication of the Report

In general, only few countries have made it a *legal requirement* to report tax expenditures.[250] According to a survey made by *OECD* (2010b), tax expenditure reporting is legal obligation e.g. in *Australia, Austria, Belgium, Chile, France, Germany,*[251] *Greece, Italy, Korea, Mexico, Portugal, Spain,* and the *United States*.

The situation varies across Nordic countries in this respect. In *Denmark*, for example, tax expenditure reporting is not a legal obligation, and actual tax expenditure reports are not published either.[252] In *Finland*, there is no mention in the legislation about the treatment of tax expenditures in general, and tax expenditure reporting is not required by the law; however, the tax expenditure reports are actually

[242] Rauhanen & Venetoklis (2012).
[243] Tax Expenditures in the Nordic Countries (2010), 37.
[244] Valtion taloudellinen tutkimuskeskus (2010).
[245] Solbu & Kristiansen (2012).
[246] Tax Expenditures in the Nordic Countries (2010), 46.
[247] See e.g. OECD (2010d), 123 and Kjellqvist et al. (2012).
[248] Tax Expenditures in the Nordic Countries (2010), 50.
[249] Mattsson (2009), 164.
[250] See also EUROSAI (2008a) and OECD (2010e), 77.
[251] In Germany, the legal obligation concerns only for tax expenditures on businesses.
[252] Terkilsen et al. (2012).

published. The Ministry of Finance has given a continuous mandate to the Government Institute for Economic Research (VATT) to publish a descriptive report of tax expenditures annually.[253] In *Sweden,* tax expenditure reporting is a legal obligation; moreover, tax expenditures have been defined in the preparatory drafts of the legislation concerned, but not in the legislation.[254] In *Iceland*, an overview of tax expenditures is required to be provided by the State Accounting Act. [255]

In *Denmark* and in *Sweden,* the Ministry of Taxation and Ministry of Finance, respectively, performs calculations.[256] Moreover, the Danish Ministry of Business and Growth publishes the tax expenditures under business taxation in an annual report regarding business subsidies.[257] In *Finland* the Government Institute for Economic Research (VATT) makes the calculations. In *Norway* the work is divided between the Ministry of Finance and Statistics Norway.[258] In many other OECD countries, the Ministries of Taxation and Finance take care about tax expenditure reporting.[259]

Most OECD countries report tax expenditures *annually*, but some countries report every two years or less.[260] For example, in *Germany* tax expenditure reports are published every two years, and in *Switzerland* the frequency of reporting is irregular.[261] *Finland, Norway* and *Sweden* report tax expenditures annually. More specifically, report is published in Sweden twice a year, in spring and in autumn. In *Denmark*, a complete revision of all tax expenditures is not carried out annually. On the other hand, the list is supplemented by new tax expenditures, *ad hoc* revisions of the existing tax expenditures as well as their amendments.[262]

In general, OECD countries produce full tax expenditure reports that are made *public* on a regular basis. *Korea* is an interesting exception: even though it produces such a report regularly, it does not make it publicly available.[263] In all the Nordic countries, tax expenditure reports – or list of them in Denmark - are publicly available.

Some OECD countries report tax expenditures outside the budget and some in *annexes to the budget*.[264] The situation varies across Nordic countries in this respect, too. The *Danish* Government decided to end tax expenditure reporting in the Budget Proposal in 2006, as it did earlier since 1997. Thereafter, the Ministry

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[253] Rauhanen & Venetoklis (2012) and Viitanen (2012).
[254] See closer Kjellqvist et al. (2012).
[255] Matthiasson (2012).
[256] Tax Expenditures in the Nordic Countries (2010).
[257] Terkilsen et al. (2012).
[258] Solbu & Kristiansen (2012).
[259] See e.g. OECD (2010d), 107.
[260] See e.g. OECD (2010d), 78, 85, 107 and 154.
[261] OECD (2010b), 102 and 104.
[262] See closer Terkilsen et al. (2012).
[263] OECD (2010b), 38.
[264] See e.g. OECD (2010d), 154. According to Kraan (2004), 122, "the budget is considered as the law or collection of laws authorizing 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."

of Taxation has published a list of changes to tax expenditures on its homepage.[265] The list includes new tax expenditures and also revisions of existing tax expenditures. In addition, parts of the tax expenditures are reported separately in different contexts.[266] In *Finland*, in 1989 – 1999 the tax expenditure report was published as an appendix to the budget proposal. In 2000, it was moved to the Parliament's report on the administration of government finances. After 2005, the main categories of tax expenditures are presented in Report on the Central Government Final Accounts.[267] In *Norway*, tax expenditures were reported in the national budget, but from 2011 the description of tax expenditures were moved to to the annual parliamentary bill on the government's tax programme.[268] In *Sweden*, tax expenditures are reported in a Government Communication in conjunction with the Spring Fiscal Policy Bill, and they are re-reported in the autumn as supplement to the Budget Bill.[269]

All Nordic countries *except Denmark* report tax expenditures yearly *to the Parliament*.[270] On the other hand, the fact that tax expenditure report is no longer shown in connection with the Finance Bills was criticized by Rigsrevisionen as early as in October 2007. However, Rigsrevisionen has agreed with the Ministry of Taxation and the Ministry of Finance that the data upon which the overview was based were obsolete, and the appendix therefore no longer relevant.[271]

3.4 Information Covered by the Report

From idealism to realism. According to *Tax Expenditures in the Nordic Countries* (2010), following information is valuable when reporting tax expenditures:[272]

1) the applied benchmark used to identify tax expenditures
2) the estimates of the annual revenue loss
3) cost in recent years and cost estimates for the future
4) the method used when calculating the tax expenditures
5) behavioral responses of tax expenditures
6) the reporting could include legal citation, reasons for enactment, and year of enactment for each tax expenditure
7) time limitation and
8) information from evaluations of tax expenditures.[273]

Another matter is how ideal tax expenditure reports have been in practice. According to *EUROSAI* (2008d), for example, the arrangements for reporting tax expenditures are inadequate in practice. An overview

[265] www.skm.dk.
[266] Tax Expenditures in the Nordic Countries (2010), 29.
[267] Tax Expenditures in the Nordic Countries (2010), 37.
[268] Solbu & Kristiansen (2012).
[269] OECD (2010d), 122 and Tax Expenditures in the Nordic Countries (2010), 23 and 25.
[270] Tax Expenditures in the Nordic Countries (2010), 23 and Kjellqvist et al. (2012).
[271] Rigsrevisionen (2007).
[272] Cf. Pogue (2009).
[273] See also Levitis et al. (2009) and Leachman et al. (2011).

about all tax expenditures is often not available. Losses of tax revenues are calculated incompletely. For instance, in some cases it was impossible to say whether the amounts of revenue lost were actual results or only estimates.[274] No information is given about the basis of such estimates and assumptions. The presentation submitted by the national government is in most cases too concise with respect to the objectives, the target achievement, the actual outcomes and the evaluation of tax expenditures.

Non-calculation of revenue losses is characteristic for large part of tax expenditures in Nordic countries, too. In *Denmark,* tax expenditures are not calculated where a benchmark is difficult to establish, as for example in private pensions systems, where the time horizon and correlation to public transfers complicates the matter.[275] In *Finland,* after the reporting reform in 2010 there are plenty of tax expenditures the revenue loss of which has not been calculated.[276] In *Norway*, all existing tax expenditures are included in the report, but not all are calculated, such as inheritance tax expenditures and several tax expenditures related to payments in kind. In *Sweden*, too, there are many tax expenditures, approximately one third of all tax expenditures reported, revenue loss of which has not been calculated.[277]

What is still worth noting is that the information about tax expenditures has *split to different documents*. *Finland* may provide an example in this respect. First, the motivation for individual tax expenditure has been presented in the preparatory drafts of tax legislation when the new tax expenditure in question has been introduced. Secondly, in the budget document for the upcoming fiscal year different data on tax expenditures are reported. Moreover, information about the revenue loss due to tax expenditures for the forgone year is listed in the Government's Statement of Annual Accounts. In addition, Government Institute for Economic Research (VATT) publishes detailed tables about tax expenditures annually both in VATT's Memorandum Series and in VATT's internet pages.[278]

Coverage of years. According to *Tax Expenditures in the Nordic Countries* (2010), including cost in recent years and cost estimates for the future will give an indication of any trends in the single tax expenditure. However, tax expenditure reporting varies across OECD countries in this respect. Most counties in OECD, however, generally cover only few years when reporting.[279] In *Finland*, tax expenditure report published in 2011 covered years 2009 – 2012.[280] In a report published a year before, only tax expenditures in 2009 were outlined.[281] According to *Rauhanen & Venetoklis* (2012), however, the reporting window is three years in the State Budget, i.e. budget year and two preceding years, and two years in the Government's Statement

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[274] See also EUROSAI (2008a), 16.
[275] Tax Expenditures in the Nordic Countries (2010), 23.
[276] Valtion taloudellinen tutkimuskeskus (2010).
[277] See closer Skr. 2010/11:108 and Kjellqvist et al. (2012).
[278] See closer Rauhahen & Venetoklis (2012).
[279] Tax Expenditures in the Nordic Countries (2010), 17.
[280] Valtion taloudellinen tutkimuskeskus (2011).
[281] Valtion taloudellinen tutkimuskeskus (2010).

of Annual Accounts, i.e. accounting year and one preceding year. In *Sweden*, the annual Spring Fiscal Policy Bills cover tax expenditures for three years, i.e. the budget year, one year prior, and one succeeding year.[282]

Coverage of Taxes and Tax Expenditures. In general, some countries identify tax expenditures only for their income taxes on individuals and corporations. A reference can be made here to the *United States*.[283] Some other countries also identify tax expenditures for value added tax, real estate taxes, excise taxes, and all other taxes.[284] For instance, in *France* tax expenditures are defined for every tax.[285]

In *Denmark,* tax expenditure list covers personal and corporate income taxes, VAT, and other indirect taxes.[286] In *Finland*, the benchmark tax systems and tax expenditures are defined in personal income taxation, taxation of corporate income and other enterprise income, inheritance and gift tax, real estate tax, transfer tax, value added, excise duties and to some extent in social security contributions.[287] In *Norway*, all existing tax expenditures are included in the report, but not all are calculated.[288] In *Sweden*, tax expenditure reporting covers income tax, labor tax, social security contributions paid by employers, VAT and some excise taxes (energy and carbon dioxide tax). Instead, no tax expenditures are shown for taxes on motor vehicles or duties on alcohol and tobacco.[289]

Furthermore, one question is whether to apply *triviality limit* in outlining the tax expenditures. Also from this point of view, Nordic countries have applied different policies. For instance, in *Denmark* the triviality limit of DKK 5 million has been applied.[290] *Finland*, on the contrary, has not applied any triviality limit. For example, there were seven tax expenditures in 2011 the amount of which were estimated to be only 0.5 million euros.[291]

Does reporting cover all levels of government? The practice varies across OECD countries as well as across Nordic countries.[292] In *Denmark*, tax expenditures include general and local taxation but tax expenditures are not split into different levels for purposes of reporting.[293] In *Finland*, tax expenditure calculations include general government taxation, municipal taxation, church taxation and contributions paid by individuals to Social Insurance Institution.[294] On the other hand, even though it would be interesting for local officials to have information on the tax expenditures generated at their administrative area, due to

[282] See closer OECD (2010d), 122.
[283] OECD (2010d), 132. For a brief period in the 1990s tax expenditures were measured for estate and gift taxes, too.
[284] OECD (2010d), 72.
[285] OECD (2010d), 84.
[286] See e.g. Terkilsen et al. (2012).
[287] Rauhanen & Venetoklis (2012). See also Valtion taloudellinen tutkimuskeskus (2010).
[288] See e.g. Solbu & Kristiansen (2012).
[289] OECD (2010b).
[290] Rigsrevisionen (2007).
[291] Valtion taloudellinen tutkimuskeskus (2011).
[292] See e.g. OECD (2010d), 76, 84 and 88. See also Craig & Allan (2011).
[293] Tax Expenditures in the Nordic Countries (2010), 28. See also OECD (2010b), 51.
[294] Tax Expenditures in the Nordic Countries (2010), 35. See also OECD (2010b), 51.

lack of resources this has not been attempted until now in Finland.[295] In *Norway*, only tax expenditures in general government taxation are calculated, although the revenue loss will also affect local government income as tax revenue from tax on ordinary income is divided between central and local government.[296] In *Sweden*, tax expenditures are not measured at the municipal level. However, tax expenditures at the central governmental level may affect tax revenues at the local level.[297]

Description of the tax expenditure. In *Finland*, when tax expenditure reporting was reformed in 2010, a short description was offered by each tax expenditure. Descriptions covered e.g. the reasons why tax provisions concerned were regarded as tax expenditures; the revenue losses due to the tax expenditures, or that the revenue losses were not calculated; the calculation method of tax expenditures; and the sources of calculation.[298] In *Norway*, the tax expenditure report contains a short description of all exceptions and deviations from the benchmark system. The description is neutral and tax expenditures are not justified in any way.[299] In *Sweden,* a brief description of tax expenditures is provided as well as their legal basis.[300]

Introduction of new tax expenditures. In *Denmark*, the Ministry of Taxation publishes a list of changes to tax expenditures due to legislation on its homepage, even though no tax expenditure report is published.[301] In *Finland*, a listing of new tax expenditures is provided as a part of the report as well as the detailed description of those tax expenditures the purpose or features of which have changed considerably.[302] *Norway* has had no systematic approach to new tax expenditures in the tax expenditure report, but in the report (2008) new tax expenditures were pointed out.[303] In *Sweden*, when a new tax expenditure measure is introduced, this is explicitly pointed out in the tax expenditure report.

Tax expenditures together with equivalent spending programs? According to *OECD recommendations*, regular expenditures and tax expenditures should be shown in the documentation side-by-side for the same number of years.[304] In general, however, reporting of tax expenditures alongside similar outlay programs is seldom done in OECD countries.[305] Nordic countries have not been an exception to the main rule in the sense that tax expenditures were not an integrated part of the budget process still few years ago. In most cases tax expenditures were not reported in connection with direct expenditure targeted to the same activities or recipient groups. One exception was found in *Norway*, where direct and tax expenditures to different industries were reported under the heading “Industrial support” in the National Budget.[306] In *Finland*, tax expenditures are not, in general, reported in connection with subsidies or income

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[295] Rauhanen & Venetoklis (2012).
[296] Tax Expenditures in the Nordic Countries (2010), 42.
[297] See closer OECD (2010d), 121. See also OECD (2010b), 53.
[298] Valtion taloudellinen tutkimuskeskus (2010).
[299] Tax Expenditures in the Nordic Countries (2010), 43.
[300] Kjellqvist et al. (2012).
[301] www.skm.dk.
[302] Rauhanen & Venetoklis (2012).
[303] Tax Expenditures in the Nordic Countries (2010), 23.
[304] See also Rigsrevisionen (2007), OECD (2010d), 154 and Matthiasson (2012).
[305] OECD (2010d), 154.
[306] Tax Expenditures in the Nordic Countries (2010), 24 and 43.

transfers that serve the same purpose.[307] However, the connection of tax expenditures into the budget process has been partially implemented in 2011. The aim is to strengthen this approach when the calculation would be developed.[308]

On the other hand, according to *Tax Expenditures in the Nordic Countries* (2010), a full integration of tax expenditures into the budget process is hardly feasible. Lack of data, computational methods, benchmark choice and other methodological issues complicates this matter. For example, the *Danish Ministry of Taxation* has mentioned that the estimation of tax expenditures is subject to considerable uncertainty and therefore it will not make any sense to present the estimated tax expenditures along with the direct expenses in the budget. It has been referred to identification criteria and reliability of data and side-effects of tax expenditures on tax revenues and taxpayers' changed behavior if tax expenditure program is repealed.[309]

3.5. Revenue Losses Due to the Tax Expenditures

Methods and problems. There are three different approaches to estimate the cost of tax expenditures. *Revenue forgone method* involves a static estimate of the loss of tax revenue. Hence the method does not take account of behavioral responses. It is, therefore, the easiest estimation method. On the other hand, there are good reasons to believe that taxpayers change their behavior in response to the tax expenditure.[310] The revenue foregone method has several other drawbacks, too. First, it does not take into account interactions among different tax expenditures. Secondly, because the revenue foregone method omits behavioral responses, the method tends to overestimate the direct revenue gain from eliminating tax expenditure, especially in cases where the underlying activity is significantly reduced when the tax expenditure is withdrawn.[311] Thirdly, it does not take into account behavioral changes on the part of the government because of the tax expenditures, such as enacting or repealing other tax expenditures or outlay programs. In summary, revenue foregone method does not provide an accurate estimate of the revenue effect of the repeal of the tax expenditure, and the amounts of multiple tax expenditures cannot be added to obtain an accurate sum.[312]

Revenue gain method provides an *ex ante* estimate of the additional revenue that would accrue from eliminating a given tax expenditure when behavioral effects are taken into account. However, this makes the estimation of revenue loss much more complicated to apply in practice.[313] Moreover, a revenue foregone method does not depend on the estimates of the predicted human behavior, whereas a revenue

[307] Rauhanen & Venetoklis (2012).
[308] Valtion taloudellinen tutkimuskeskus (2010).
[309] Rigsrevisionen (2007).
[310] Tax Expenditures in the Nordic Countries (2010), 8.
[311] See also Valtion taloudellinen tutkimuskeskus (2010), 15.
[312] See e.g. OECD (2010b), 49 and OECD (2010d), 151. Cf. the revenue gain method.
[313] OECD (2010d), 151 and Tax Expenditures in the Nordic Countries (2010), 8.

gain method does.[314] Furthermore, the number of potential interactions among tax provisions and other government programs is for all practical purposes infinite. This makes the application of revenue gain method even more troublesome.[315]

With the *outlay equivalence method,* tax expenditures are measured by estimating the amount of direct expenditures that would be required to provide the same benefit to taxpayers.[316] Under outlay equivalence method, in order to estimate tax expenditures on the same basis as regular expenditures, it is necessary 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.[317]

In general, most countries apply revenue foregone method. For example*, Finland* applies only the method concerned.[318] Some countries, like *Denmark*, have applied outlay equivalence method in addition to the revenue foregone method.[319] Also *Sweden* provides outlay equivalent measures as a supplement to the revenue foregone method.[320]. The revenue gain method is rarely applied.[321] However, the *Australian* Tax Expenditure Report incorporates some estimates of tax expenditures based on the revenue gain approach starting in 2008.[322]

Most OECD countries use *micro-simulation models* based on detailed information from tax records to estimate the cost of PIT and CIT expenditures. *Aggregate modeling* – based on national accounts, input-output tables, aggregates from tax records – is generally used for estimating VAT expenditures. Additionally, the *data* used may be of varying quality. This is one reason why to interpret the figures of tax expenditures with caution.[323]

The tax expenditure calculations rely in the Nordic countries on tax administration data and other statistical data. In addition, *Finland* and *Norway* utilize micro-simulation models in calculating tax expenditures in personal income taxation.[324] In *Finland*, in corporate income taxation tax expenditure calculations are based on tax forms data from tax authorities. In value-added taxation calculations are based on data from Statistics Finland. With respect to excise duties, data is received from the Finnish Customs, and with respect to motor vehicle taxation, the data is provided by the Finnish Transport Safety Agency.[325] In *Norway*, the

[314] OECD (2010d), 151 – 152.
[315] See e.g. Terkilsen et al. (2012).
[316] See e.g. OECD (2010d), 13 – 14 and Tax Expenditures in the Nordic Countries (2010), 7 - 8.
[317] Tax Expenditures in the Nordic Countries (2010), 8.
[318] Valtion taloudellinen tutkimuskeskus (2010) and Rauhanen & Venetoklis (2012). See also Solbu & Kristiansen (2012) regarding Norway.
[319] Rigsrevisionen (2007) and Terkilsen et al. (2012). See also OECD (2010d), 71.
[320] OECD (2010d), 151. The United States once did the same as Sweden, but has discontinued the practice.
[321] See e.g. Rigsrevisionen (2007).
[322] OECD (2010b), 47.
[323] Tax Expenditures in the Nordic Countries (2010), 21.
[324] Tax Expenditures in the Nordic Countries (2010), 22 and Solbu & Kristiansen (2012).
[325] Rauhanen & Venetoklis (2012).

model calculating revenue effects from changes in direct taxation and tax expenditures is based on tax returns from a selection of households.[326] Tax expenditures related to indirect taxes are not calculated by models, but by *ad hoc* method based on sectoral statistical information and information from tax administration systems.[327] In *Sweden*, there are some concerns about the absence of data in some areas. There is a general sentiment that tax expenditure estimates can be of a lesser quality than spending estimates.[328]

Although it has long been understood that the combined cost of many tax expenditures could differ from the sum of the separate tax expenditure line items, analysts have not to a large extent examined the *interaction among tax expenditures*.[329] Interactions between different tax expenditures are not taken into account in any Nordic country.[330] A reference can also be made to other OECD member states in general, where tax expenditures are evaluated independently, and so there is no attempt to capture interaction effects among any combinations of tax expenditures. This means that any sum of tax expenditures does not accurately reflect the combined impact of all of the relevant provisions.[331]

In general, tax expenditures are typically, but not always, measured as *annual cash flows*.[332] In some instances, governments produce *discounted present-value estimates*. Such estimates may be useful, although governments are not necessarily indifferent between different streams of costs with the same present value, and often want to see year-by-year figures.[333] In *Finland*, present value calculation is not applied.[334] *Norway* calculates some tax expenditures as present value. This method is used when there is a time horizon, by estimating today's value of a future gain. The tax expenditures related to depreciation rates higher than actual depreciation and tax expenditures related to employee premiums and contributions to occupational pension schemes are calculated using this method.[335] In *Sweden*, tax expenditure estimates measure annual cash flows at current prices, rather than a discounted present value of future flows.[336]

In summary, there are *considerable uncertainties* when estimating and calculating tax expenditures. The estimates are sensitive to changes in the choice of benchmark and different benchmarks would generate different levels of tax expenditures. There are also tax expenditures in a number of areas where the statistical and analytical basis for a survey are not sufficient.[337] Moreover, a tax expenditure estimate does not measure the revenue that would be gained by eliminating that provision. For instance, the estimate

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[326] See closer Tax Expenditures in the Nordic Countries (2010), 42.
[327] Tax Expenditures in the Nordic Countries (2010), 42.
[328] OECD (2010d), 122.
[329] See e.g. Burman et al. (2008).
[330] See e.g. Rauhanen & Venetoklis (2012). See also OECD (2010d), 121 – 122.
[331] See e.g. OECD (2010d), 89.
[332] See e.g. Valtion taloudellinen tutkimuskeskus (2010), 9.
[333] See closer OECD (2010d), 153. See also Valtion taloudellinen tutkimuskeskus (2010), 6.
[334] Rauhanen & Venetoklis (2012).
[335] Tax Expenditures in the Nordic Countries (2010), 42 and Solbu & Kristiansen (2012).
[336] OECD (2010d), 121.
[337] Tax Expenditures in the Nordic Countries (2010), 30 and Terkilsen et al. (2012).

does not include any behavioral response, which would be incorporated in a revenue estimate.[338] Furthermore, since the tax provisions may interact, for example through the progressive tax schedule, the total amount of tax expenditure cannot simply be calculated by summing up all the parts.[339] In addition, tax expenditures increase in many instances the need for public administration and control, and complex tax regulations of the increase the burden of administrative costs to be carried by businesses and citizens.[340] Hence, not only revenue loss has to be taken into account but also the administrative burden and costs to businesses, citizens and public sector.[341]

The magnitude of revenue losses in total. There is huge variation regarding the revenue loss due to the tax expenditures in relation to GDP across OECD countries.[342] This holds also among the Nordic countries. According to *Tax Expenditures in the Nordic Countries* (2010), the share of tax expenditures as per cent of GDP has been largest in *Sweden*, 8 per cent, and smallest in *Denmark*, 2.2 per cent (2009);[343] in *Iceland* the share has been even lower, approximately 1 per cent in recent years. In *Finland* the share has been 7 per cent and in *Norway* 5.4 per cent of GDP.[344] As per cent of total tax revenue, the tax expenditures amount to 4.4 per cent *in Denmark*, 16 per cent in *Finland*, 3.8 per cent in Iceland, 12.6 per cent in *Norway* and 17 per cent in *Sweden*.[345] On the other hand, these numbers must be interpreted with caution as neither behavioral effects nor interaction of tax expenditures are taken into account.[346] This is underlined also by the fact that after the reporting reform in 2010 in Finland, the revenue loss related both to the GDP and to the total tax revenue are largest among Nordic countries. Total amount of tax expenditures jumped first from 13 billion euros to almost 18 billion euros, and thereafter still to 23 billion euros.[347] This would be understandable if Finland would have implemented tax revolution in these years, but is has not!

Reasons for the magnitude of revenue losses fluctuating over the years. There are many reasons behind the development of revenue loss due to the tax expenditures. First, new tax expenditures have been introduced. *"Me too" syndrome* may be one factor by which to explain the increase of the revenue loss here. By granting tax expenditure to one sector, other sectors will inevitably lobby hard for inclusion. On the other hand, abolishing a wide range of tax expenditures prevents this kind of lobbying.[348] Secondly, expansions of some existing tax expenditures have been made. Thirdly, the revenue loss due to the tax expenditure has dropped as a result of base-broadening tax provisions.[349] Fourthly, while not many tax expenditures have been eliminated, their value has often fluctuated over time as tax rates have been rising

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[338] See e.g. Burman (2003), 614 – 615.
[339] See e.g. Burman (2003), 615, Tax Expenditures in the Nordic Countries (2010), 9 and Valtion taloudellinen tutkimuskeskus (2010), 6 - 7.
[340] Rigsrevisionen (2007).
[341] On the other hand, other tax expenditures may ease administrative burdens, and therefore, not only revenue loss but also administrative benefits have to be taken into account. See also OECD (2010a).
[342] See closer OECD (2010d).
[343] See e.g. Terkilsen et al. (2012).
[344] The figures in the above-mentioned study refer to 2008 or 2009.
[345] The figures in the above-mentioned study refer to 2008 or 2009.
[346] Tax Expenditures in the Nordic Countries (2010), 44.
[347] See closer Valtion taloudellinen tutkimuskeskus (2010 and 2011).
[348] See also OECD (2010e), 88.
[349] See e.g. Onhus & Skeie (2009) regarding Norway. See also OECD (2010e), 85.

or falling.[350] Fifthly, revenue loss has declined due to the changes in the composition of economic activity.[351] In addition, the cost of existing unchanged tax expenditures can increase because of real economic growth or inflation. For example, accelerated real economic growth could push taxpayers into higher progressive tax rate brackets, thereby increasing the measured cost of tax expenditures that operate by deduction or exclusion from income.[352]

In *Denmark*, since the late 1990's the share of tax expenditures to GDP has declined. This is primarily due to relatively small increases in overall tax expenditures in the period. Also tax expenditures to housing conditions have decreased from 2000 and forward. The abolition of tax expenditures related to taxation on energy consumption is worth of mentioning, too.[353] On the other hand, not all tax expenditures have reduced, e.g. fringe benefits have increased rapidly in the recent years.[354] In addition, *Denmark* introduced the tax reform in 2010. As a part of reform, the top marginal tax rate under personal income taxation was cut. The measures were financed by cutting the tax value of interest deductions, by introducing a limit to yearly tax-favored pension savings and by reducing tax expenditures for businesses and industry. Moreover, reductions in the tax value of deductions of expenses like labor union fees and commuting expenses were implemented.[355]

In *Finland,* the share of tax expenditures to GDP has remained relatively stable during 2000s, but it has come down remarkably since the mid-eighties, which was the start of the reporting period. More specifically, the share of tax expenditures as per cent of GDP has decreased from 14 per cent in 1985 to 7 per cent in 2007. The percentage of total tax revenue was 34 and 16, respectively. Lately there has been an increasing tendency towards introducing new tax expenditures in Finland, so generally the volume of total tax expenditures can be expected to increase rather than decrease in the years to come.[356] Moreover, the reporting reform in 2010 was reflected in the magnitude of revenue losses drastically.

In *Iceland*, the share of tax expenditures to GDP has remained stable during 2000s. On the other hand, the proportion of income tax expenditures has been falling but VAT expenditures increasing considerably over the past years.[357]

In *Norway,* since the late nineties, an increasing number of deductions and allowances have been defined as tax expenditures. This has contributed to an increasing volume of tax expenditures. One of the objectives of the 2006 tax reform in Norway was to abolish several exemptions and allowances that were

[350] See e.g. Burman (2003), 621, Amby (2009) and OECD (2010b), 64.
[351] See e.g. Burman et al. (2008).
[352] OECD (2010d), 30.
[353] Tax Expenditures in the Nordic Countries (2010), 22 and 31 and Terkilsen et al. (2012).
[354] Tax Expenditures in the Nordic Countries (2010), 31 and Terkilsen et al. (2012).
[355] OECD (2010e), 75.
[356] Tax Expenditures in the Nordic Countries (2010), 22, 35 and 37 - 38.
[357] Matthiasson (2012).

poorly justified, but the reform was only partly successful in this matter. The general trend has been that the reported tax expenditures are growing. Moreover, exceptional growth in marked values on property, without an equal growth in assessment value in wealth taxation has contributed the development. Increases in the VAT rate have also contributed to increased tax expenditures.[358]

In *Sweden*, the figures should be interpreted with care, especially if different years are compared. For several reasons the reports of tax expenditures are not complete. For example, data used for some calculations may be insufficient. In addition, in 2009 the estimated tax expenditures were 17 per cent of total tax revenue and in 2008 16 per cent, but the three preceding years the shares were only 11 to 13 per cent.[359]

3.6 The Number of Tax Expenditures

There are several factors affecting to the total number of tax expenditures, and, thus, not even the number of tax expenditures is unambiguous figure. First critical issue is how general or detailed the benchmark system is.[360] Secondly, if only such tax expenditures are taken into account which can be converted to direct spending programs, the number of tax expenditures is smaller than if broader definition is applied. Thirdly, the coverage of taxes is critical, e.g. if only income taxes are covered, the number of tax expenditures is, of course, smaller than if reporting is comprehensive including all taxes.[361] Fourthly, a critical issue is whether tax expenditures are measured both at the central governmental level and at local level or only at the central governmental level. Fifthly, the reform of reporting may affect drastically in the number of tax expenditures, as reform in *Finland* in 2010 has shown. Moreover, smaller changes in reporting may affect the number of tax expenditures.[362] In a similar way in *Norway*, since the late nineties an increasing number of deductions and allowances have been defined as tax expenditures.[363] Furthermore, the number of tax expenditures does not tell whether the composition of tax expenditures has changed e.g. from less PIT expenditures to more VAT expenditures.[364] Finally, the triviality limit and its level affect the number of tax expenditures.[365]

In OECD countries there is great variation in the number of tax expenditures. For instance, in total *Germany* reported 86 tax expenditures in 2006,[366] but on the other hand, in *France* the total number of tax expenditures was 469 in 2009.[367] According to *Tax Expenditures in the Nordic Countries* (2010), the number

[358] See more exactly Tax Expenditures in the Nordic Countries (2010), 22 and 44.
[359] Tax Expenditures in the Nordic Countries (2010), 49.
[360] See also OECD (2010d), 150.
[361] This point of view has been stressed e.g. in Finland, Valtion taloudellinen tutkimuskeskus (2010), 13.
[362] Valtion taloudellinen tutkimuskeskus (2011) and Rauhanen & Venetoklis (2012).
[363] Tax Expenditures in the Nordic Countries (2010), 22 and 44.
[364] See also Matthiasson (2012).
[365] Cf. OECD (2010d), 153.
[366] OECD (2010d), 93.
[367] OECD (2010d), 87.

of tax expenditures ranged from 60 in *Norway* to 115 in *Sweden*.[368] On the other hand, in Norway 60 was the number of calculated tax expenditures; in addition, there were several tax expenditures that were not calculated due to technical difficulty.[369] In *Denmark*, the number of tax expenditures has been approximately 90.[370] In *Finland*, the number of tax expenditures was 60 in 2008.[371] In *Finland*, the number of tax expenditures remained almost the same between 1998 (66) and 2008 (60). Some tax expenditures were abolished and new ones introduced.[372] Due to the reporting reform in 2010, the number of tax expenditures increased drastically, approximately to 200. More specifically, 40 per cent of tax expenditures were related to the taxes first time covered by the tax expenditure report.[373] Moreover, there has been an increasing tendency towards introducing new tax expenditures in Finland in recent years.[374] During the last ten years an increasing number of deductions and allowances have been defined as tax expenditures in *Norway*. This, of course, has contributed to an increased number of tax expenditures.[375] In other words, *re-definition of tax expenditures* has been one reason behind the increase in the number of tax expenditures.

4 LEGAL ISSUES

4.1 Tax Expenditure as a Legal Concept

In general, the concept of tax expenditures has not been defined in legislation.[376] There is not either explicit legal definition of the benchmark tax system for purposes estimating tax expenditures.[377] In Nordic countries, there is not either legal definition of tax expenditures.[378] In practice, every Nordic country defines tax expenditures, however, in the tax expenditure reports.[379] On the other hand, the *United States* has the statutory definition of tax expenditures according to which tax expenditures are "revenue losses attributable to provisions of the Federal tax laws which allow a special exclusion, exemption, or reduction from gross income or which provide a special credit, a preferential rate of tax, or a deferral of liability."[380]

Another matter is that tax expenditures are *authorized by the law*, which is emphasized e.g. by *Rigsrevisionen* (2007) in Denmark. Moreover, *EUROSAI* (2008a) has referred to that the procedures for introducing tax expenditures are not subject to any rules differing from those that apply to other legislative

[368] The figures in the above-mentioned study refer to 2008 or 2009.
[369] Tax Expenditures in the Nordic Countries (2010), 44. See also Joint Committee on Taxation (2008).
[370] Tax Expenditures in the Nordic Countries (2010), 30.
[371] Tax Expenditures in the Nordic Countries (2010), 38.
[372] Valtion taloudellinen tutkimuskeskus (2010), 10. On the other hand, it has been mentioned that the identification of new tax expenditures was defective because of the lack of comprehensive analysis of tax expenditures.
[373] Valtion taloudellinen tutkimuskeskus (2010).
[374] Tax Expenditures in the Nordic Countries (2010), 22.
[375] Tax Expenditures in the Nordic Countries (2010), 44.
[376] See also OECD (2010d), 88.
[377] OECD (2010d), 89.
[378] See e.g. Viitanen (2012) regarding Finland. See also EUROSAI (2008d).
[379] See also Terkilsen et al. (2012).
[380] See also OECD (2010d), 132.

processes. What is worth noting here is that taxes have to be introduced or enacted by the law. Under section 43 of the *Danish constitution*, for example, no taxes shall be imposed except by statute. Similarly, according to section 81 of the *Finnish constitution*, tax – i.e. tax liability, amount of the tax and the legal protection of those liable to tax - should be imposed by statute. Since tax expenditures are part of taxes, it is clear-cut that they shall be imposed by statute.

The concept of tax expenditures has been used in the preparatory drafts of legislation to varying degrees. In *Denmark*, new tax expenditures are explicitly mentioned when a bill includes tax expenditure. When a Bill implies tax expenditures, revenue and distributional effects and the purpose of the new tax expenditure are presented.[381] On the contrary, the term "tax expenditure" is rarely used in *Norwegian* preparatory drafts of legislation when new tax expenditures are introduced.[382] On the other hand, in *Finnish* preparatory drafts of tax legislation tax expenditures have been mentioned several times. Sometimes, but rarely, the concept of tax expenditure has even been mentioned in the title of the government bill.[383] However, government bills have not been very analytical in this respect. Moreover, there are plenty of cases in which tax measures are not mentioned as tax expenditures even though they are such measures, and sometimes *vice versa*, certain tax provisions are mentioned to be tax expenditures even though they are not listed as tax expenditure in the tax expenditure report.[384]

4.2 The Objectives of Tax Expenditures

In general, governments introduce tax expenditures for a wide variety of reasons including to correct externalities, to redistribute income, or to favor a particular interest group.[385] One argument e.g. for reduced VAT rates includes a desire to treat *merit goods* more favorably to encourage their consumption. Merit goods are considered to be goods that an individual or society should have on the basis of some concept of social or cultural need, rather than ability and willingness to pay. It has been referred e.g. to books, newspapers and cultural events in this respect.[386] Another argument is that reduced tax rates are needed in order to correct *positive externalities*. However, VAT expenditures have been regarded as rather blunt instruments for correcting externalities.[387] On the other hand, many tax expenditures are hard to justify from an efficiency or equity perspective.[388]

In general, the national draft bills for tax expenditures sometimes have considerable weaknesses in comparison with the existing standards of national legislation. Thus, the qualitative and quantitative

[381] Tax Expenditures in the Nordic Countries (2010), 23 and 29 and Terkilsen et al. (2012).
[382] Solbe & Kristiansen (2012).
[383] Viitanen (2012). See also HE 85/1997 vp and HE 72/1999 vp.
[384] See e.g. HE 57/2007 vp in which allowance of travel costs is mentioned to be tax expenditure even though the tax expenditure report has not included this allowance.
[385] See e.g. OECD (2010b), 9.
[386] OECD (2010b), 18.
[387] OECD (2010b), 19. See also OECD (1988), 58 and Cnossen (1992), 132.
[388] See e.g. OECD (2010e), 3.

objectives of tax expenditures are in many cases documented inadequately; the objectives are described in such general terms that it is impossible the target achievement by means of these descriptions; no link is shown connecting tax expenditures with overall government policy; and tax expenditures are sometimes outdated and therefore not in line with the original legislative intent.[389]

In *Denmark*, according to *Rigsrevisionen's* examination (2007), the objective of 10 of the 12 programs was specified in the explanatory notes. The objectives of the individual programs were described on an overall, general level in the explanatory notes and did not translate into concrete performance targets which would facilitate the follow-up process. The objectives of two older programs were not specified. On the other hand, *Rigsrevisionen* (2007) admits that it is not always relevant to set performance targets for tax expenditures. Moreover, for most of the Danish tax expenditure programs examined (11 of 12 programs), the *beneficiaries* were clearly specified.[390] In *Finland*, the objectives of tax expenditures are usually set in the government bill, their effects are analyzed and possible follow-up assessments are planned. The overall quality of government bills has improved significantly during past years.[391] In *Norway*, the objective of new legislation involving tax expenditures is usually made clear and revenue impact is always calculated, too.[392]

4.3 Constitutional Problems due to the Tax Expenditures

According to *Peter Melz* (2009), constitutional rules have seldom been an obstacle to implement non-fiscal purposes under taxation. However, he mentions that constitutional considerations may be more motivated when taxes rather than grants are used as an instrument.[393] In any case, constitutional problems related to the tax expenditures have been seldom in Nordic countries. For example, tax expenditures have not caused any constitutional problems in *Denmark*.[394]

Usually, tax law cannot be applied *retroactively* to taxable events.[395] This problem is not unfamiliar in Nordic countries. In *Norway*, in two cases raised for the Supreme Court the question was whether the transitional rules accompanying the changes were in conflict with the constitutional prohibition against giving new legislation retroactive effect. In one of these cases, the Supreme Court concluded that the transitional regulations entering previously untaxed profits as income had unlawful retroactive effect, and thus were in breach with the constitutional prohibition of giving new legislation retroactive effect.[396]

[389] See closer EUROSAI (2008a) and EUROSAI (2008c).
[390] Rigsrevisionen (2007).
[391] Viitanen (2012).
[392] Solbu & Kristiansen (2012).
[393] See also Enger (2009), 86 – 87.
[394] Terkilsen et al. (2012).
[395] See also Amby (2009), 49.
[396] Solbu & Kristiansen (2012).

4.4 EC Law

Aid in any form, which

- has been granted by a member state or through state resources,
- distorts or threatens to distort competition,
- favors certain undertakings or the production of certain goods (the selectivity criterion), and
- affects trade between member states

is considered to be incompatible with the common market.[397]

Moreover, two issues are worth noting here still. First, state aid rules apply only to the subsidization of businesses, and, thus, these rules are not applied to all tax expenditures. Furthermore, tax expenditures and state aids do not correspond each other in every respect otherwise either.[398]

Norway and *Sweden* have applied reduced social security contributions for undertakings in certain regions. The Commission took a negative decision concerning the reduced social security contribution scheme notified by Sweden. Commission concluded that the scheme had the character of operating aid. Compatibility of the scheme with the common market was made according to Article 87(3) (a) EC and according to the Regional Aid Guidelines from 1998. First rule could not be applied simply because no region in Sweden was classified as an Article 87(3) (a)-region. Not either Regional Aid Guidelines could be applied since the reduced social security contribution had no connection to additional costs for transportation.[399] On the other hand, the Norwegian Government notified a scheme of reduced social security contributions, which was accepted by the European Surveillance Authority (ESA).[400] According to *Mona Aldestam* (2009), the new Regional Aid Guidelines for 2007 – 2013 opened up the possibility for greater flexibility to grant state aid in the least populated regions compared to what was possible according to the Regional Aid Guidelines from 1998. Norwegian scheme was also expected to distort competition less than the Swedish scheme was expected to do because the former was general in the sense that it was open to undertakings in all sectors in the eligible regions. In addition, aid measures according to the Norwegian scheme, was considered more proportionate than the one proposed by Sweden.[401]

Denmark has had several cases in which state aid rules have created problems of interpretation. First, tax measures have not been regarded as state aids if they have been justified by the nature or general scheme of the system of which it formed part; if tax measures did not confer a selective advantage; or if activities supported were not commercial. Moreover, there have been many cases in which measures have

[397] See e.g. Aldestam (2009). See also Schön (1999).
[398] See closer Terkilsen et al. (2012). See also Viitanen (2012) regarding Finland.
[399] See closer Aldestam (2009), 181 – 183.
[400] See closer Aldestam (2009), 181 – 184.
[401] In Finland, state aid rules have been taken into account, too, with respect to the regionally-motivated tax expenditures. See closer HE 160/2008 vp and HE 50/2011 vp.

constituted state aid but they have been exempted from the prohibition of state aids. Furthermore, and of course, sometimes tax measures have been regarded as incompatible aid.[402]

The *prohibition of discriminatory taxation* should not be passed over either. What is worth noting is that not only do different tax rates constitute tax discrimination but account must also be taken of the basis of assessment of the tax as well as the exemptions and reliefs and detailed rules for levying a tax. Thus, all these components may constitute tax expenditure, too. With respect to the discriminatory taxation, the decisive factor is the actual effect of a tax on both national production and on imports. The prohibition is applicable even if the discriminatory effect is slight or incidental and even if the discrimination can be avoided only by removing the whole tax. What is worth noting here is that Nordic countries did not report any problems in this respect.[403]

4.5 Tax Expenditures as Tax Loopholes

According to *OECD* (2010b), broadening the tax base and lowering tax rates reduce the incentive and opportunities for tax avoidance and evasion. On the contrary, tax expenditures are regarded as a source of abuse and fraud. In addition, a less complex tax regime may also be more effective in terms of achieving higher levels of compliance.[404] On the other hand, it has been claimed that incentives for tax avoidance and tax evasion may be increased with higher progressivity and high tax levels, contributing to a larger informal economy.[405]

Tax evasion and inappropriate measures for tax avoidance may lead to serious difficulties in practice. If the tax rate is set initially at the target level x, but some taxpayers do avoid taxes by inappropriate measures, the fiscal goal will not be reached. Therefore, the tax rate has to be increased to the level x' inducing, however, inappropriate measures even to a larger extent than before. Again, because the fiscal goal will not be achieved, the tax rate has to be increased to x'', etc. In short, there is a danger that inappropriate measures will lead to a *spiral* in which increases of tax rates follow each other without ever reaching the fiscal goal.[406]

Is it categorically so that tax expenditures cause fraud and abuse or does the vulnerability to abuse and fraud depend on the design and nature of the tax expenditure? In practice, certain tax expenditures have been introduced in order to discourage the move to underground economy. A reference can be made to *income tax expenditure for household services*.[407] Another example is the *lower VAT rate of hairdressing*

[402] See closer Terkilsen et al. (2012).
[403] See e.g. Viitanen (2012).
[404] OECD (2010b), 15. See also Altshuler & Dietz (2008).
[405] OECD (2010b), 22.
[406] See also Määttä (1997), 89.
[407] In Finland, the tax credit for household services introduced in 2001 has been evaluated for employment effects.

and small-scale repair services.[408] If these tax expenditures are really effective in order to prevent the enlargement of shadow economy, estimates of the revenue losses – made by revenue foregone method - are far too large, since they do not pay attention to the behavioral responses of tax expenditures.

5 EVALUATION OF TAX EXPENDITURES

5.1 Tax Expenditures Compared with Direct Spending Programs

5.1.1 Apples-to-Apples Comparison is Often Out of Question

According to the *substitutability criterion,* tax expenditure report should include only tax provisions that substitute for potential spending programs.[409] This point of view emphasizes the similar nature of tax and direct subsidies, and thus, that they are regulatory options for each other.[410] However, it is good to be qualified in this respect. First, tax and direct expenditures are not pure substitutes.[411] Moreover, direct spending does not necessarily take account of taxes, whereas tax expenditures mostly are stated after taxes.[412] On the other hand, it is also possible to produce estimates in outlay equivalence terms, i.e. the amount that would have to be budgeted for an equivalent direct spending program.[413] In addition, not all tax expenditures are subsidies in nature.

Second, tax expenditures may not be only a regulatory option to direct expenditures but e.g. to excise duties.[414] For instance, health policy objectives may be promoted by reduced VAT rate on healthy foodstuffs on the one hand, or by excise duties levied on unhealthy products (so called health taxes) on the other hand.[415] Sometimes, it may even be said that tax expenditures and direct expenditures are not alternatives to each other. A reference can be made to that the charitable deduction would make no sense as a direct expenditure.[416] Moreover, different kinds of tax expenditures can often be regarded as alternatives to each other. For instance, the reduced VAT rate on foodstuffs can be seen as a regulatory option for the personal allowances in the income tax system.[417] Furthermore, one regulatory option is not to expend government resources at all to certain purposes.[418] If tax expenditures are compared with direct

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[408] See e.g. OECD (2010b), 18 – 19.
[409] See e.g. Fiekowski (1980).
[410] In general, see e.g. Perry (1995).
[411] Schick (2007), 11. See also Kleinbard (2010).
[412] Tax Expenditures in the Nordic Countries (2010), 16. See also OECD (2010d), 52 fn. 5.
[413] Burman (2003), 622.
[414] See also Weisbach & Nussim (2004).
[415] Moreover, tax expenditures may be a regulatory option to direct regulation. For instance, environmental policy goals are often promoted by direct regulation, but on the other hand, they may be promoted e.g. by accelerated depreciation of anti-pollution equipment under corporate income taxation.
[416] Burman (2003), 620.
[417] See e.g. Enger (2009), 92 – 93, who refers to the committee report NOU 2003:9.
[418] See e.g. Joint Committee on Taxation (2008), 2 – 3. See also Surrey & McDaniel (1985), 32 – 37.

expenditures too straight, this relevant option would be omitted. Moreover, from ability to pay perspective, it is easy to understand that tax expenditures under personal income taxation are criticized due to the upside-down impact. But it is only one side of the coin. Another side of the coin is that tax expenditures concerned may have been introduced in order to mitigate the progressivity of personal income taxation. Thus, the regulatory options are whether to mitigate progressivity directly or mitigate progressivity indirectly by tax expenditures. From this point of view, discussing only tax expenditures and direct expenditures as regulatory options is defective and misleading. In addition, from fiscal point of view, repealing tax expenditures may be an alternative to increasing general tax rates, or *vice versa*, introducing tax expenditures may be an alternative to cutting general tax rates.[419] Tax base broadening is an important issue in this respect.[420] In summary, it is not right to compare tax expenditures straightforward with direct expenditures, but first to outline the policy actions which are truly regulatory options to tax expenditures.

Thirdly, tax expenditures and spending for an identical purpose are rarely truly equivalent programs. Because tax expenditures function through the tax system, they can have different effects on different taxpayers based upon their differing marginal tax rates or the status of the taxpayer as taxable or non-taxable based upon their level of income. Spending programs rarely would be designed to rely so explicitly on tax status, and so likely would function differently.[421] Moreover, it has been regarded that tax expenditures should not be used for programs with administrative discretion in providing subsidies or transfers.[422]

Fourthly, tax expenditures and direct expenditures may *supplement* each other.[423] Tax exemption of child benefits under personal income taxation is – *de facto* - an example of the combination of direct expenditure and tax expenditure. Thus, under these circumstances it should not be analyzed the appropriateness of either tax or direct expenditure but the combination of tax and direct expenditures.[424] In some cases tax expenditures and direct expenditures should be supplement to each other, for example, if the aim is at subsidizing all the economic actors equally. In particular, households and firms that pay little or no tax will receive little benefit from a tax provision unless it is made available as a *refundable tax credit*.[425]

In addition, tax expenditures must be considered realistically relative to alternative policy tools, i.e. the deficiencies of regulatory options have to be taken into account, too.[426] Conclusions about the

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[419] See also EUROSAI (2008b), 45, where it is mentioned that the tax expenditure for small enterprises has not become relevant in Latvia, since corporate income tax has reduced drastically.
[420] See e.g. OECD (2010e), 3. Cutting general tax rates may be recommendable among other things because administrative costs could be reduced, and because the incentive for inappropriate measures for tax avoidance may be decreased.
[421] OECD (2010d), 27 – 28.
[422] Kraan (2004), 134.
[423] See also Weisbach & Nussim (2004).
[424] See also Valtion taloudellinen tutkimuskeskus (2010), 7, which pays attention to that international comparability requires analysis of tax and direct expenditures together.
[425] OECD (2010b), 24.
[426] See e.g. OECD (2010d), 24.

appropriateness of tax expenditures will be completely misleading if imperfect tax expenditures applied in practice are compared e.g. with the ideal and perfect direct expenditures. Thus, a critical question is under which circumstances criticisms may stem from inappropriate design of tax expenditures rather than from intrinsic problems in using the tax system to deliver benefits.

5.1.2 Tax Expenditure Cap: Is It Only Theory?

In some countries the government gives decision on the ceiling for the budget expenditures over a certain period of time, e.g. the entire electoral period. Referring to this, *EUROSAI* (2008a) demands that tax expenditures should be taken more explicitly into account in budget process and as part of state revenues and expenditures. They should not lead to exceed spending limits. The decision either to apply tax expenditure or direct expenditure should be based on their effectiveness in order to achieve the objective. This will improve the effectiveness of the subsidy or expenditure policy. *Rigsrevisionen* (2007) has emphasized that if no budgetary cost limits have been set for tax expenditures, they may lead to open-ended spending, i.e. they place no limits on the amount of tax benefits a taxpayer may receive, and hence are not capped. Nonetheless, capping tax expenditures is possible, though probably complicated.[427]

Also *OECD* has recommended that tax expenditures should either be included in total expenditure cap that is set every year during budget preparation or in a special tax expenditure cap.[428] Overspending on tax expenditures should be fully compensated, at least in so far as it originates in policy change.[429] For instance, in the early 1980s, *Canada* implemented an "envelope system" in the budget formulation process, under which a total sum of outlays and tax expenditures would be made available for each policy area. Implicitly, line agencies could spend the amount in their envelopes either on tax expenditures or on spending programs. This system had some initial success, but then was abandoned.[430] In *Germany*, there are non-binding guidelines from the Federal Cabinet in 2006 that new subsidies should be given as grants, or financial aids, rather than as tax expenditures, and that they should be paid for. These processes are seen in Germany as successful barriers against expansion of tax expenditures.[431] In the *Netherlands*, five tax expenditures have their own annual caps. If applications for those credits reach the annual limit, use of the credits is closed until the beginning of the next fiscal year.[432] In addition, some OECD member countries are considering fiscal rules that make use of expenditure ceilings. The handling of tax expenditures under such rules is critical because a systematically lesser degree of budgetary control on tax expenditures, as opposed to direct expenditures.[433]

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[427] See e.g. Weisbach & Nussim (2004).
[428] See also Kraan (2004), 135.
[429] See also Rigsrevisionen (2007).
[430] See closer OECD (2010d), 79.
[431] OECD (2010d), 90.
[432] OECD (2010d), 108.
[433] OECD (2010d), 15.

According to *Tax Expenditures in the Nordic Countries* (2010), while a cap can be applied to direct expenditures, there is no direct limitation on tax expenditures. *Finland* and *Sweden* apply budget caps to direct expenditures and it may be argued that such caps give incentives to give support through the tax expenditures. In Finland, it has been argued that the introduction of new tax expenditures has been due to budgetary spending limits on direct expenditures.[434] *Denmark* does not yet have a budget cap, but a proposal of such has recently been published, where changes in tax expenditures will be reflected in the cap. The new budget law is expected to be amended in autumn 2012. Besides there is a long run balanced budget goal in Denmark. In *Norway*, the government operates with a balanced budget rule. This budgeting method implies that the government has a choice between tax expenditures and direct expenditures. It also implies that reduced taxes and tax expenditures imply less revenue to be distributed on the spending side of the budget.[435]

Robert Bojie (2002) has stressed that a complete integration of tax expenditures into the budget process would remove the incentive to circumvent the expenditure ceiling by reducing taxes instead. However, since the present tax expenditure calculations are incomplete and flawed by some technical problems, it is not possible to fully integrate tax expenditures in the budget process. Some additional difficulties can be mentioned, too. For example, in many countries only part of tax expenditures fulfill the substitutability criterion, i.e. not only tax expenditures are comparable to the direct expenditures. Consequently, there is a problem, how to draw the line between tax subsidies (comparable to direct expenditures) and other tax expenditures. Moreover, tax expenditure reports are more or less imperfect. This is shown by the coverage of taxes and tax expenditures in the reports; uncertain estimates of the amount of tax expenditures; non-calculation of the amount of many tax expenditures; and difficulties in defining the benchmark tax system. Furthermore, sometimes it is matter of opinion, whether tax provision can be characterized as tax expenditure or not. In addition, how to deal with tax sanctions in this respect?

On the other hand, tax expenditure cap – in the form whatsoever – is not the only alternative to control these expenditures. Above all, tax expenditures need not to be permanent, but they may be temporary, so-called *sunset expenditures*. However, tax expenditures are in the Nordic countries usually permanent in nature.[436] Moreover, if some tax expenditures would have been in force only few years, their validity has been continued, even though the effectiveness of the tax expenditure has been highly questionable. This kind of phenomenon has been familiar at least in *Finland*.[437]

5.1.3 Over- and Under-Inclusiveness

Two definitions first: If taxpayers outside the target group benefit from tax expenditure, it is question about over-inclusiveness. For example, reduced VAT rate for foodstuffs benefits also billionaires. On the other

[434] Tax Expenditures in the Nordic Countries (2010), 26. See also Valtion taloudellinen tutkimuskeskus (2010).
[435] Tax Expenditures in the Nordic Countries (2010), 25 and 43.
[436] See e.g. Kjellqvist et al. (2012).
[437] About criticism in Finnish Parliament, see e.g. StVM 23/2007 vp – HE 137/2007 vp.

hand, if not all taxpayers belonging to the target group of tax expenditure do not benefit from tax expenditure, it is question about under-inclusiveness. For example, tax credits for businesses lose their effectiveness when their value exceeds tax liability.[438] Many tax expenditures suffer from these disadvantages.[439] On the other hand, the solution to these problems is not necessarily to repeal tax expenditure and introduce direct expenditure, but to pay attention to the design of the tax expenditure.

Under- and over-inclusiveness are closely related to the *distributional consequences* of tax expenditures. As is well known *horizontal equity* requires that taxpayers with similar characteristics and circumstances should be treated in the same way. According to *vertical equity*, the tax burden should be related to ability to pay. More generally, an equitable tax system implies that the value of tax expenditures depends on the taxpayers' ability to pay. Against this background, for example, it is understandable that some OECD countries have replaced tax allowances with refundable tax credits.[440]

Under progressive income taxation, the value of deductions increases with income, reducing consequently the average tax rates more for individuals facing high marginal tax rates than for those with low marginal tax rates. Therefore, these tax expenditures give greater benefits to taxpayers with higher incomes. A common criticism of tax expenditures for private pensions or homeownership, for example, is that the individuals who benefit from them most are those with relatively high incomes, who can afford the items that receive the preferential tax treatment.[441] Furthermore, preferential treatment of savings may be subsidizing savings that would have been done in the absence of the tax incentive, and, therefore, generating "windfall gains" to high-income individuals.[442] Why to provide tax incentives for those who would not need any incentives?

In general, where formulated as deductions – amounts deductible from taxable income – these provisions will therefore generally reduce the progressivity of the tax system. This effect is known as the *upside down effect*.[443] For example, the mortgage interest deduction has been criticized as an upside down subsidy that provides the greatest benefit to upper middle class homeowners, while the greatest needs are among lower-income families.[444] In contrast, if structured as tax credits – amounts deductible from tax liability – these tax provisions might mitigate the problem concerned. Furthermore, a tax credit will create uniform incentives and provide uniform benefits to all individuals if it is structured as a refundable credit, where a cash payment is made by the revenue authorities to the individual if tax liabilities before the credit are lower than the value of the credit.[445] However, refundable tax credits are not familiar in the Nordic

[438] Pogue (2009).
[439] See e.g. Burman et al. (2007).
[440] OECD (2010e), 85.
[441] See e.g. OECD (2010b), 30.
[442] See e.g. OECD (2010b), 28.
[443] See e.g. OECD (2010b), 23 and Valtion taloudellinen tutkimuskeskus (2010), 5.
[444] See e.g. Burman (2003), 622.
[445] OECD (2010b), 23.

countries.[446] In addition, in some OECD countries, specific tax expenditures, such as tax expenditures for contributions to pension plans, are *capped*, and therefore the value to upper-income taxpayers is limited. However, other tax expenditures, like relief for realized capital gains or corporate dividends, typically are not limited in this fashion.[447]

Onhus and *Skeie* (2009) criticize the health care expense deduction in *Norway*, since this type of tax expenditure will have a tendency to benefit the rich rather than the poor, as one will not benefit from the deduction scheme without taxable income. Distributional problems are not the only problems caused by the tax expenditures mentioned. Moreover, special tax allowance due to illness or other permanent weakness has caused problems to tax authorities.[448]

Many countries use differentiated consumption taxes to reduce income inequality by exemptions, zero ratings and reduced VAT rates on certain goods and services such as basic foods and medicine. The underlying explanation for the reduced rates is the regressive nature of consumption taxes as lower income households spend a larger share of their income on these goods than richer households do. In general, however, VAT preferential treatments are generally not well targeted to those in need.[449] Thus, poorer households may benefit from VAT expenditures on necessities but better off households gain even more.[450] Transfers directly targeted to low-income households may be more effective in enhancing equity than VAT provisions.[451] Furthermore, it may well be difficult to define 'necessities' in practice. For instance, a reduced rate may apply to all food including 'luxury' items. Consequently, *L. Ebrill et al.* (2001) argue that direct transfers to low-income households are more effective in enhancing equity than VAT exemptions, zero rate and reduced rates. In addition, tax policy problems are not exhausted to the above-mentioned ones. For example, drawing distinctions tends to raise administrative and compliance costs and it encourages litigation.[452]

In spite of the above-mentioned critique, it is possible to adopt another kind of perspective to the under- and over-inclusiveness, and thereby, to the distributional impacts of tax expenditures. That is, much low income observed at a point in time is temporary and need not reflect low *lifetime living standards*. While it is true that some people are persistently poor, many have volatile earnings. Against this background, for instance, the contrast between progressive direct taxes and regressive indirect taxes would be much smaller.[453]

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[446] See also Valtion taloudellinen tutkimuskeskus (2010), 5, which pays attention to that refundable tax credits may be administratively burdensome.
[447] OECD (2010d), 52.
[448] Greni (2009), 154 – 155.
[449] See e.g. Anderson (2008) and OECD (2010b), 9.
[450] See e.g. McLure (1990), OECD (2008) and OECD (2010e), 85.
[451] See e.g. OECD (2010b), 17.
[452] OECD (2010b), 17.
[453] See e.g. OECD (2010e), 88.

In addition, the criticism against the distributional impacts of tax expenditures above has been theoretical. However, empirical studies are not without problems. *OECD* (2010d) stresses that empirical estimation of the distributional effects is a large and complex issue. The quantitative estimates of the revenue effects of tax expenditures are typically of little help because they are undertaken one by one and because they rely on the revenue foregone method, they incorporate no behavioral response on the part of taxpayers. Analyzing one tax expenditure in isolation might give a false impression of the real distributional effect of all elements of the tax and expenditure system. This could be true in the case where the same group of persons or firms receive a tax deduction in one area but have to pay an extra tax in another area.[454]

Should tax expenditures be repealed due to the regressive impacts? If this kind of policy is implemented, it is good to acknowledge that the net distributional effects of eliminating tax expenditures, however, depends on *how the government uses the increased revenues*.[455] For example, the distributional effect of replacing all tax expenditures with rate cuts depends on how rates are cut. Moreover, replacing tax expenditures with equal per capita increases in direct expenditures may benefit low-income taxpayers. Of course, large redistributions would also occur within income groups.[456] Furthermore, the distributional effects of removing tax expenditure provisions differ greatly across *groups of tax provisions*.[457] For example, according to *Huang* and *Shaw* (2009), lower tax rates on capital gains and dividends were very regressive, while the reverse was true regarding refundable tax credits.[458]

5.1.4 Administrative Remarks

According to *OECD* (2010d), spending program grants to individuals typically involve prior reporting by individuals and verification by a spending agency before the grant is paid. Where a detailed verification is not necessary, a tax benefit is paid solely on the ground of the taxpayer's filing can be cost-effective. For instance, ready availability of verifying data from a separate entity, such as for interest payments to a financial institution, can effectively deter false reporting without prior verification by a spending agency. Thus, an important point of view here is that direct expenditures are characterized by *ex ante* control, but tax expenditures by *ex post* control. Since all direct expenditures are controlled but not all tax expenditures, the administrative costs of former are larger than the latter. On the other hand, the abuse of direct expenditures may be rarer than the abuse of tax expenditures.

Following example shows, how abusive behavior may be prevented but the administrative costs may be large. In *Norway*, with effect from the income year 2002, all enterprises subject to taxation in Norway are eligible for a tax deduction for R&D expenses in approved projects. The tax deduction scheme is placed on a close relationship between the Research Council of Norway and the tax administration: the actual R&D project is approved by the Norwegian Research Council, while the tax administration examines, among

[454] Tax Expenditures in the Nordic Countries (2010), 16.
[455] See e.g. Burman et al. (2008).
[456] Burman et al. (2008).
[457] See closer Burman et al. (2008).
[458] On the other hand, Huang and Shaw (2009) were analyzing the US tax system.

other things, what kind of costs should be taken into consideration. In this respect, the tax authorities have to draw the line between operating costs and R&D expenses. According to *Greni* (2009), from administrative point of view, it would seem more appropriate to render the subsidy directly from the Research Council instead of canalizing it through the tax authorities.[459]

Tax expenditures can create administrative difficulties in several other ways.[460] First, tax expenditures may increase *filing complexity*, increasing costs for taxpayers and the tax authorities. In the value-added tax, new tax expenditure can require department personnel to engage in difficult *line drawing*. Additional time must be spent explaining the rules to taxpayers, who, of course, also then bear increased compliance costs. The added complexity may make it difficult for even a well-intentioned taxpayer to comply with the law. Second, in a world of *aggressive tax planning*, tax expenditures also offer an avoidance opportunity. Administrative difficulties increase if a tax expenditure gains a broader reach over time than was initially intended – either because the enabling legislative language is interpreted more broadly by the courts or because new qualifying products or ways to package income have been created. When a tax expenditure expands to reach "unintended beneficiaries," administrative resources will be directed toward devising ways to contain it. Audit activity increases in response.

There is still one additional source of administrative burden. An increased used of mandatory reports from businesses and households can establish an improved dataset for evaluating tax expenditures. However, this extra information must be weighed against the cost of obtaining this information and objective to reduce administrative burden.[461] Against this background, it is good to note that *Denmark* has decided to end tax expenditure reporting in the Budget Proposal. One reason behind the decision was that the Danish Government has committed to decreasing administrative burden.[462]

It is quite often claimed that the main reason to apply tax expenditures instead of direct expenditures are lower administrative costs.[463] But is it really possible to reduce administrative burden and administrative costs by replacing tax expenditures by direct expenditures? According to *OECD* (2010d), for example, the pursuit of policy objectives might be administratively costly through conventional government spending programs. Because tax expenditures usually deliver their reward through a reduction of tax that would be paid in any event, government spending agencies need not engage in the administrative effort to manage a program and deliver payments.[464] On the other hand, these efficiencies can result merely from the absence of truly necessary program administration. Tax authorities may lack expertize necessary to determine eligibility, and the premium on quick processing of tax returns may conflict with sufficient oversight.[465] This point of view shows that the comparison of tax expenditures and direct spending is multidimensional task.

[459] Greni (2009), 155.
[460] Minnesota Department of Revenue (2011).
[461] Tax Expenditures in the Nordic Countries (2010), 16.
[462] Tax Expenditures in the Nordic Countries (2010), 25.
[463] See e.g. Kjellqvist et al. (2012).
[464] See also Melz (2009), 17.
[465] OECD (2010d), 28. See also Melz (2009), 18, who refers to the deductions for health costs in this respect.

How to mitigate the administrative burden of SMEs? Several OECD member states levy a *reduced corporate income tax rate on the profits of small businesses* that are below a certain ceiling. In order to benefit from the reduced rate, other conditions have to be fulfilled as well.[466] The lower tax rates for small businesses may be treated as tax expenditures because they are intended to provide tax benefits to small business.[467] On the other hand, this does not mean that the tax expenditure is not justified. This is, in particular, because the lower tax rates may take into account the overall administrative burden of small enterprises. And the administrative burden is proportionately largest just among small enterprises. Another question is whether the reduced tax rate is the best way to mitigate the overall administrative burden. In a similar fashion, *VAT exemption for enterprises with low turnover* has been regarded as a tool to mitigate the administrative burden of small businesses. Furthermore, the particularly *long credit time for payment of VAT* granted to small businesses is an example of tax deferral, and thereby tax expenditure, the aim of which is to minimize the administrative burden of small business.[468]

5.2 Effectiveness of Tax Expenditures: Empirical Evidence

5.2.1 General Remarks

Tax expenditures are not necessarily only waste of tax proceeds but there might be also good economic reasons for tax expenditures that correct e.g. market failures. From this point of view, there is no rationale to recommend straightforward that tax expenditures should be abolished. What is needed is evaluation of tax expenditures systematically to see whether the benefits of these preferential tax treatments continue to outweigh their cost.[469] In other words, do tax expenditures achieve their objectives in a cost-efficient manner, that is, in terms of minimizing distortions, administrative costs and negative distributional impacts?[470] It is easy to note in this respect that loss of revenue due to tax expenditures tells only partial answer about the appropriateness of tax expenditures.[471]

There are several cases in the Nordic countries in which the appropriateness of tax expenditures has been evaluated. In *Norway*, for example, newspapers that are published at least weekly, books and some periodicals are levied value-added tax with a rate of 0 per cent. The Norwegian Competition Authority has evaluated the scheme twice. The Competition Authority held that magazines and single-copy-sale newspapers compete for the same advertisers and readers, and therefore should be treated equally with respect to VAT liability. Moreover, the committee (NOU 2003:9) argued that the tax expenditure should be abolished.[472]

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[466] OECD (2010e), 40.
[467] Joint Committee on Taxation (2008), 23.
[468] See also Rigsrevisionen (2007).
[469] See also OECD (2010b), 3.
[470] OECD (2010b), 10.
[471] See also Valtion taloudellinen tutkimuskeskus (2010), 5.
[472] See also Engen (2009), 92.

Nevertheless, the situation in the Nordic countries is good to compare with the review of tax expenditures made in the *Netherlands*. In 2004, the Netherlands began with a program of evaluations of tax expenditures, with the goal of reviewing tax expenditures approximately every five years. The purpose of the evaluation is to estimate the effectiveness and efficiency of the tax expenditure. Questions that are specified for the evaluations to answer include:

- Does the tax expenditure accomplish its objective?
- Can the same goals be achieved with lower costs through a different policy instrument?
- Is the tax expenditure the logical instrument to achieve these objectives?
- Is the tax expenditure really the cause of any perceived effect, or would the same outcomes have occurred without the tax expenditure?[473]

Moreover, *Germany* has built up follow-up and assessment system in order to determine the impacts of tax expenditures and the achievement of their objectives. Although in Germany methods have been developed for evaluating target achievements, most of the government departments have not used a well-structured approach or generally acknowledged methodology.[474]

In summary, there have been much more recommendations than actions regarding the evaluation of tax expenditures. For example, *Tax Expenditures in the Nordic Countries* (2010) recommends that more emphasis could be placed on evaluating tax expenditures. A critical remark is whether tax expenditures have achieved intended objectives. Nevertheless, in few cases analysis has been undertaken before the introduction of tax provisions. Most of the reported *ex post* evaluations have been targeted to some particular provisions and undertaken by external institutions. Only very few countries have reported plans to introduce periodical assessments of targeted tax provisions. In general, data and the difficulties of undertaking rigorous evaluations explain the limited number of provisions that are evaluated on a systematic basis in OECD countries.[475]

5.2.2 Problems Confronted with the Evaluation of Tax Expenditures

The analysis of tax expenditures against public policy objectives, such as relative income distribution, often leaves much to be desired.[476] Why is it so? According to *EUROSAI* (2008a), usually no systematic evaluation of tax expenditures has been carried out among other things because the *objectives pursued by means of the tax expenditures have not been stated at all or only insufficiently*. On the other hand, this is only partial explanation in this respect, since, of course, the impacts of tax expenditures can be evaluated in spite of the well-defined goals of legislation.

[473] OECD (2010d), 108.
[474] EUROSAI (2008d), 17.
[475] See closer OECD (2010b), chapter 3.
[476] Craig & Allan (2001).

One major challenge is that significant *empirical data* is required to evaluate the theoretical background of tax expenditures. Whereas data for collected taxes typically are registered, data for tax expenditures which are taxes not collected are not always recorded. The introduction of tax expenditures can even directly lead to a lack of information. In any case, widely data collecting and providing of data is necessary in order to evaluate the effectiveness of tax expenditure. For purposes of comparison, tax expenditure data has to have the same standing and be of the same level of quality as spending data in the budget.[477]

Further challenges result from *interactions between different tax expenditures*. In these cases changing one tax expenditure can affect costs and effectiveness of another and thereby make it difficult to isolate the effects of individual tax expenditure. Therefore, for example, when distributional effects of certain tax expenditure are analyzed, it is important to analyze the tax system as a whole.[478] Moreover, assumptions are required in order to obtain quantitative estimates of tax assistance, and the estimates should therefore be interpreted with caution.[479]

Furthermore, regarding e.g. R&D tax incentives governments provide support for R&D through a variety of channels, such as grants and loans as well as procurement and patent policies, not just through the tax system. As a result, the evaluation of the effectiveness of R&D tax incentives is far from unambiguous.[480]

In addition, the evaluation of tax expenditures is to some extent arbitrary, since certain tax provision may be regarded as a tax expenditure or not depending e.g. on how the benchmark tax system is defined. It can be referred to the in-work benefits which are reported in Finland as tax expenditures but not in Sweden.[481] Against this background, one recommendation is easy to be made: Do not concentrate too much on tax expenditures!

5.2.3 Some Examples

Tax expenditures motivated by regional policy. From regional policy point of view, tax systems of Nordic countries vary quite a lot from each other. *Denmark* is such a small country that regional policy does not play a major role in designing the Danish economic policy.[482] In *Finland*, social security contributions have been differentiated regionally. Revenue losses due to the regionally-motivated tax expenditures have not been significant.[483] *Norway* has applied certain tax expenditures motivated by the regional policy goals. In

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[477] Tax Expenditures in the Nordic Countries (2010), 16. EUROSAI (2008a) also emphasizes the lack of data as a critical problem in the evaluation of tax expenditures.
[478] Tax Expenditures in the Nordic Countries (2010), 16.
[479] See e.g. Department of Finance (2009).
[480] See e.g. Department of Finance (2009).
[481] See e.g. Valtion taloudellinen tutkimuskeskus (2010), 8.
[482] Möller & Parum (2009), 60.
[483] Valtion taloudellinen tutkimuskeskus (2011).

the northern part of Norway, consumption of electricity and energy produced from alternative energy sources is exempted from VAT. The exemption applies to *e.g.* district heating and bioenergy. On the other hand, *Onhus* and *Skeie* (2009) have an interesting point of view to the issue. According to them, the regionally differentiated payroll taxes are considered to be tax expenditures, although regional policy partly is defined as a main target of the tax structure in Norway. We are confronted again with the critical problem: how to define the benchmark tax? However, Onhus and Skeie's opinion may be criticized: Should we regard many tax provisions anymore as tax expenditures, since they serve goals which are characteristic for the Nordic welfare state?

In *Norway*, the tax expenditures in connection with regional policy for Finnmark county and regions of Troms county have also previously been evaluated. According to the results of the research, the tax expenditures in general have contributed to increased settlement and employment in the respective areas, and that the system with differentiated social security contributions from employers has been the most efficient policy instrument to increase employment. On the other hand, the exemption from excise duty on electricity consumption has been a rather inefficient policy instrument, both since it is difficult to say whether the exemption actually has affected the consumer prices on electricity and since the exemption probably has not contributed much to employment in the region.[484]

Finnish experience shows that the regional differentiation has not necessarily worked well. *Korkeamäki* and *Uusitalo* (2006) evaluated the effects of a regional experiment that reduced payroll taxes by 3 – 6 percentage points in Northern Finland for three years. According to the results, the reduction in payroll taxes led to somewhat faster wage growth in the target region. The increase in wages offset roughly half of the impact of of the payroll tax cut on the labor costs. The remaining labor cost reduction had no significant effects on employment. Moreover, Korkeamäki and Uusitalo paid attention to that targeted payroll tax cut was financed by increasing payroll taxes in the rest of the country. Moreover, a regional experiment may have substitution effects if the firms reallocate labor to the target region from the rest of the country. Finally, a temporary experiment is likely to create smaller employment effects than a permanent reduction in the payroll tax. *Korkeamäki's* (2011) study indicates, too, that the payroll tax cut experiment had not led to any unequivocal aggregate effects in the target region.

R&D tax incentives. A growing feature of corporate tax systems is the use of tax incentives for research and development (R&D) expenditures.[485] These are now available in over half of OECD countries, with the generosity of these tax subsidies varying across countries. *Norway*, *Turkey, the Czech Republic, Portugal, Spain* and *France* are the countries that provide the most generous R & D tax treatment. Some countries, such as *Canada* and the *Netherlands*, provide more generous tax subsidies for R&D in SMEs than for large companies.[486]

[484] Solbu & Kristiansen (2012).
[485] See e.g. Department of Finance (2009).
[486] OECD (2010b), 68.

While R&D investment has undoubtedly *positive externalities*, governments need to carefully consider the design of R&D tax incentives to ensure that windfall gains are minimized by targeting the benefit to additional investment. Windfall gains may be reduced by, for example, limiting the amount of the credit to a proportion of the tax liability.[487] However, it is unclear whether the existing reliefs target investment with large spillovers and whether the tax system is the most cost-efficient way to encourage this type of investment. In general, different studies have shown that R&D tax incentives can increase private research spending. Moreover, the key role of R&D in economic growth has been underlined in literature. Another matter is, however, whether R&D tax incentive is appropriate tool to promote these activities. For example, one problem is to what extent private research spending has increased compared with the loss in tax revenue. Furthermore, how inappropriate tax avoidance, such as redefinition of R&D, can be prevented with reasonable administrative costs?

In *Norway*, with effect from the income year 2002, all enterprises subject to taxation in Norway are eligible for a tax deduction for R&D expenses in approved projects. Tax expenditure for R&D expenses has been thoroughly evaluated by Statistic Norway.[488] According to the evaluation, on average, NOK 1 from the government triggers NOK 2 of investment from industry. In the state budget for 2008, the total tax expenditure related to the scheme was estimated to be NOK 900 million.[489] In *Denmark*, expenditure for research and development activities may be deducted as other operating costs or depreciated over several years. However, deduction of R&D expenses has not been subjected to the impact analysis.[490] In *Finland*, no R&D tax incentive is applied today.

The reduced VAT rate for food items. Reduced VAT rates are applied to necessities, such as food, in order to reduce the tax burden on low-income individuals, such as pensioners, low-paid workers and social security beneficiaries.[491] However, the benefits of reduced VAT rate on foodstuffs are greater for better off households in absolute terms. Thus, poorer households may benefit from VAT expenditures on necessities but better off households gain even more.[492] Moreover, it may be difficult to define 'necessities' in practice. A reduced rate may apply to all food including 'luxury' items, such as caviar: and caviar is not familiar in the poorer households.[493]

Norwegian discussion is worth of noting in this respect. The VAT rate on foodstuff was first reduced from 24 per cent to 12 per cent, and increased to 14 per cent with effect from 1 January 2007. However, already committee NOU 2003:9 argued that the tax expenditure should be abolished, since it is expensive and less accurate measure for redistributing income or supporting families with young children. This aim could be achieved more efficiently by increasing the personal allowances in the income tax system or by increasing

[487] See also Collins & Walsh (2011).
[488] Tax Expenditures in the Nordic Countries (2010), 24 and 43.
[489] See also Enger (2009), 89.
[490] Rigsrevisionen (2007).
[491] See e.g. OECD (2010b), 15. See also Viitanen (2012) regarding Finland.
[492] See e.g. McLure (1990), OECD (2008) and OECD (2010b), 42.
[493] See also OECD (2010b), 17 and EUROSAI (2008c).

the child benefits. However, VAT legislation has not been amended. Tax expenditure related to the reduced VAT rate on foodstuff is estimated to be in 2008 NOK 7,500 million.[494] According to *Onhus* and *Skeie* (2009), the average share of incomes spent on food is only about 10 per cent for Norwegian households. As a redistributive measure, reducing food prices is therefore highly non-accurate.

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[494] See e.g. Enger (2009), 92 – 93.

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Abbreviations

CIT	corporate income tax
EC	European Community
EU	European Union
EUROSAI	European Organization of Supreme Audit Institutions
GDP	gross domestic product

HE	hallituksen esitys (government bill)
NOK	Norwegian krone
NOU	Norges offentlige utredninger
OECD	Organization for Economic Cooperation and Development
PIT	personal income tax
R&D	research and development
SHS income	Schantz-Haig-Simons income
Skr.	regeringens skrivelse
SMEs	small and medium-sized enterprises
VAT	value added tax