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# **Tax expenditures in direct taxation in EU Member States**

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## EXECUTIVE SUMMARY

Tax expenditures are reductions in government revenue through preferential tax treatment of specific groups of tax payers or specific activities. EU Member States make ample use of tax expenditures with a wide variety of aims including employment creation, innovation, education, entrepreneurship, home ownership and income redistribution. While tax expenditures may be motivated by relevant economic or social goals, they are not necessarily the most cost-efficient instrument and may, in some cases, lead to severe economic distortions. Such preferential treatment could alternatively be provided through government spending or granted through direct regulation.

In a context of constrained public finances, it is important to better understand the budgetary and economic impact of tax expenditures. Tax expenditures allow certain groups of taxpayers to reduce their tax burden and, therefore, could be regarded as revenue losses attributable to derogatory tax provisions. This paper provides an overview of major categories of tax expenditures, highlighting possible risks and challenges that Member States face and that are important to bear in mind when assessing or considering policies in this area.

Regular reporting on tax expenditures is a key issue with a view to increasing the transparency of tax systems and some progress has recently been made in this area. By mid-2013 around 2/3 of Member States were carrying out such reporting. However, diverse reporting practices render a meaningful interpretation of revenue cost estimates across countries problematic and hinder reliable cross-country comparison. The information provided is often fragmented and not fully transparent. In addition, while the central government level is in general fairly well covered, the local dimension tends to be captured to a lesser extent (partly due to the heterogeneity of taxes applied). As of 2014, the Budgetary Frameworks Directive requires Member States to publish information on the impact of tax expenditures on revenues for all sub-sectors of general government.

Member States apply numerous tax expenditures in personal and corporate income taxation as well as in VAT. Cross-country comparisons are difficult in practice due to different definitional, classification and benchmark approaches. Moreover, there are limited data available or reliable which would allow for comparing the use of tax expenditures in EU Member States. Nevertheless, available data indicate that the budgetary cost of tax expenditures amounts to a non-negligible percentage of GDP in many Member States, with tax expenditures in personal income taxation generally representing the lion's share. This is not surprising given that tax expenditures are extensively used by governments as instruments for income redistribution as well as to encourage investment, employment and growth. In terms of development, tax expenditures appear to have somewhat increased during the last decade, while pressure has emerged more recently to moderate their growing use.

The economic relevance of tax expenditures can be assessed against a small number of criteria. A first group of criteria covers various facets of microeconomic efficiency (internalising externalities, minimising distortions generated by taxation and remaining compatible with a sound functioning of the single market). The second group of criteria reflects the capacity to meet social or strategic objectives defined by the government with the best available instruments, which are not necessarily tax expenditures. The last group of criteria relates to the efficient functioning of fiscal policy, which would usually include keeping the tax system simple and stable and ensuring transparency and accountability. A thorough assessment of tax expenditures includes an evaluation of their impact on these three dimensions.

Considering the first criterion, tax expenditures might cause severe microeconomic distortions and encourage rent seeking behaviours, as other types of preferential treatment. The required increase in statutory tax rates to counter the narrowing of tax bases contributes to welfare losses, by inducing sub-optimal behaviours. An evaluation of the efficiency of tax expenditures requires a case by case analysis for different policy areas of how tax expenditures could – or could not – help meet given economic objectives in these areas.

As regards the second group, a thorough assessment of tax expenditures also includes an evaluation of their impact on social equity. This involves discussing their potential benefits and limitations in comparison with the alternative available tools, not necessarily related to tax policy.

Concerning the third group of criteria, tax expenditures might also impact the fiscal framework. Caution is required when deciding on whether to apply tax expenditures, as they could increase the complexity and instability of the tax system, may risk overburdening tax administrations and might lead to welfare losses. Simultaneously, they are often subject to less control and scrutiny by national parliament, although recent progress has been made in many Member States regarding transparency. They are more vulnerable to influential lobbies as well, compared to direct spending.

A number of specific tax expenditures in personal income taxation deserve particularly close scrutiny in terms of their costs and benefits.

- Making Work Pay policies – aimed at addressing inactivity traps and supporting those who face poverty or social exclusion – deserve careful scrutiny as there is mixed evidence on their efficiency.
- Self-employment is another area to be closely looked at, given the increasing importance in the EU and its often specific treatment in the tax system. Closing unnecessary loopholes in this area or establishing stringent conditionality is crucial to avoid abuse of the tax system, such as ‘fake’ self-employed.
- Tax incentives to induce higher rates of private pension savings or more favourable tax treatment of private pension schemes to compensate the income loss after retirement are widely used in the EU. These incentives are granted in the context of ageing population and also with a view to encouraging long-term saving in the economy. They may have a considerable impact on the budget and on income redistribution, now and even more in the future.
- Tax expenditures promoting home ownership also deserve close scrutiny. While they are justified by the assumption that they generate positive externalities for society, the paper highlights that such policies are generally costly and risk being regressive and detrimental to social equity. They could also encourage the misallocation of resources, contribute to higher house prices, thereby favouring debt accumulation. These concerns are especially relevant as around half of the Member States subsidise housing investment, through a low taxation compared with other investment items, and could encourage household indebtedness, via more or less generous mortgage interest reliefs.

As regards tax expenditures in corporate taxation, the discussed items include special corporate income tax regimes, reduced rates for SMEs and tax incentives for R&D. These items find their economic rationale in market failures but tax expenditures do not seem to be the first-best policy instruments in many cases. Furthermore, special tax rules (e.g. for SMEs) may conflict with each other. R&D tax incentives aim at increasing innovative activities by lowering the marginal cost of investment and indeed there is a general consensus in the economic literature that tax incentives for R&D have the potential to positively impact business expenditure in innovative activities. However, there are also associated risks and unintended consequences that increase their social cost (e.g. possible impact on tax competition including business location, in case of ‘Patent box regimes’ among others).

All in all, there is strong need for stringent monitoring, effective evaluations and transparent communication on the application of tax expenditures by the Member States. While well-designed expenditures can be justified and enhance positive spill overs and welfare, it is important to ensure that they do not cause economic distortions and that they are the most cost-efficient means of achieving economic and social policy goals. That is why the potential impact of these instruments – positive and negative – deserves more attention. This paper intends to serve as a roadmap to identify possible risks and challenges that Member States face when maximising the economic efficiency of tax expenditures and that are important to bear in mind when assessing policies applied or considered in Member States.

## CONTENTS

1.	Introduction	7
2.	Trends in tax expenditures - Some orders of magnitude	9
3.	General issues with tax expenditures evaluation	11
3.1.	The problems of identification	11
3.2.	Guiding principles: increasing policy efficiency	12
3.3.	Political economy dynamics: risk of misuse of tax expenditures and persistence	16
4.	Tax expenditures reporting in member states	19
5.	Economic and distributive aspects of selected tax expenditures in personal income taxation	23
5.1.	Making Work Pay tax expenditures	23
5.2.	Tax expenditures for self-employed	25
5.3.	Pension related tax expenditures	27
5.4.	Tax expenditures for education	31
5.5.	Housing related tax expenditures	34
6.	Economic aspects of selected tax expenditures in corporate income taxation: the national and the international dimension	37
6.1.	Special corporate income tax regimes	37
6.2.	Reduced rates for SMEs and companies operating in special regions or sectors	39
6.3.	Tax incentives for R&D	41
7.	Concluding remarks	45
	Annex	47
	References	49

## LIST OF TABLES

3.1.	Standard typology of government policy instruments	15
4.1.	National reporting of tax expenditures	19
4.2.	Elements of regular reporting practices	20
5.1.	Private pension payments and tax breaks in selected countries, 2009	30
5.2.	Tax incentives for education in personal income taxation	32

5.3.	Tax incentives for education in corporate income taxation	33
6.1.	Types of Corporate Income Tax regimes, with international dimension in EU Member States	38
6.2.	Reduced corporate income tax rates for small businesses, 2013	40
6.3.	Reduced corporate income tax rates and special tax regimes for specific regions and sectors	41
7.1.	Evaluation of tax expenditures in some major areas	46
A.1.	Top statutory tax rates in personal and corporate income taxation, in %	47
A.2.	References to national publications on tax expenditures	48

## LIST OF GRAPHS

2.1.	Tax expenditures in selected EU MS and the US as % of GDP (left) and as % of total tax revenues (right)	9
2.2.	Change in top personal income tax rate and adjusted top corporate income tax rate (1995-2013)	10
5.1.	Private pension expenditure in 2010 and 2060 in selected Member States (as % of GDP)	27

## LIST OF BOXES

5.1.	The tax treatment of pension savings and the benchmark for tax expenditures	28
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# 1. INTRODUCTION

**Tax expenditures are widely used to promote public policies.** Governments use favourable special/derogatory regimes (tax expenditures) to influence the allocation of resources in some direction or to achieve specific social aims, such as the fight against poverty or the reduction in income inequality. While formally generally defined as a reduction in tax revenue in the National Account, they are often economically equivalent to a public expenditure. They could be considered functionally as ‘hidden subsidies’, since they are designed to affect specific tax payers who are benefiting from a reduced tax liability. Recently, trends toward greater transparency in fiscal policy and the growing use of cost-benefits analysis of tax expenditures led to an increased interest in tax expenditures throughout the world. Relevant work by the IMF<sup>(1)</sup>, the OECD<sup>(2)</sup> and other international bodies emphasizes the need for various countries to review the tax expenditures when designing their budget.

**Tax expenditures can be budgetary costly and may, in many cases, turn out inefficient.** Tax expenditures reduce the tax burden for certain groups of taxpayers, resulting in revenue losses. They may achieve the assigned objective, but at large costs. For instance, they may be insufficiently targeted by benefitting only those who actually have a positive tax liability, thereby excluding many low-income households or companies with actually no taxable income. Alternative targeted measures on the expenditure side of the budget may often be more economically efficient. Using such measures may help mitigate social resistance to and political cost from tax expenditures removal. A removal of distortive tax expenditures can also create fiscal space allowing for stronger consolidation or a revenue neutral reduction in statutory tax rates, supporting growth. It may also imply a growth-friendly tax shift as is the case for VAT when abolishing current exemptions at unchanged statutory rates allowing for reduction of labour taxes.

**However, in specific cases, tax expenditures may be an efficient policy instrument or – as a second best solution – the most efficient one available.** This may be the case of targeted cuts in labour taxation (including social security contributions) to stimulate the labour force participation of disadvantaged groups (with highly reactive labour supply) and increase their employability by firms. Other examples could be investment and R&D-friendly tax cuts to reduce the cost of capital and stimulate innovation in periods of strong recession and special allowances to address the debt bias in corporate taxation (ACE). This justifies a cautious and case-by-case approach, considering the economic goal sought by the government and possible alternative instruments.

**Focusing on direct taxation, this paper traces key developments and outlines main issues related to tax expenditures.** It looks at tax expenditures at large but also examines particular groups of tax expenditures associated with specific economic issues. The paper is organised as follows. Section 2 provides some orders of magnitude and presents the recent trends in different tax expenditures. Section 3 investigates general issues related to tax expenditures, mainly the difficulty to measure and the risk to use tax expenditures in an inefficient way. Section 4 considers efforts made at Member States level to report tax expenditures systematically in order to raise transparency and avoid practices and to weaken the fiscal framework. Section 5 and 6 cover the specific economic and distributive aspects of selected types of tax expenditures in the personal income tax (PIT) and corporate income tax (CIT) area respectively. The final section briefly summarizes findings and offers some concluding remarks.

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<sup>(1)</sup> See Fiscal Monitor (IMF, 2011)

<sup>(2)</sup> See Tax expenditures in OECD Countries (OECD, 2010a)

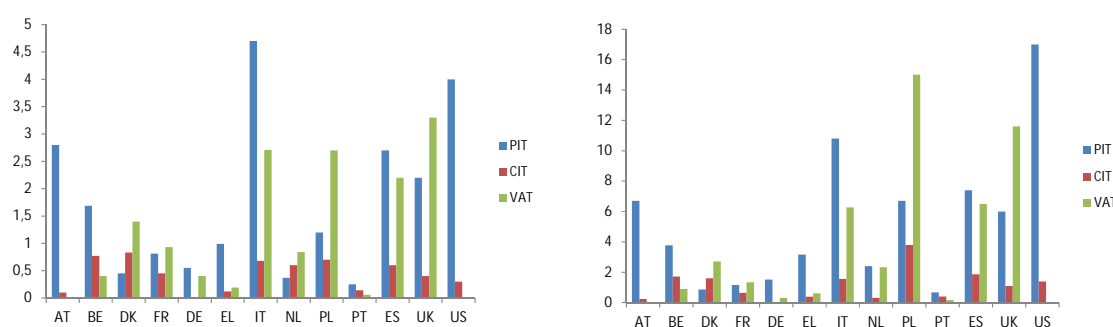


## 2. TRENDS IN TAX EXPENDITURES - SOME ORDERS OF MAGNITUDE

### Reported tax expenditures add up to a non-negligible share of GDP in many EU Member States.

Graph 2.1 shows the total size of reported tax expenditures as a percentage of GDP and total tax revenues in selected EU Member States plus the US. Italy, the UK and Spain are Member States with the highest share of reported tax expenditures in GDP (8.1%, 5.9% and 5.5% respectively). Such figures give some indication of the order of magnitude, but cannot be interpreted directly as budgetary costs. International comparisons however can be misleading given the problem of measurability and comparability, which are highlighted in the next section.

Graph 2.1: Tax expenditures in selected EU MS and the US as % of GDP (left) and as % of total tax revenues (right)



Note: Reporting years vary from 2005 (Belgium) to 2012 (Poland). For Austria there is no data on VAT tax expenditures and the US does not apply VAT. All sample countries estimate the value of tax expenditures in terms of revenue foregone. Worth noting that existing data do not capture all recent trends (e.g. the decreasing trend for Spain since 2010 in PIT and since 2009 for CIT etc.). In the case of Italy, measures linked to the progressive structure of the tax, e.g. the basic threshold of the family component allowances, is considered as tax expenditure and contributes to the high ratio for tax expenditures in PIT.

Source: OECD (2010).

**The size of reported tax expenditures in PIT generally exceeds that in CIT.** The exceptions in our sample based on OCED data are Denmark and the Netherlands. The size of total tax expenditure is captured by the sum of all tax expenditures as a percentage of GDP. It could amount to 2%-4% of GDP in some countries, but in half of those covered here it stands below 1% of GDP. Of course, one should not lose sight of the limits of such a measure and the limited sample of countries shown in Graph 2.1.

**As an element of comparison, the size of reported tax expenditures in direct taxation is generally higher than that of tax expenditures in VAT.** The total size of VAT tax expenditures is influenced by the level and the frequency of reduced rates and exemptions as well as by the broadness of the benchmark definition. While the reported VAT tax expenditures could be relatively high in some countries (2% or 3% of GDP), they generally generate a lower revenue loss than the reported tax expenditures in PIT. Denmark, for instance, has a high VAT rate that is used as benchmark and both lower rates and exemptions, even those that follow the VAT directive, are considered tax expenditures (Gebauer et al., 2010).

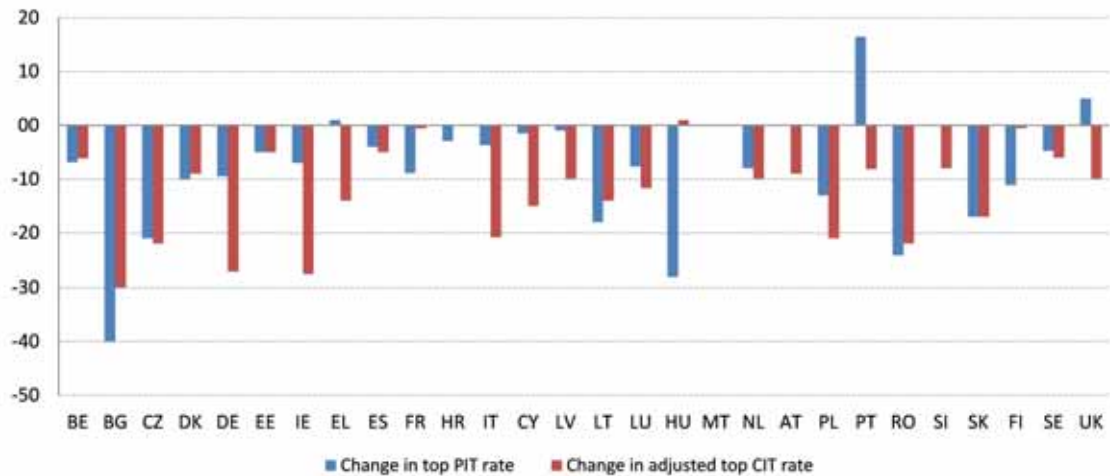
**Tax expenditures in PIT have increased over the last decade, while those in CIT have remained broadly stable or slightly on the rise.**<sup>(3)</sup> The following factors might plausibly explain this trend. The rise in PIT rates in many countries has mechanically increased the monetary amounts of deductions and exemptions and encouraged new exemptions as a compensation scheme for specific groups, including the most vulnerable. This expansion of tax expenditures is accompanied by a decrease in top rates (see Graph 2.2). At the same time, sharp reductions in statutory CIT rates in many Member States have been financed

<sup>(3)</sup> OECD (2010b) observed an increasing trend of tax expenditures in PIT in many OECD Countries in recent decades (e.g. Belgium, France, Spain, Portugal, Greece, Australia, US). At the same time most countries reported a stable or increasing trend in tax expenditures in CIT.

by a broadening of the tax base and the abolition of tax expenditure items. In addition, the strong reduction of CIT statutory rates over the last decade reduces mechanically the monetary amounts of deductions and exemptions. Moreover, during the 2000s and until the crisis, some governments created new PIT tax expenditures in order to circumvent more stringent spending controls in place in the respective countries.

**More recently, there is a tendency of offsetting pressures on tax expenditures in direct taxation in EU Member States.**<sup>(4)</sup> On one hand, constrained public finances push towards the reduction in tax expenditures. Moreover, some countries have enacted or are considering fiscal rules that may increase the transparency and the budgetary control of tax expenditures (OECD, 2010a and 2010b). On the other hand, governments want to encourage investment, employment and growth, which has resulted in a trend to a wider application of specific tax expenditure items in PIT and CIT, such as tax incentives to boost investment and R&D.

Graph 2.2: Change in top personal income tax rate and adjusted top corporate income tax rate (1995-2013)



Note: 2010-2013 change for Croatia.  
 Source: Commission Services.

<sup>(4)</sup> See European Commission (2013a)

## 3. GENERAL ISSUES WITH TAX EXPENDITURES EVALUATION

### 3.1. THE PROBLEMS OF IDENTIFICATION

#### Unclear definitions: the thorny issue of the benchmark

**The analysis of tax expenditures faces fundamental definitional obstacles, related to the determination of the relevant benchmark.** More precisely, the difficulties arise from the concept of benchmark tax system, which varies across countries and academic studies. Since tax expenditures are a deviation from a benchmark tax system, they are generally rather difficult to identify in a straightforward and unequivocal way. For example, the same tax relief could be classified as tax expenditure in one country, while being considered as a part of the benchmark tax system in another.

**Usually three general approaches are distinguished that countries use to define the benchmark tax system and to identify tax expenditures.** According to Craig and Allan (2001) these are: i) the conceptual approach; ii) the legal approach and iii) the analogous subsidy approach. The *conceptual approach* links the benchmark tax to a normative tax structure, the *legal approach* takes the current tax legislation as a basis for defining the benchmark tax and, thereby, for identifying tax expenditures, and the *analogous subsidy approach* identifies as tax expenditures only those tax provisions that are clearly analogous to a direct subsidy. The conceptual approach constitutes in practice the widest definition of the three approaches, resulting in a more extensive list of tax expenditures with greater total cost.

**The choice between a consumption tax and a comprehensive income tax benchmark exemplifies the different conceptual approaches that can be taken for the area of income taxation.** Under a (comprehensive) income tax benchmark, any provision that reduces or postpones revenue from the taxation of income derived from capital is tax expenditure. Whereas under a consumption tax benchmark, any taxation of income from capital is a negative tax expenditure or a tax sanction.

**Tax expenditures in individual income taxation can take many different forms.** These include deductions, exclusions, non-refundable tax credits, refundable tax credits or reduced rates for specific activities. With non-refundable credits taxpayers may only reduce or eliminate the tax liability, while with refundable credits the taxpayer receives the excess or ‘negative tax liability’ as a payment in case the credit exceeds pre-credit tax liability.

**Favourable tax treatment in corporate income taxation is also very diverse and often concerns a specific sector or activity.** This is particularly the case of accelerated depreciation for specific types of investment, and special tax regimes. Other examples of tax expenditure in corporate taxation are deferral allowances, special exclusions, exemptions or deductions from gross income. This implies that the *legal approach* is often used in corporate taxation to define the benchmark tax system.

**Countries use different classifications of tax expenditures.** Many countries classify according to the tax base (PIT, CIT, VAT, etc.) and by types of provisions (reduced rates, exemptions, deductions, deferrals, reliefs, and credits). Some countries also use a classification by beneficiary, in order to show the sector or type of taxpayer that receives the tax advantage, or by the purpose or function of the tax expenditure (housing, low income earners, environmental, etc.). To allow for comparison with spending programmes, countries sometimes also closely relate the items to a spending category in the budget. A detailed review on the different classifications applied in EU Member States can be found in Table 4.2 in Chapter 4.

#### Different methods to measure the revenue costs of tax expenditures

**The calculation of revenue cost is a crucial component of a tax expenditure report.** A precise quantification of the costs or value of tax expenditures is, however, not straightforward. Such

quantification ideally needs to consider behavioural responses, interactions with other tax bases and other methodological issues. OECD Member States mainly apply three methods to estimate the costs or value of tax expenditures, i.e. (i) the revenue forgone method, (ii) the revenue gain method and (iii) the outlay equivalence method (OECD, 2010a).

**Member States most often use the revenue forgone method in their regular tax expenditure reporting.**<sup>(5)</sup> The *revenue forgone* method is the easiest estimation method. Behavioural responses or the interaction with other tax bases is disregarded. The tax expenditure is typically the product of the tax provision (e.g. rate reduction) and the volume it applies to (e.g. income). This method has, therefore, important drawbacks for estimating the budgetary costs and can only give a very first illustration of the possible revenue effects of a tax provision. The *revenue gain method* takes account of behavioural responses and tax interaction and, therefore, gives a more precise cost estimate. It considers the increase in revenue that could be expected if a particular provision was to be repealed. Behavioural reactions can have substantial effects on budgetary outcomes. The latter is, e.g., exemplified by the results of Barrios et al. (2014) which suggest that behavioural effects reduce the revenue cost of work-related tax expenditures by around 1/3 in selected Member States. The revenue forgone estimate has, however, the advantage of giving a rather determinate estimate compared to a more subjective revenue gain estimate. The *outlay equivalence approach* (also called ‘resource cost measure’) estimates what direct spending would be required to achieve the same goals and benefits. It calculates the outlay that would have resulted in a similar gain for the taxpayer as the considered tax expenditure. In other words, it considers the situation in which tax expenditures were replaced by a direct expenditure, *delivered outside the tax system*, in the budget function.

**The measurement of tax expenditures faces a wide range of methodological issues.** It can, for example involve the choice of a calculation method for tax expenditures which allows estimating postponed or forgone tax revenues (e.g. the case of depreciation rules or taxation of pension savings). Here a standard ‘present value’ approach can be used or a micro-simulation model. The choice of micro simulation models depends on available tax data, and other technical issues (e.g. algorithms used), since these models are usually used if full data for estimating the cost of tax expenditures are not available, and for projections over several years. Another choice is whether revenue estimates should be based on an accrual or cash basis etc.

### 3.2. GUIDING PRINCIPLES: INCREASING POLICY EFFICIENCY

The economic relevance of tax expenditures could be assessed through a small number of criteria. This section first identifies three groups of guiding principles and then analyses how tax expenditures could affect the performance of public policy according to each of these criteria.

#### Identifying guiding principles

**The first group of criteria covers various facets of the microeconomic efficiency**, which corresponds to the use of resources maximizing the production of goods and services and are referred to by Musgrave (1939) as the ‘resource allocation’ function of taxation:

- *Internalising externalities*, so as to provide the socially-optimal level of good and services. This could refer to positive externalities, like for instance those generated by R&D and innovation, or negative externalities, created by pollution and greenhouse gas emission. In the latter case, tax expenditures may actually reduce economic distortions.

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<sup>(5)</sup> See European Commission, 2013.

- *Minimising distortions generated by taxation.* Taxation is considered to distort the production and allocation of good and services, compared with the unrealistic absence of taxation. However, given a certain level of tax burden (to finance a number of public good and services), the introduction or removal of tax expenditures may impact the level of economic distortion. For instance, the cost generated by a particular tax expenditure should be financed by a low distortive form of taxation and not by growth-harmful form of taxation, such as tax on labour. Beyond static inefficiency, tax expenditures may durably affect inefficient behaviour such as rent seeking activity instead of efficient investment in the long run (dynamic inefficiency). In some case, however, tax expenditures can reduce the distortions generated by taxation: e.g while classic corporate income tax systems favour debt as a source of financing compared to equity, a tax expenditure in the form of the Allowance for Corporate Equity (ACE) reduces that distortion.
- *Remaining compatible with a sound functioning of the single market.* The existence of tax expenditures, especially in the area of corporate taxes, may increase mismatches and double non-taxation in the EU. This may affect profit shifting and base erosions.

**The second group of criteria covers the capacity to meet efficiently social or strategic objectives defined by the government.** The issue is therefore not about the relevance of the governmental objectives, but, rather, about the choice of the best instruments to meet the objectives assigned. Tax expenditures may be one of the possible instruments, but, it should be checked if other instruments could reach the same target at a lower cost.

- *Improving social equity.* This corresponds to the redistributive function of taxation, identified by Musgrave. Tax expenditures could be used as a means to reduce income inequality and combat poverty. In some cases, for instance favourable tax treatment (e.g. on energy consumption to support low-income outcome) may conflict with economic objectives (e.g. reduce carbon emission or use energy resource efficiently).
- *Reaching strategic goals.* The paper does not cover this dimension because of its strong political economy character. These objectives may be manifold but generally related to industrial policy and the promotion of national champions or flagship sectors. This should be done in the respect of the Single Market.

**The last group of criteria relates to the efficient functioning of fiscal policy.** This may corresponds to the ‘stabilisation’ function of fiscal policy and macroeconomic stability as defined by Musgrave.

- *Simplicity and stability of the tax system.* Reducing its complexity will positively affect the compliance costs for firms and citizens and the collection costs for public administration. In some cases, tax expenditures are in fact designed to reduce compliance and collection costs (e.g. fringe benefits such as employee provided, health insurance, education allowances, childcare and assistance allowance).
- *Keeping transparency and accountability of fiscal policy.* Tax expenditures – as an allegedly less transparent and less accountable form of public expenditure – should be used in a fashion compatible with a sound functioning of national fiscal framework.

### Microeconomic efficiency

**Tax expenditures could be used to internalise externalities, but this faces an identification problem.** This requires identifying the (negative or positive) externality precisely and calibrating the amount of tax reduction accurately to ‘price in’ the externality. In practice, this is a delicate exercise, requiring a large amount of evidence.

**The introduction of tax expenditures narrow tax bases, which often leads to higher tax rates.** General textbook analysis stresses the virtue of a large tax base and low tax rates. The economic distortions are more than proportional to the tax rate. Indeed, a higher marginal tax rate is more likely to affect behaviour, especially if the economic agents are highly reactive to changes in relative income.

**Tax expenditures affect the behaviour of economic agents and can distort the allocation of resources.** Some tax expenditures can lead to welfare losses by distorting investment and consumption choices. Introducing tax expenditures to support a given sector will divert resources and activity from other sectors of the economy. A key question is then to know if the reallocation of resource is efficient, as is the case with direct spending. A general response to this question is impossible and any assessment should be made on a case by case basis, addressing the specific economic issues at hand.

**Tax expenditures, like other government policies, including direct spending may lead to rent seeking behaviour by tax payers.** This results in a sub-optimal allocation of resources, which is often accompanied by allegations of undue influence by special interest groups. Rent seeking can be quite costly for economic growth through hurting innovation and creating inequalities. Substantial resources are dedicated to tax optimisation at the expense of more productive activities.

**In the assessment of tax expenditures, possible undesirable interactions with other tax bases should be taken into account.** While a given tax expenditure can be immediately related to the reduction in the beneficiary's tax liability for the corresponding base, the overall impact on revenues depends crucially upon the interaction with other relevant taxes. A typical example is the introduction of tax relief on mortgages, which could indirectly reduce or increase tax revenue from dividend and interest income once households have readjusted their portfolios to accommodate the lower cost of mortgages (OECD, 2010a) (Capozza et al., 1996). This difficulty arises independently of the method applied for the measurement of tax expenditures.

**Tax expenditures may complicate the functioning of the single market.** The existence of mismatches and loopholes across tax systems, particularly in the area of corporate taxes, may encourage firms to engage in tax planning, with a view to minimise tax liabilities. This may reduce the capacity of collecting tax revenue in the EU as a whole, because of the induced base erosion and the presence of double non-taxation. This may encourage profit shifting and base erosions, which could push some Member States to further tax less mobile tax base like labour, leading to a harmful impact on growth for some countries and a sub-optimal allocation of resource at the EU level.

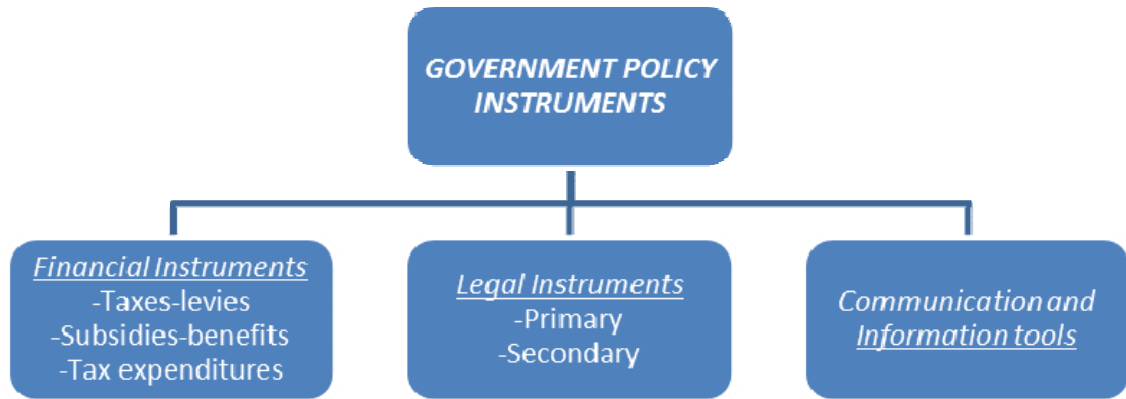
**Clear cost and benefit analysis can show that – in some cases – tax expenditures are well justified.** There are valid reasons for government involvement. Such involvement can, for instance, aim at stimulating the consumption of merit goods, to promote innovation etc. Some objectives can be achieved at lower administrative cost via the use of tax expenditure (due to the use of existing tax information) compared to spending programmes. Tax expenditures could be justified in the case of market imperfections e.g. linked with the access to financial market.

#### Achieving social goals with more efficient means?

**Tax expenditures are not necessarily the most efficient policy instrument to reach a desired goal.** Various instruments are available in the hands of governments and can be classified as follows i) financial instruments (subsidies, general tax/revenue policy and tax expenditures), ii) legal or regulatory instruments and iii) communication and information policy (see Graph 3.1). Before introducing any new tax expenditure, one should determine whether this instrument is more efficient than a legal or information instrument and to estimate whether it is better when compared to other available financial instruments – and vice versa.



Table 3.1: Standard typology of government policy instruments



Source: Classification of Financial Policy instruments. Polackova, B., et al World Bank (2004)

**Tax expenditures can be regressive and may not be targeted enough, generating windfall.** Some tax expenditures provide the largest benefit to high-income taxpayers and little or no benefit to low income households, which is not least problematic from a social equity viewpoint. Indeed, tax expenditures tend to favour those who can actually reduce their tax liability by a large amount, that is, the high income taxpayers. This in particular applies to tax deductions as compared to tax credits. In the first case the reduction in the tax due depends on the marginal tax rate, whereas in the second case the reduction is the same for all tax payers with a positive tax due. The poorest taxpayers, who are likely to pay a relatively modest amount of taxes, have less or no opportunity to reduce further their tax liabilities. The exception are refundable tax credits, which give rise to a ‘negative tax’ in the form of a benefit, classified as subsidy<sup>(6)</sup>, if the tax credit exceeds total tax liabilities. Therefore, all taxpayers benefit the same way.

**The distributional effects of tax expenditures are difficult to measure and to control, unlike in the case of targeted subsidies or benefits.** More affluent tax payers often have a better knowledge of the tax system and can afford the advice of tax counsellors, with a view to using tax expenditures as a tool of tax optimisation. Many tax expenditures are, however, not means-tested and benefit all income levels. Depending on the purpose of the tax expenditure, this could generate large dead-weight costs, which could be avoided by using targeted benefits to support the most vulnerable households. Means-testing or targeting would result in other well-known difficulties, such as increased marginal effective tax rates in the area of the threshold. The distributional effects of targeted spending programs are often easier to control but in some cases it may require more administration.

#### Distorting effects on fiscal framework and fiscal policy

**Tax expenditures increase the complexity of the tax system and risk to overburden tax administration resulting in additional revenue losses.** Tax expenditures may: i) generate higher compliance and administrative costs by rendering the tax system more complex, ii) weaken the fiscal framework and iii) possibly generate a misallocation of public funds. The complexity of the tax system increases the compliance costs for households, entrepreneurs and SMEs. It is also raises the cost of tax collection.

<sup>(6)</sup> The move from ESA 95 to ESA 2010 is expected to change the classification of some tax expenditures. ESA 2010 introduces among others explicit new rules for recording tax credits in national accounts. This treatment represents a clear difference as compared to the previous recording under the ESA 95. Tax credits that constitute non-contingent liability of government are now treated as expenditure instead of reduction of tax revenue and recorded at the moment when government recognises the obligation to pay. The new recording on gross (rather than net) basis results in an increase in total revenue and total expenditure indicators, compared to the previous practice.

**Tax expenditures are less transparent than direct spending and do not have to be approved in all Member States regularly by the relevant legislative body, reducing the political accountability.** The use of tax expenditures does not provide the same assurance of transparency as the use of direct subsidies and benefits. Even in the most developed countries with a well-functioning tax expenditure reporting, the gap between the level of scrutiny and transparency of tax expenditures compared with direct spending remains an issue. Tax expenditures can have a considerable lower cost in the year of introduction than over time. The development in revenue cost of tax expenditures is much less transparent than in the case of spending on the expenditure side of the budget. The opacity generated by the existence of numerous and large tax expenditures can complicate revenue management.

**In terms of fiscal governance, tax expenditures reduce the certainty of the budgetary process because of their uncapped funding.** While spending programmes tend to be routinely reviewed when drafting the annual budget and are subject to budgetary ceilings, tax expenditures in some countries do not face similar scrutiny, and their budgetary effect ultimately depends upon behaviour (i.e. upon the take-up ratio). The open ended character of tax expenditures results in a lack of control over the entire budget, which jeopardizes fiscal balance and fiscal sustainability. This issue is particularly relevant in times of fiscal consolidation, when resorting to tax expenditure can in practice be used to circumvent existing expenditure rules and limits on direct spending programmes if such limits do not take (changes in) tax expenditures into account. However, many countries have increased the governance of tax expenditures in recent years. The amounts of tax expenditures are more often presented in spending programmes and tax expenditures are included in spending reviews more frequently.

**Since tax expenditures are usually easier to introduce than direct expenditure, they may be given a higher budget priority, regardless of their effectiveness and efficiency.** This may distort the prioritization of fiscal items and affect the fiscal allocations. Moreover, tax expenditures might not be coordinated with regular spending or other tax expenditures, undermining further the efficiency in allocating public resources.

### 3.3. POLITICAL ECONOMY DYNAMICS: RISK OF MISUSE OF TAX EXPENDITURES AND PERSISTENCE

**Tax expenditures are particularly vulnerable to their capture by lobbies.** A lack of co-ordination and control of tax expenditures may increase the risk of abuse and possibilities for introducing provisions in favour of interest groups (e.g. tax holidays). In addition, governments may prefer tax expenditures, because they reduce measures of the overall tax pressure and do not increase the measure of spending. Thus, they may give the appearance of reducing the government's size. For this reason, tax expenditures have strong political appeal in some countries. In fact, however, tax expenditures can actually expand government's interference in the economy, partly because they induce changes in taxpayers' behaviour.

**The economic rents captured by some actors combined with the lack of transparency render tax expenditures quite persistent, even when their raison d'être has disappeared.** Like direct spending, tax expenditures must also be paid for through higher taxes or reduced spending elsewhere. This appeal for tax expenditures also echoes the 'deficit bias' effect, generated amongst others by i) electoral motives such as high spending in election years (Drazen, 2000), ii) 'fiscal illusions' on inter-temporal budget constraints, affecting voters (Buchanan and Wagner, 1977), and iii) the wish to constrain successor government with different spending preferences (Tabellini and Alesina, 1990). Hence, rent seeking activity is promoted taking into account the fact that a focussed advantage benefitting a small target population is more visible than cost broadly spread over the general taxpaying population. On the other hand, and unlike a direct spending programme, tax expenditure does not give rise to bureaucracy with a vested interest in maintaining it.

**The discussion above highlights general issues that are important in the evaluation of tax expenditures.** These general issues are related mainly to economic efficiency of tax expenditures, their

impact on social-equity, the need to address market imperfections, to foster entrepreneurship and growth and to complement non-tax policy solutions. An evaluation of the efficiency of tax expenditures requires identifying different policy areas and an assessment of how tax expenditures could – or not – help meet given economic objectives in these areas. A case-by-case analysis with the focus on specific groups or categories of tax expenditures associated with specific economic issues is needed (*bottom up or thematic approach*) in order to identify policy options. The main challenge is through an analysis of costs and benefits to help limit the use of tax expenditures to cases where, based on the above general guiding principles, considerable market failures exist and where obvious administrative advantages over comparable spending programs can be identified.



## 4. TAX EXPENDITURES REPORTING IN MEMBER STATES

**Tax expenditures reports play an important role in increasing transparency of the tax regime.** The estimates of revenue cost need to be interpreted carefully but can provide a useful starting point for policy and decision makers, considering the pros and cons in reforming tax systems. Table 4.1 gives an overview of existing tax expenditure reporting in Member States. It shows that 18 Member States regularly report on tax expenditures and Bulgaria already decided to do so as of 2014. The reporting practices are however very diverse across countries and vary a lot in presentation, deepness and coverage. For some countries, one-off tax expenditure reviews or inventories have been produced recently (see the third column). These reports are generally more extensive, produced in some cases by independent experts (e.g. in Denmark, Ireland and Finland) and could include reviews or judgments on specific tax expenditure measures. The contents, do, however, vary from report to report. References to national publications connected with regular reporting and the specific reports can be found in Table A.2 in the Annex.

Table 4.1: National reporting of tax expenditures

Country	regular (annual* )	non-regular (latest)
BE	X	
DE	X	2009
EE	X	
IE		2009
EL	X	
ES	X	
FR	X	2011
IT	X	2010/2011
CY		
LU		
MT		
NL	X	
AT	X	
PT	X	
SI		
SK	X	
FI	X	2010
BG	(X)	2011
CZ		
DK	(X)	
HR		
LV	X	
LT		
HU	X	
PL	X	
RO		
SE	X	
UK	X	

Note: Regular reporting is biannual in Germany. In Denmark, not all tax expenditures are updated annually. In Bulgaria, the new Law on Public Finances adopted at the end of January 2013 and entering into force at the beginning of 2014 provides for annual publication of tax expenditure information. Latvia published a report on reliefs in PIT in 2011.

Source: Commission services

**Some general common features of regular reporting practices can be identified.** Reporting (mostly annual) is typically conducted by the Ministry of Finance, Economics or Taxation or by services reporting to these Ministries. Some Member States, following a legal approach, publish tax expenditure figures together with other budget documents, while others publish them as individual reports. The countries in general use the *revenue forgone* method for calculating tax expenditures, but there are important differences in methodology, for instance whether revenues are estimated on a cash or accrual basis.

Table 4.2: Elements of regular reporting practices

Country	Legal requirement	Levels of government covered				Time coverage	Categorization
		Central government	State government	Local government	Social security funds		
BE	X	X				t-5, t-4, t-3, t-2, t-1	tax base, purpose
DE	X	X	X	X		t-2, t-1, t, t+1	tax base, type of tax measure, purpose, sector
EE		X	n.a.			t, t+1	tax base, purpose
EL	X	X	n.a.	n.a.		t-2	tax base, purpose, sector
ES	X	X	X			t+1	tax base, type of tax measure, expenditure category
FR	X	X	n.a.		X	t-1, t, t+1	tax base, expenditure category
IT	X	X	n.a.			t, t+1, t+2	type of tax measure, purpose, sector
NL	X	X	n.a.			t-2, t-1, t, t+1, t+2, t+3, t+4	tax base, sector, law, policy area
AT	X	X	X			t-3, t-2, t-1	tax base, sector
PT	X	X	n.a.			t-2, t-1, t, t+1	tax base, purpose
SK	X	X	n.a.	X	X	t-2, t-1, t, t+1, t+2, t+3	tax base
FI		X	n.a.	X		t-1, t, t+1	tax base, purpose
DK		X	n.a.	X		various years	tax base
LV		X	n.a.			t-2, t-1	tax base
HU	X	X	n.a.			t+1	tax base
PL		X	n.a.	X		t-1	tax base, purpose
SE	X	X	n.a.	X	X	t-1, t+1, t+2	tax base, type of tax measure, purpose/sector (expenditure category or technical tax expenditure)
UK		X	n.a.	X		t-1, t	tax base

Note: In the column for time coverage 't' refers to the year of publication. 'n.a.' stands for 'not applicable'. State government refers to the Länder in Austria and Germany, the gewesten en gemeenschappen / régions et communautés in Belgium and the comunidades autonomas in Spain. In Belgium, the reporting covers taxes collected by the federal government. In Spain, the autonomous communities publish different tax expenditure reports. In Bulgaria, the new Law on Public Finance provides for annual publication of tax expenditure information as of 2014. Detailed information on reporting is not available yet. In France the reporting of tax expenditure in social security funds refers to the Projet de loi de financement de la Sécurité sociale - Annexe 5: Présentation des mesures d'exonérations de cotisations et contributions et de leurs compensations. In Finland, time coverage refers to numbers published for individual tax expenditure items by the Ministry of Finance in the budget proposal. The VAT report identifies all tax expenditure for t-2, t-1, t and t+1. In Netherlands Ministries also have to report tax expenditures that fall within the policy area individually in their budget reports

Source: Commission services based on national sources

**In 2013, there was a national legal requirement to report on tax expenditures in 10 of the 18 Member States that report regularly today.** In addition to whether national law requires reporting on tax expenditures, Table 4.2 provides information on coverage in terms of level of government and time and the categorisation of tax expenditures used. The levels of government covered vary between countries. While central government is always covered, tax expenditures related to local taxes and social security funds seem to be less well captured. In the case of local and state government, this is partly due to the heterogeneity of the taxes applied.

**There is great variance in the number of years covered and whether reporting is backward or forward looking.** In Austria and Belgium, the reporting is clearly backward looking covering the last three or even five years, whereas in Sweden tax expenditures are reported for last year, current year and two years forward. The Netherlands has the longest reporting period and the reporting is both forward as backward looking. The most frequent years reported on are the past year, the current year and the coming year (see Table 4.2 for detailed information).

**Tax expenditures are identified in reference to their tax base, but combinations with other categorizations are common as well.** Tax expenditure is generally categorised according to the tax base (e.g. VAT, PIT, or CIT) and often grouped according to type of tax measure (e.g. allowances, rate relief, and exemptions), purpose (low income earners, housing, etc.) or sector (households, businesses, or agriculture). Some countries also link tax expenditure to the expenditure side of the budget (e.g. Spain, France and Sweden). Overall, those countries that do not report so far on tax expenditure regularly find it difficult to provide such information. Based on available information by June 2013, these countries are: Ireland, Cyprus, Luxembourg, Malta, Slovenia, the Czech Republic, Croatia, Lithuania and Romania.<sup>(7)</sup>

**Overall, information on tax expenditures in force or planned in Member States is often fragmented and not fully transparent.** This makes it more difficult to identify possible improvements in fiscal and

<sup>(7)</sup> In accordance with EU directive on requirements for budgetary frameworks, Romania has introduced in the legislation the obligation to report data on the impact of tax expenditure. The data will be available starting with the 2015 budget law.

tax arrangements and can make fiscal policy-making less effective and efficient. This in turn affects the strength of the domestic budgetary framework because — more or less hidden — revenue losses may weaken the impact of enhanced transparency on the expenditure side. The changes recently introduced with ESA 2010 in the recording of some tax credits in national accounts, may have an impact on tax expenditures classification<sup>(8)</sup> and are expected to enhance budgetary transparency and impact budgetary discipline .

**In the absence of a commonly agreed definition of tax expenditures, the case for transparent reporting is even stronger and now mandated by EU legislation.** Within the context of the transposition of the Directive on requirements for budgetary frameworks (2011/85/EU), Member States are required (since 1 January, 2014) to provide information on the tax expenditures and their impact on revenues. Article 14(2) of the Directive states that: *‘Member States shall publish detailed information on the impact of tax expenditures on revenues’*. While it is not the intention of the provision to establish or enforce a standardised procedure for the Member States to evaluate tax expenditures in this context, the Commission has issued broad guidelines to assist Member States in complying with this obligation to publish, which are summed up below. As a subsequent step the Commission may have to assess the degree to which various Member States comply with the *core requirements* of the above Directive. This will allow the Commission to gain a better understanding of the present (new or improved) reporting practices of the Member States and possibly to suggest further reporting improvements to be discussed in the future.

**To raise awareness of tax expenditures in the budget process and among the public, it is advisable to include information and data on tax expenditures in the budget documents.** A transparent presentation should be attempted and an explanation of the main approaches including benchmark, revenue estimate and coverage should be given. The reporting should include cost estimates and a broad coverage of all areas of taxation incl. social security contributions and local taxes. A more detailed explanation of methodology could be needed. Such information could also be provided in a separate reference. A listing of tax expenditures in the budget documents that would allow for easy comparison with spending programs in the same field would help visualize the relative magnitude of such concessions and give a more comprehensive picture of public support in a specific policy area. Such a grouped listing (in connection to, or close to spending lines) could be an addition to a separate section or report on tax expenditures.

**Beyond having tax expenditures reported in the budget, the next step should be to perform regular formal evaluations.** Such reviews should judge the tax expenditures in terms of efficiency and cost effectiveness and could be more extensive and repeated on a less than annual frequency. Government bodies might not be always best placed to perform an objective review of tax expenditures. Independent bodies or commissions could be better suited for this task. Such reviews should be publicly available.

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<sup>(8)</sup> See footnote 6 in Section 3 for more information on recent changes.





## 5. ECONOMIC AND DISTRIBUTIVE ASPECTS OF SELECTED TAX EXPENDITURES IN PERSONAL INCOME TAXATION

This section discusses selected tax expenditure items in personal income taxation, namely making work pay tax expenditures, tax expenditures for self-employed, pension related tax expenditures, tax expenditures for self-employed and housing-related tax expenditures.

### 5.1. MAKING WORK PAY TAX EXPENDITURES

**Among work-related tax expenditures ‘Making Work Pay’ (MWP) policies play a determinant role.** This embraces different instruments such as tax credits, tax rate reliefs and exemptions for specific individuals. Their aim is (i) to make work more attractive by providing a financial incentive to become employed for those who are unemployed or inactive, thus promoting labour force participation; and (ii) to support those who are at risk of poverty or social exclusion even when employed. As far as tax credits are concerned, the UK – a pioneer in designing this system<sup>(9)</sup> – announced in 2010 the transition to a Universal Credit System, although the current model still relies mainly on the Working Tax Credit introduced in 2003. Other Member States introduced tax-related MWP measures in 2001: France (*prime pour l’emploi*), Belgium (*crédit d’impôt pour les bas revenus d’activité professionnelle*) and the Netherlands (*arbeidskorting*). On the contrary, in Hungary the employee tax credit in 2008 (*adójtámogatás*) was replaced in 2012 by an employer-contribution relief for young, old and unskilled employees. When turning to *tax rate reliefs* and *tax exemptions*, between 2011 and 2013 the need for budget consolidation did not provide much scope for reducing the former and/or increasing the latter. In fact, most of the Member States generally increased personal income taxes. Nonetheless, there were some exceptions. Latvia gradually reduced the PIT rate from 2013 to 2015, and as of 2013, the UK has increased the ‘personal allowance’, i.e. the amount of income free of taxation.

**Making Work Pay tax-related measures differ according to the eligibility and generosity criteria.**<sup>(10)</sup> As regards *eligibility criteria*, tax credits are means-tested both at individual and household level in the UK and France, and only at individual level in Belgium and the Netherlands. The potential beneficiaries can be employees or self-employed in the UK, France and the Netherlands, while in Belgium the measure is mainly for the self-employed.<sup>(11)</sup> The number of weekly worked hours is an eligibility criterion in the UK. In terms of generosity, in France the minimum annual income required to access the credit is EUR 3 743 while the maximum depends on household composition. Income brackets are wider in the Netherlands, where there is no minimum income required. The Member States also differ according to the *generosity criteria*, e.g. the amount of tax credit or the refundability.<sup>(12)</sup> Another characteristic is the waiting time to obtain the relief. Furthermore, some credit rates depend on the number of dependents, as in the UK or France and in some cases incentives also depend on age, as in the Netherlands.

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<sup>(9)</sup> The UK introduced the Family Credit in 1988, replacing it in 1999 with the Working Family Tax Credit. The UK is presently in a transitional period. Both the Working Tax Credit and the Child Tax Credit will be incorporated into the Universal Credit System (together with the income-based Jobseeker’s Allowance, income-related Employment and Support Allowance, Income Support and Housing Benefit); the process, started in April 2013 will go through different pilot and trial stages, before being rolled out nationally by 2017.

<sup>(10)</sup> Tax credits can have different eligibility criteria (e.g. the level of personal and/or household income, employment status, or the number of hours worked) and different generosity criteria (the extent of relief, the possibility of obtaining a refund, the time it takes to receive the credit). The generosity of the relief may also depend on the taxpayer’s situation (level of income, age, household composition, number of dependents). For tax rate reliefs and exemptions, the only eligibility criterion is, in most of the cases, the income level.

<sup>(11)</sup> Also a part of the public sector is still covered. With the aim of strengthening the labor supply effect, for most wage earners the PIT tax credit has been converted into a reduction of social contributions based upon the number of worked hours.

<sup>(12)</sup> Refundability implies that if the credit exceeds the amount of tax due, the difference is not lost (e.g. in the Netherlands the credits are not refundable).

**MWP tax expenditures are mainly assessed with respect to their impact on labour supply<sup>(13)</sup> as well as on the income distribution (capacity to meet efficiently social or strategic objectives).** The most recent literature, although in some cases contrasting results are found, highlights some key messages:

- The effect of increasing the labour supply level can be substantial depending, inter alia, on the size of the intervention (e.g. for the case of the UK Brewer et al. (2006)) attributed to the replacement of the Family Credit and the Working Family Tax Credit <sup>(14)</sup> an increase in the employment rate of 5-10% but for the case of France, several authors (e.g. Cazenave (2005), Arnaud et al. (2008))<sup>(15)</sup> agree that the 2001 PPE scheme, as well as its successive modification, was too timid to achieve relevant change in the employment rate).
- Despite the positive effect on the overall rate of employment, some negative incentives can occur for secondary earners or in terms of the number of worked hours. For the case of France, Stancanelli (2008) showed the PPE scheme to have a negative and significant impact on the employment probability of married women and, in some cases, a positive and significant one for unmarried women. For the UK, Brewer et al. (2006) found that the Working Family Tax Credit led to an increase in the labour supply of single mothers while the labour supply of coupled parents was gender-related, with a slight decrease for mothers and a slight increase for fathers. Brewer *et al.* (2011) also found that the new system of Universal Credit is likely to give a stronger financial incentive to work to the part-time or low-wage main earners, with higher earners and second earners having a weaker incentive. From a comparative perspective, Bargain and Orsini (2006) presented a EUROMOD micro-simulation with the aim of applying a working tax credit similar to the British Working Family Tax Credit, and, alternatively, a purely individualised wage subsidy to Germany, Finland and France. The conclusion points to a negative overall effect on female employment after the introduction of the working tax credit, and a positive effect on female employment after the introduction of the wage subsidy. These results are valid in particular for France and to a lesser extent for Germany and Finland.
- In terms of distributional effect, MWP tax expenditure measures can have positive effects. The impact may differ depending on the specific design of the measure. In the case of France, Thibault et al. (2002) positively assessed the role of PPE in terms of redistribution; Bargain (2008) finds that the different measures applied result in a decrease of the Gini Index for all the countries considered: France, Belgium, the UK and the Netherlands. Nevertheless, in case of the Netherlands where the tax credits are not only targeted at low-wage workers it happens that the income of workers around the median is increased relative to that of the poorest, leading to an increase of the number of people at risk of poverty. In contrast, the effect of poverty reduction is stronger in the UK and more limited in France and Belgium. In case of the UK, Brewer et al. (2011) find that the bottom income deciles will gain the most as a fraction of income from the Universal Credit.
- MWP tax expenditure entails a cost in terms of foregone revenue compared to the benchmark system which might justify an in-depth cost-benefit analysis in times of consolidation effort. In this respect, also the behavioural-induced revenue effects need to be taken into account. Barrios et al. (2014), in a comparative study on five EU Member States (France, the UK, Spain, Slovakia and Hungary), show that decreases in labour supply – particularly along the extensive margin – following a marginal reduction in MWP tax expenditures wash away at least one-fifth of the purely mechanical revenue gain from the reform. The revenue gain erosion is relatively larger for the more targeted instruments (e.g., tax credits for the working poor), and increases in the degree of individual heterogeneity with respect to the calibrated labour supply elasticities.

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<sup>(13)</sup> Both intended as number of employed and number of worked hours.

<sup>(14)</sup> In force until 2003.

<sup>(15)</sup> See also the literature mentioned in Immervoll and Pearson (2009).

**Compared to spending programmes, MWP tax expenditures present some pros and cons that should be considered on a case to case basis.**

- Some advantages over the unemployment benefits or the minimum wages include the capacity of offsetting the ‘benefit dependence’ (unemployment and inactivity traps) and of avoiding an increase in labour costs.
- On the other hand, drawbacks have been found in the complexity of their design as well as in the lack of real-time effect due to the annual account basis for declaring income taxes (OECD, 2010a).
- Other relevant elements to consider are the budgetary implications (after positive behaviour adjustment), error-proneness and the scope for fraud induced by the system. MWP tax expenditure measures should also be designed taking into account the interaction with other factors such as social contributions, benefits, whether there is a minimum wage, the features of the labour market demand side and the possible choices of those already employed in terms of worked hours.

## 5.2. TAX EXPENDITURES FOR SELF-EMPLOYED

**Self-employment is becoming increasingly important in the EU.** Traditionally, the self-employment status is equated with entrepreneurship and considered to be a form of independent contracting, which is based on a reduced form of legal liability compared to corporations. However, evidence suggests that many of those classified as self-employed, in practise act more like wage-employees than fully-fledged entrepreneurs.

**A preferential treatment of self-employed can be justified for several reasons.** The rationale behind preferential treatment for self-employed workers is linked *inter alia* to the fact that their income tends to cumulate a higher degree of uncertainty, as entrepreneurship activities are riskier, and to the fact that it is more difficult to receive funding when compared to other occupations.

**Regulations that facilitate easy access to self-employment create incentives for wage-employees to move into self-employment.** Labour market regulations and organisational changes also have a strong impact on the level of this traditional form of non-standard employment. A multitude of advantages are also built into the tax systems (e.g. deductions, credits, allowances for start-up costs, etc.) to support self-employment. Therefore, it is inevitable that efforts are made by some taxpayers to be reclassified as self-employed. This is also evident, when looking at the favourable system of allowable deductions existing in several Member States, which applies for example to operating expenses, equipment, the taxpayer’s children and non-working spouse.<sup>(16)</sup>

**In addition to existing government support schemes, tax systems in many Member States provide strong incentives for individuals to start firms and become self-employed.** Tax systems can be instrumental in promoting self-employment. Tax incentives for self-employed usually aim at treating self-employed in a way comparable to the treatment provided to employees (e.g. deductions for health insurance premiums and long care insurance premiums for self-employed etc.). However, the introduction of such tax incentives is likely to have contributed to an increase of self-employment, which has coincided with the declining relative productivity in starts up (OECD, 2011a).

**Labour and tax regulations may also drive companies to shift from wage employees to self-employed schemes.** For example, industry-specific regulations (e.g. in construction, transport, guarding, cleaning, insurance, media) and legal restrictions in the variability of wages usually play an important role in the outsourcing decision. This could lead to an increase in dependent self-employed, as companies try

<sup>(16)</sup> Travel expenses are also allowed as a deduction throughout the EU, while deductions for children and a non-working spouse are only available in half of the Member States (European Commission: ‘Taxes in Europe’ database).

to optimise their costs under the new labour and tax regulations. It would also act as an incentive for companies to circumvent the labour market and social security protection laws, by replacing their wage-employees with self-employed workers, but still maintaining the same working relationship and link of subordination as before.

**Tax expenditures provided to self-employed may, in some cases, significantly incentivise labour to shift from more productive employment to less productive self-employment.** Tax incentives for self-employed add to already existing tax incentives for SMEs or other supporting measures and contribute to higher tax evasion among self-employed than among employees. Tax incentives for self-employed may give enhanced room for under-reporting of income and may affect taxation of worldwide income as well, by using specific rules to circumvent or to avoid taxation.<sup>(17)</sup> Looking at undeclared work across OECD countries, the majority is conducted on a self-employed basis, while waged employment for informal business accounts for a smaller share (Williams and Rennoy, 2008 and Johansson, 2005)<sup>(18)</sup>. In summary, evidence supports the argument that the scope for underreporting of income and tax evasion is significant among self-employed and that high taxation of labour earnings can also encourage self-employed not to declare at least part of their earned income (OECD, 2008). Overall, this preferential tax treatment may result in the fact that rather low-productive self-employed activity is preferential from an individual perspective to more productive employed activity.

**The tax treatment of self-employed workers is rather different across Member States.** Some prominent examples of tax expenditures which only apply for self-employed or maybe exploited better by them include: working tax credits (if working full-time), housing benefits, capital allowances (e.g. computers, machinery), deductions for the business use of a vehicle, deductions of donations, child tax credits and child benefits, deduction for non-working spouses, jobseeker's allowances (if working part-time), deduction on health insurance, pension credits, reduced social security contributions for self-employed, and different tax support from local authorities.

**Compared to direct spending programmes, tax expenditures for self-employed need to be evaluated on a case to case basis in order to justify that relevant tax expenditure is the preferable tool.** In particular in this area, there is the constant need to evaluate and assess the impact of the specific tax rules on micro-economic efficiency, equity, simplicity and transparency as well as the administrability of the rules. This evaluation will help target the promotion of real entrepreneurship facing a high degree of economic uncertainty and facing high risk taking to survive in a competitive environment. Such assessment will also avoid the circumvention of labour market laws and social security protection legislative by companies with potential revenue shortfall.

**Tax expenditures targeted at self-employed should not necessarily be removed, especially if they help foster entrepreneurship.** Entrepreneurship yields high social returns, and it is generally accepted that it should be taxed at a lower rate than the current marginal tax rate on labour (OECD, 2011 and Gordon, 1998). However, without any good instruments to *ex ante* identify entrepreneurship among small businesses and self-employed, it is difficult to evaluate tax incentives aiming at lowering the tax burden. Rather, it could be ensured that tax incentives do not lead to a discriminatory regime that encourages firms to outsource their employees, resulting in the substitution of wage-employees by 'bogus self-employed'.<sup>(19)</sup> In that case, the prime motivation of the self-employed status is linked to the avoidance of

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<sup>(17)</sup> For example self-employed may avoid paying income tax for worldwide earned income. According to OECD Model Convention to avoid double taxation, self-employed are only paying income tax in their residence country, unless when they have permanent establishment in the source country. However, self-employed may avoid to declare the income in their residence country benefiting from limited possibilities for administrative co-operation and automatic exchange of tax information between countries.

<sup>(18)</sup> These studies estimated that, for example, in Finland income from self-employed was underreported by 16-40%, representing 1-3% of GDP; for the UK self-employment income was found to be about 1.3 to 1.5 times larger than the reported income; as regards Sweden, self-employment income should be multiplied by a factor of 1.35 in order to arrive at true income.

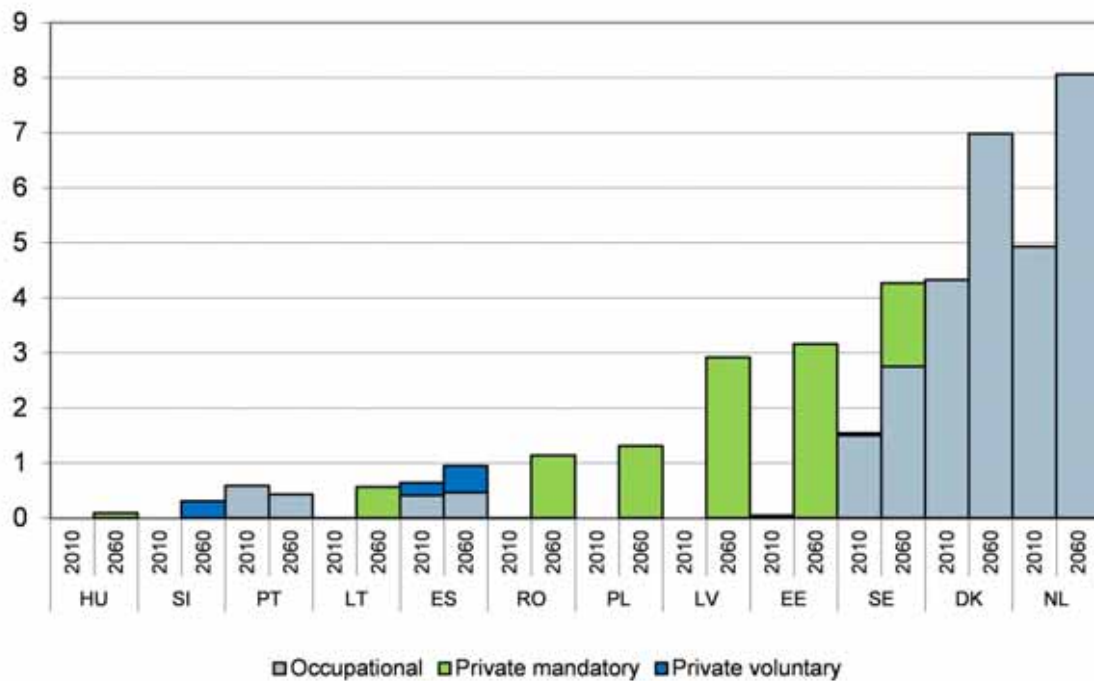
<sup>(19)</sup> By 'bogus self-employed', we mean workers that are physically and functionally part of the business, although they work under self-employment status.

paying contributions for both employers and self-employed, resulting in a tax windfall, due to underreporting of taxable income as well. Finally, some employers may, also, prefer this type of status, as fake self-employed individuals could be discharged without warning, are not entitled to holiday or sick pay, have reduced benefit rights and are also denied access to employment tribunals.

**5.3. PENSION RELATED TAX EXPENDITURES**

Most pension income in EU is provided by statutory public pensions funded on a pay-as-you go (PAYG) basis, but private and funded systems are growing in importance.<sup>(20)</sup> Payments from private pension schemes were worth 1.6% of GDP or equivalent to a fifth of average public spending on retirement benefits in OECD countries in 2009.<sup>(21)</sup> Many Member States have in the last decades introduced compulsory private pensions and such funds have only to a small degree started to pay out pensions. Graph 5.1 shows how private pension payments can be expected to grow for selected Member States over the next 50 years. In Denmark and the Netherlands the private pension payments already are at quite a high level and roughly close in size to public pension payments. It should be mentioned that UK is also among the countries with considerable private pension expenditures.<sup>(22)</sup>

Graph 5.1: Private pension expenditure in 2010 and 2060 in selected Member States (as % of GDP)



Source: The 2012 Ageing Report (European Commission, 2012).

<sup>(20)</sup> The defining feature of a pay-as-you-go (PAYG) pensions system is that – in each period – the social contributions paid by the working age population should finance the pension benefits paid to pensioners. In general, no assets are set aside. In practice, additional transfers over the state budget and financed by general taxes often help financing pension benefits. In a *funded* plan, contributions are invested in funds towards meeting future retirement benefits.

<sup>(21)</sup> OECD (2013a): Pension at a Glance (covering data from 25 countries).

<sup>(22)</sup> UK has unfortunately not provided data on private pension expenditure in the context of the ageing report (2012). It should also be mentioned that some Central and Eastern European countries have introduced reversals of pension reforms with partial or full shifts of contributions to the public scheme and government appropriations of the assets in private pensions (e.g. PL and HU).

*Box 5.1: The tax treatment of pension savings and the benchmark for tax expenditures*

The taxation of pensions can take place in three possible points in time, namely when:

1. contributions to the fund are paid (out of earned income)
2. investment income and capital gains accrue to the fund
3. benefits are received from the fund

TEE system (taxed, exempt, exempt) and EET system (exempt, exempt, taxed)

In a TEE-system earned income financing contributions is taxed whereas returns to the fund and pension payments are tax exempted. In an EET-system contribution payments qualify for a tax deduction, returns to fund are tax exempt but pension payments are taxed. The tax treatment is in both cases equivalent to a consumption tax, see chapter 3.1.1.

*With a flat PIT rate*, these two systems are equivalent in effect and neutral between consumption now and in the future. They deliver the same net present value of revenues to the government although the timing is different. Revenues are deferred until retirement under EET, but received immediately under TEE.

*In a progressive personal income scheme*, when a tax payer is confronted with different marginal tax rates before and after retirement, a tax payer with higher marginal tax rate before retirement will benefit from the EET scheme.

TTE system (taxed, taxed, exempted) and ETT system (exempted, taxed, taxed)

In these models capital gains accrue to the fund are also taxed. This makes the tax treatment in the two alternatives equivalent to a (comprehensive) income tax, neutral between consumption and saving but not neutral between consumption now and consumption in the future. This implies a disincentive to save. Otherwise the difference is as described above.

Inflation can increase the tax burden in TTE and ETT systems significantly when nominal returns are taxed.

Low or non-existing taxation of returns to pension savings is regarded as tax expenditures under an income tax benchmark, but not under a consumption tax benchmark. Pensions are savings for future consumption and a neutral treatment of consumption over time is only respected by the consumption tax systems (TEE and EET). However, such a treatment would generally provide a tax advantage over other forms of saving such as interest bearing accounts, direct holdings of equity, or intermediated products such as unit trusts or investment trusts as these capital returns are typically taxed. Owner-occupied housing is on the other side a form of saving that is often even more generously treated with respect to taxation than pension savings.

**Population ageing challenges public pay-as-you-go (PAYG) pension systems considerably and has led several countries to create tax incentives for private pension savings.** The motivation for such tax incentives can be to smooth income over the life-cycle, prevent old-age poverty or encourage long-term saving in the economy to stimulate growth in the long run. It is typically argued that many people are myopic and do not plan sufficiently for the future and measures are needed to correct for a possible under provision of long-term needs.

**A generous tax treatment of pension savings in private funds may have considerable impacts on government revenues and redistribution.** Whether a generous treatment increases the overall saving rates is questionable, a generous tax treatment could promote pension savings in the tax-favoured plans at the expense of other forms of savings, and be costly in terms of revenue forgone, lead to tax avoidance and distortions. The distribution consequences may also be undesirable if higher income earners are better able to take advantage of tax reliefs. If a generous tax treatment of private pension savings is to encourage savings overall, the funds going into such accounts need to have come from individuals reducing their consumption levels as opposed to simply moving money from one form of saving to another. When rather the latter is the case, the preferential tax treatment would imply high budgetary cost while missing the objective of the policy.<sup>(23)</sup> A recent study on pension savings in Denmark found that a tax (or price) subsidy is ineffective in raising total savings (Chetty et al., 2013). The study concludes that automatic or mandatory contributions to savings accounts are more effective in raising total savings than a tax subsidy.

**There are 3 different occasions to tax pensions and several tax approaches can be taken.** Box 5.1 on the previous page describes the most common approaches for taxing private pension savings and lists some important features of the different models. The box also points out the implication of the choice of benchmark for the assessment of tax expenditures in private pension savings.

**A more generous treatment of pension savings than the expenditure tax-benchmark (EET, TEE) indicates a particular need for a review of tax incentives for pensions.** The tax treatment of pensions in several (European) countries is often associated with the EET scheme (occupational pension schemes for instance in the UK, Ireland and the Netherlands or private Riester pensions in Germany). Nevertheless, preferential tax treatment for pension income exists beyond that for instance by lower rates or special tax free thresholds for pension income. On the other extreme, a less generous tax treatment than a pure comprehensive income tax could put an unjustifiable high tax burden on pension savings.

**Under a deferred taxation scheme (EET, ETT) pension savers benefit from deductions at higher tax rates from taxable income when working compared to those applicable to typically lower pension income when retired.** This leads to a reduced tax burden on the underlying labor income. Since replacement rates (that is the ratio of gross pension income to gross income when in work) are less than 100 per cent over most of the income range, the progressivity of the tax system leads to more generous deductions of pension contributions compared to the taxation of benefits. This can, however, also be regarded as a form of ‘tax rate smoothing’ allowing an individual to spread out high income earned in shorter periods over time, not necessarily reducing the tax burden compared to another taxpayer with similar life earnings, which are more evenly distributed over time (Mirrlees et al., 2011). OECD (2013a) finds that taxes and contributions payable for a pensioner with pension income equal to workers average earnings amount to 16.9 %.<sup>(24)</sup> The corresponding tax rate for pensioners with the gross replacement rate of an average earner is 10.9%. The difference illustrates the impact of progressivity in income tax systems and is often regarded as tax expenditure.

**In practice, most countries use, in general, a reporting approach for tax expenditures closer to the income tax benchmark.** Applied to private pension savings it means that any preferential treatment of the returns to saving compared to the tax treatment of other types of income, could be regarded as tax expenditure too. Some countries report tax breaks for private pension savings as tax expenditures. OECD (2013) includes data on tax expenditures for 9 EU Member States. These can be seen from Table 5.1 below. The UK, Ireland and Germany report the most substantial tax expenditures for private savings of 1.4, 1.2 and 0.9 % of GDP respectively. Additionally, in the Slovak Republic the tax expenditure is rather

<sup>(23)</sup> OECD (2005): Long-Term Budgetary Implication of Tax-Favoured Retirement Saving Plans shows that in the case where tax incentives are assumed to lead essentially to saving diversion rather than creation, the net budgetary cost of tax-favoured schemes remain large.

<sup>(24)</sup> The amount of taxes and contributions paid by workers is on average earnings considerably higher with 26.7 % in OECD. This can be attributed to specific tax concessions for pension income but cannot be directly interpreted as such since no taxation on pension benefits might be justified by pre-paid pension tax models (TEE and TTE).

considerable compared to the level of private pension payments. It needs to be further analysed which tax design leads to these reported tax expenditures. One should also look more in detail into the tax treatment of pensions in countries not covered in the table.

Table 5.1: Private pension payments and tax breaks in selected countries, 2009

Country	Private pension payments (% of GDP)	Tax breaks on private pensions (% of GDP)	tax breaks as % of private pension payments
Austria	0.7	0.1	14%
Belgium	1.4	0.2	14%
Finland	0.3	0.1	33%
Germany	0.8	0.9	113%
Ireland	1.1	1.2	109%
Portugal	0.5	0.1	20%
Slovak Republic	0.3	0.2	67%
Spain		0.2	
UK	4.6	1.4	30%

Source: Pensions at a Glance 2013 (OECD, 2013a)

**A wide range of pension related tax expenditures exist.** These include among others: a) different types of complete reliefs (e.g. for some or all pension income often below certain thresholds), b) lower rate on pension income than ordinary labour income, c) specific tax allowances and credits (which exceed those available to taxpayers of working age) or d) no application of social security contribution to pensions. As mentioned above, many studies consider also the lower taxation of pension income compared to the deductibility that applies to contribution in a deferred pension scheme (EET, ETT) as tax expenditure. Depending on benchmark, the missing taxation of capital gains accruing to pension funds is also often regarded as tax expenditure. For instance in the UK, the minimum personal tax-free allowance for pensioners is higher than for those in working age and increasing in age.<sup>(25)</sup> Also a tax-free amount of up to 25% of pension payments to a maximum of £ 437,500 was given in 2010 for a lump sum outtake of pension savings. In Ireland, pension tax expenditures are at the top of the list of tax expenditures identified by a national Commission on taxation in 2009. The Commission suggested to reform and reduce the generous treatment of pension savings and some changes have been introduced in the recent years, including removing exemption for employers and employees PRSI on contribution to private pension schemes, limiting tax-free pension lump sum payments at EUR 200,000 and reducing the cap on tax-relieved contributions. In the Slovak Republic neither pension contributions nor pension benefits are taxed for a substantive part of the pension system (only a supplementary, voluntary private pension is taxed as of 2011).<sup>(26)</sup> Private pension schemes are as a general rule taxed ETT in Denmark. Capital gains are however taxed at 15%, compared with an average of approximately 29% for assets in taxable accounts. Denmark limited the generosity of the tax treatment for high end earners in 1999 by abolishing deductibility for the top income tax rate (Chetty et al., 2013).

**Considering that one of the main motivations for pension-related tax expenditures is to increase overall savings, analyses of whether the target is reached at a reasonable cost or whether other measures could be more efficient would be worthwhile.** Differences in public spending also influence the take up and potentially need for tax expenditures in a policy area (e.g. take-up of private pension incentives will in part depend on the layout and generosity of public pension systems) (Bauger, L., (2014). A high level of private pension payments seems to be driven more by (quasi) mandatory schemes and less by tax expenditures; however the total revenue cost of even smaller tax expenditure for private

<sup>(25)</sup> In 2011-12: £9,940, compared to £7,475 for those of working age. The allowance rose to £10,090 for those aged 75 and over (for those with an annual income below £100,000)

<sup>(26)</sup> National authorities.



pensions can be considerable for countries with an extended coverage of private pensions. Generous tax expenditures can also be very costly and inefficient when they are applied to increase low levels of private savings. Last but not least, it should be also considered whether the taxation of pension savings is too low generous compared to other investment options and thereby creating undesirable distortions as well as whether the distributional features are efficient and equitable. It seems questionable whether tax incentives are an efficient and appropriate measure in correcting for a lack of rationality by some individuals in long-term consumption needs.

#### 5.4. TAX EXPENDITURES FOR EDUCATION

**Investment in education and training and its impact on a country's human capital stock is a key ingredient for economic growth.** At macro level, increases in formal educational attainment have contributed to economic growth across the OECD. At the micro level, higher levels of education are associated with lower rates of unemployment, higher wages and non-economic benefits to the society (OECD, 2012).

**Tax systems can play an important role in enabling, complementing or hindering education policies.** Targeted tax measures related to education are important in this respect. They directly influence the expected returns to skills developments and may influence the supply and demand for skills in the labour market. In this context, low marginal rates encourage education, as otherwise a poverty trap could emerge and lifelong learning might not provide the necessary return.

**A tax system that is neutral with respect to financing agents does not influence who finances education and skill investments.** This can be achieved if the cost of employee training is deductible for CIT tax purposes when financed by employers and deductible for PIT purposes when financed by individuals. It is, therefore, important to look at the treatment of spending on training in PIT and CIT in parallel. For VAT the neutrality of the tax system can be improved by zero rating the costs of education.

**The concept of benchmark tax system, for defining education tax expenditures is again rather difficult to identify.** Education tax expenditures are generally defined as tax measures that result in a favourable rather than 'neutral' tax treatment of human capital. More specifically tax expenditures on education are defined as the loss of public revenue as a consequence of the introduction of the incentives. In general, state intervention is justified to offset socially undesirable *underinvestment* in education and skills, improving social equity.

**Differences in the tax treatment of expenditures on education and training can be observed among EU Member States, but it is widely recognised that the tax system can play an important role in reducing education and training costs** (CEDEFOP, 2009).<sup>(27)</sup> Tax expenditures for education are low in most OECD Member countries for which data are available<sup>(28)</sup> and only account for a small percentage of total public expenditure on education and training (CEDEFOP, 2009). Education allowances, tax credits, special deductions and SSCs incentives are examples of commonly used incentives to encourage private skills investment. Training expenses in the interest of the enterprise can in general be deducted from earnings as a cost of doing business. In addition, tax incentives for individuals are present in the majority of Member States. Table 5.2 and 5.3 contain examples of tax incentives

<sup>(27)</sup> Comparisons in this note are limited to tax incentives, classified as tax expenditures, directly linked to the cost or financing of education. However, a more detailed analysis should ideally include private education schemes used to stimulate human capital formation. For example an alternative to providing tax incentives to stimulate employer-sponsored training are tax-like schemes that require employers to finance a minimum level of training indirectly by contributing to a training fund. While these measures do not rely on tax expenditures to stimulate employer-provided training, they encourage employers to increase their training investments only up to a minimum level etc.

<sup>(28)</sup> Examples (as % of total tax revenues): Canada (2004): 1.25 %, Netherlands (2006): 0.58%, Korea (2006):1.64 %, Spain (2008): 0.05 %, UK (2008): 0.01 %, USA (2008): 1.32%. See OECD (2012).

(classified as tax expenditures in the majority of Member States concerned) in personal and corporate income taxation.

Table 5.2: Tax incentives for education in personal income taxation

M-S	Tax measure	Criteria-characteristics
AT	Tax allowance for education expenses	Education related to current occupation
BE	Tax allowance for education expenses	Education linked to current professional activity (as part of the standard deduction for work related expenses).
CZ	Refundable tax credit	Fixed amount per child-student, depending on the age and academic program
DK	Tax allowance for education expenses	Professional training
EE	Tax allowance for education expenses	Fixed amount per student depending on the age and academic program
ES	Exemption of Public grants Deductibility of IT education expenses for employee	
FR	Tax credits for expenses on secondary and tertiary education. Earnings by apprentices and students during holidays are exempt from income taxation.	
FI	Tax allowance for education expenses	Linked to professional training
DE	Tax allowance for education expenses Child and training tax allowances-refundable tax credit	Work-related-vocational training, change of profession Fixed amount per child enrolled in vocational training
IE	Non-refundable tax credit for educational expenses	Funding of tuition fees for professional courses
IT	Non-refundable tax credit for educational expenses	Direct costs of education
LU	Tax allowance for education expenses	Vocational training
NL	Tax allowance for education expenses	Direct costs of education
PT	Tax allowance and non-refundable tax credit for educational expenses Regional/local non-refundable tax credits	Professional training expenses and fees paid to professional associations Educational and training expenses
SE	Tax allowance for education expenses	Direct cost of education, increased living expenses as a result of education
UK	Tax allowance for education expenses	Professional education, tuition and enrolment fees

Source: OECD, 2012

**Tax expenditures for human capital formation used by Member States are often criticised for favouring large enterprises, high skilled individuals and groups already with best access to education and training.** By its very nature it is very hard to design a rational education policy that doesn't benefit the most talented. Compared to targeted spending programmes, they often appear too broad and insufficiently targeted. Moreover, in some cases tax expenditures for training may cause distortions compared to other investments (e.g. company expenditure on education can be generally deducted from earnings as a cost of doing business while company expenditure on equipment can be depreciated over their lifespan). Therefore, it is preferable that tax expenditures on education may be supplemented by other policies in place, so that the final mix of state intervention is reinforcing and not resulting in contradictions and inefficiencies.

Table 5.3: Tax incentives for education in corporate income taxation

M-S	Tax measure	Criteria-characteristics
AT	Tax deduction-Full expensing Refundable tax credit Refundable apprenticeship tax credit SSC-exemption for apprentice wages	Employee training cost Fixed amount for tax credit per apprentice
BE	Tax deduction-Full expensing CIT-additional allowance for apprentice wages (20%)	Employee training cost
CZ	Tax deduction-Full expensing	Employee training cost that is related to the business activities of the employer Fixed incentive bonus
DK	Tax deduction-Full expensing	Employee training costs if training contributes to the turnover of the business
EE	Tax deduction-Full expensing	Direct cost of vocational training, retraining of employees that have been laid off.
FR	35% tax credit on increment for small companies; Separate tax credits for self-employed and taking apprentices	Work related
FI	Tax deduction-Full expensing	Education linked to updating of professional skills (basic education is excluded)
DE	Tax deduction-Full expensing	Work-related-vocational training
IE	Tax deduction-Full expensing	Training costs if incurred wholly and exclusively for the purposes of the trade
IT	Tax deduction-Full expensing or depreciation (20% to 100%) SSC-rate reduction for apprentices	Direct costs of education or depreciation in no more than 5 years in a straight-line basis "placement" and "training" contract for apprentices
LU	Non-refundable tax credit (10%)	Vocational training expenses. Unused credits can be carried forward for up to ten years
NL	Tax deduction-Full expensing	Direct costs for employee training
PL	Tax deduction for employer contribution to training fund	Contributions not used for their intended purpose within 2 years must be added back to taxable income
PT	Tax deduction-Full expensing	Employee training expenses including fees, enrolment costs etc.
SK	Tax deduction-Full expensing	Vocational training connected with the business activities, costs of technical secondary school
SI	Tax deduction-Full expensing	Training expenses including part-time school
ES	Tax deduction-Full expensing Non-refundable tax credit for IT training SSC-exemption in respect of young trainees	Employee training 5% tax credit in respect of the costs of employee training in new ICT SSC exemption limited to young people without formal qualifications
SE	Tax deduction-Full expensing	Employee training costs related to income. Partial deduction if recreation elements are included in the costs
UK	Tax deduction-Full expensing	Training for the purpose of trade. The timing of deduction follows the accrual method.

Source: OECD, 2012

## 5.5. HOUSING RELATED TAX EXPENDITURES

**Housing related tax expenditures are provided within the personal income tax framework.** It relates to the fact that many Member States want to promote home ownership as it is seen to bring benefits to the overall community. The definition of the tax expenditure will, as in most other cases, depend on the definition of the benchmark.

**According to optimal tax theory, capital taxation ideally aims at neutral tax treatment of different investments.** This implies that returns from residential property would be taxed as other capital income. Accordingly, the return or imputed rent from the house, less depreciation allowances and interest payments (i.e. the net return), would be subject to income tax.<sup>(29)</sup> A tax on imputed rents could generally be approximated through a recurrent annual tax on the property. In both cases, it is important that the value of the tax base is regularly updated in order to properly tax the return.

**A tax on imputed rents and/or a recurrent property tax are thereby essential to balance the tax subsidy provided through interest rate deductibility.** Hence, the absence of taxation of imputed rents would constitute tax expenditure if the benchmark is a neutral tax treatment across the return on different types of capital assets. The benchmark rate would then depend on the rate of taxation of other forms of capital returns.

**Alternatively, if housing is regarded as a form of expenditure, the tax treatment should not impose a tax wedge between pre-tax and post-tax returns on the marginal investment.** This implies that households pay their housing investments with taxed income, and are not taxed on the subsequent return on the housing investment (this is a tax-exempt-exempt (TEE) regime). Allowing mortgage interest deductibility in this context subsidises housing investments, and as a result the post-tax returns will exceed the pre-tax returns. Thus, using this benchmark, the mortgage interest deductibility would be regarded as tax expenditure. All in all, a tax system with mortgage interest deductibility but without or with a too low tax on the return on housing provides a subsidy to owner-occupied housing. This subsidy is a form of tax expenditure either in the form of the lack of a tax on imputed return or through the granting of mortgage interest deductibility.

**The favourable tax treatment of home ownership is based on the assumption that it generates positive externalities for society, which often justifies state intervention.** It can be vehicle for wealth accumulation as the owner will take a longer term view on his consumption behaviour and promote savings. Better outcomes for children of homeowners as well as more engagement in the local community are other positive externalities that motivate public policies favouring homeownership. However, it is often difficult to clearly isolate the positive impact of homeownership as the relationships might be casual or suffer from endogeneity bias<sup>(30)</sup>. A drawback of homeownership is also that it tends to reduce labour mobility.<sup>(31)</sup>

**Subsidising home ownership through a tax relief does not go without risks in terms of a loss in economic efficiency through misallocation of resources and a bias toward debt.** This policy encourages households to invest too much in housing in relation to other assets. Tax subsidies through the deductibility of mortgage interest payments also favour household debt accumulation particularly in housing price booms, with potentially adverse effects on bank solvency or liquidity in cyclical troughs and consequent risks of credit constraints for firms and households.

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<sup>(29)</sup> In a comprehensive income tax system, this corresponds to PIT. In a dual income tax system, the tax on personal capital income is applied. Capital gains from housing transactions should also be taxed as other capital gains in order to achieve neutrality vis-à-vis other assets.

<sup>(30)</sup> Factors that are supposed to affect homeownership depend themselves on the homeownership.

<sup>(31)</sup> See Andrews and Caldera Sanchez (2011) for an overview of benefits and costs of homeownership (box 1).

**Tax subsidies through the deductibility of mortgage interest payments also risk being a regressive policy and being detrimental to social equity.** First, no clear relationship has been found between the degree of tax relief and the aggregate homeownership rate in a cross-country comparison of OECD-countries. Second, as the tax subsidy normally takes the form of a deduction against earned income, and not the form of a tax credit, it is worth more for high-income earners. This is consistent with the finding that homeownership inequality, defined as the ratio of the homeownership ratio in the top income quartile to the ratio in the second quartile, appears to be higher in countries with generous tax subsidies (Andrews et al. 2011).

**To the extent that reduced interest costs are capitalised into higher house prices, a tax policy with interest rate deductibility would contribute to higher house prices.** Capozza et al. (1996), Harris (2010) and Agell et al. (1995) find that a removal or a reduction of the interest rate deductibility would lower house prices significantly in the U.S. and Sweden respectively. Recent empirical results also indicate that demand shocks (e.g. through financial deregulation) have a greater likelihood to be capitalised into real house prices when the country provides generous tax reliefs for mortgage cost payments (Andrews, 2010).

**Alternative reforms exist to achieve the objective of housing related tax expenditure.** To achieve a neutral treatment of different forms of capital returns, the tax on imputed rents need to be increased and brought into line with the tax on other returns. Alternatively, following the expenditure benchmark, the possibility to deduct mortgage interests in the income taxation could be phased out.

**Compared to alternative reforms and spending programs tax expenditures on housing are, by their nature, more general in scope and can often be used also by households that do not really need these tax subsidies.** As a consequence, the foregone revenue will normally be larger than the cost of the corresponding grant. In addition social objectives can generally be better and more efficiently attained by direct subsidies (subject - rather than object - related subsidies). Direct grants can be designed so as to better target specific households, limiting possible distortions (i.e. if the distortion is at the margin the intra-marginal subsidy is non-distortive).

**As regards the current situation across the EU, many Member States allow tax deductibility of mortgage interest payments while the taxation of the imputed rate is too low.** The low taxation of imputed rates is often due to low rates, a too low value of the tax base, i.e. the value of the house assessed for tax purposes, or a combination of the two. The result of these tax expenditures is that the systems favour debt creation and result in a debt bias in the taxation of housing. As a result, housing tax systems may have contributed to increases in housing prices, debt leverage and household over-indebtedness (Keen et al., 2010). Of the 14 countries that were singled out under the macro-economic imbalance procedure as having private debt above the scoreboard threshold (133 % of GDP) in 2012, 9 currently apply or have applied mortgage interest deductibility (Belgium, Denmark, Ireland, Spain, Luxembourg, the Netherlands, Portugal, Finland and Sweden).<sup>(32)</sup>

**Around half of the Member States' tax systems favour mortgage debt financing of homeowners in 2013.** Nine Member States (Belgium, Estonia, Italy, Luxembourg, the Netherlands, Finland, the Czech Republic, Denmark and Sweden) have a tax system that favours housing investment and household indebtedness, though to varying degrees. Greece, Ireland, Portugal and Spain<sup>(33)</sup> have undertaken or are undertaking reforms to phase out interest deductibility, either generally or for new mortgage contracts. Bulgaria strictly limits deductibility to young families, which can be regarded as a targeted form of

<sup>(32)</sup> COM (2013) 790 final, 13.11.2013.

<sup>(33)</sup> ) In Spain, e.g., tax expenditures linked to the acquisition of a house are no longer in force in general. A transitory regime is applied to those houses bought prior to 1 January 2013. On the other hand tax expenditure had been limited to 15% of the total amount disbursed to make the acquisition, not only the interests paid in mortgage, with a maximum amount deductible of € 9040 per annum.

support <sup>(34)</sup>. In most of the other countries, reforms are under way to reduce the debt bias in housing tax system by trimming the scope of tax deductibility of mortgage interest payments. In some cases, these reforms can already be judged as rather limited and/or back-loaded. Overall, these reforms would still need to be evaluated in order to judge whether these tax expenditures still create a bias towards debt in the tax system or whether the systems can be regarded sufficiently neutral vis-à-vis different forms of investments.

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<sup>(34)</sup> Other policy instruments which do not encourage indebtedness would be preferable to support home-ownership.

## 6. ECONOMIC ASPECTS OF SELECTED TAX EXPENDITURES IN CORPORATE INCOME TAXATION: THE NATIONAL AND THE INTERNATIONAL DIMENSION

This section focuses on tax expenditures in corporate income taxation and looks into special corporate income tax regimes, reduced rates for SMEs and tax incentives for R&D.

### 6.1. SPECIAL CORPORATE INCOME TAX REGIMES

**The international dimension, especially in the EU context, has to be considered in applying the concept of tax expenditures to corporate taxation.** CIT tax expenditures may have an impact on tax competition, creating a need for co-ordinated action in order to achieve certain policy objectives such as fiscal consolidation, reducing the continuing distortions in the single market, preventing excessive losses of tax revenue (e.g. due to double non-taxation or to profit shifting away from the jurisdictions where the profit creating activities take place) or getting tax structures to develop in a more employment friendly way.

**In the past, tax regimes have been assessed against the EU Code of Conduct criteria and State Aid rules in order to identify and eliminate the harmful elements for tax competition.** As a result, many of these specific measures have been put on standstill and rolled back. However, a number of tax regimes, containing tax expenditures elements, have been assessed as non-harmful against the EU Code of Conduct criteria, and are in force in EU Member States. Furthermore, new CIT tax expenditures have been introduced through tax regimes favouring mainly R&D (e.g. concentrating mainly on providing tax incentives for intellectual property (IP)). In recent years a number of Member States has introduced ‘patent box regimes’ that explicitly reduce the rate of corporate tax levied on the income derived from patents and in some cases from other forms of intellectual property. Patent box regimes vary in the tax rate they offer and in their design (from 0% in Malta to 15.5% in France). The definition of the tax base, and specifically the treatment of expenses, differ significantly across Member States and can be more decisive for the effective tax burden than the patent box tax rate itself. Such regimes may produce large tax shields that can be used to offset tax liabilities for other forms of income.<sup>(35)</sup> In particular, since the establishment of the EU Code of Conduct Group for Business Taxation (1998)<sup>(36)</sup> in the Council and based on the assessment<sup>(37)</sup> of tax measures and on the overview of regimes previously examined by the Group, four main type of CIT regimes, with tax expenditure elements potentially harmful for competition have been identified (see Table 6.1).

**These regimes can affect significantly business location and economic activity in the Single Market.** Examples are favourable tax treatments that result in a reduction of tax liabilities for certain subset of businesses and/or in investment outlays. These tax regimes are introduced at national level. However, the interaction of domestic tax rules, in some cases, can lead to gaps, frictions and distortions (double non-taxation, profit shifting etc.).

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<sup>(35)</sup> For an overview of ‘patent box regimes’ in the EU, see Evers et al. (2014).

<sup>(36)</sup> Conclusions of the ECOFIN Council 98/C 2/01, 1.12.1997 and Commission Services Brussels (29-02-2000) -SN 4901/99

<sup>(37)</sup> Tax measures have been assessed against the following criteria: 1. Whether advantages are accorded only to non-residents or in respect of transactions carried out with non-residents, or 2. Whether advantages are ring-fenced from the domestic market, so they do not affect the national tax base, or 3. Whether advantages are granted even without any real economic activity and substantial economic presence within the Member State offering such tax advantages, or 4. Whether the rules for profit determination in respect of activities within a multinational group of companies departs from internationally accepted principles, notably the rules agreed upon within the OECD, or 5. Whether the tax measures lack transparency, including where legal provisions are relaxed at administrative level in a non-transparent way.

Table 6.1: Types of Corporate Income Tax regimes, with international dimension in EU Member States

Regime	Usual Characteristics	Outcome
Privileged treatment of interest	<p><b>Harmful:</b></p> <ul style="list-style-type: none"> <li>– Tax base is not determined by the actual interest income, but by a (fixed) mark-up on the operational expenses (cost-plus)</li> <li>– Requires being part of an international group or only applies to international (offshore) financing income</li> <li>– Does not allow or require (domestic) presence or real commercial activities</li> <li>– Beneficial treatment restricted to financial services carried out with non-residents</li> <li>– Deduction for deemed expenses allowed (e.g. contribution to risk reserve or management charge)</li> <li>– Exemption via deemed or standard profit allocation to foreign branch</li> <li>– Deduction of deemed interest expenses by branch to foreign head office</li> <li>– Combined with limitation in deduction of domestic interest expenses</li> <li>– Special treatment available only via advance ruling</li> </ul>	base reduction
Privileged treatment of royalties	<p><b>Harmful:</b></p> <ul style="list-style-type: none"> <li>– Privileged treatment for royalties not available if deducted domestically</li> <li>– Only applicable to foreign source royalties</li> <li>– Patent boxes: targeting income from IP rather than R&amp;D investment (risk of distorting investment choices and locations)</li> </ul> <p><i>Non-harmful:</i></p> <ul style="list-style-type: none"> <li>– Royalty income relates to a registered patent</li> <li>– Royalty income relates to a self-developed intangible</li> <li>– Definition of eligible intangibles excludes models, design, trademarks or copyrights</li> <li>– Patent / intangible must continue to be supervised, monitored and maintained</li> <li>– The amount of royalties that can enjoy beneficial tax treatment is capped</li> <li>– Self-development may be outsourced</li> <li>– Applies to genuine royalty income and to "embedded royalties"</li> <li>– Lower tax rate is determined as a percentage of the general tax rate</li> <li>– Regime only available upon request</li> </ul>	base reduction/ reduced rates
Intermediate financing or licensing	<p><b>Harmful:</b></p> <ul style="list-style-type: none"> <li>– The avoidance of withholding tax</li> <li>– The avoidance of limitations in deductibility</li> <li>– Accelerated depreciation</li> <li>– Certainty in advance</li> </ul>	base reduction
Free or special economic zones(1)	<p><b>Harmful:</b></p> <ul style="list-style-type: none"> <li>– It is not limited to economic sectors requiring genuine economic activity (production, R&amp;D, etc.) or are not explicitly listed</li> <li>– Financial, banking and insurance activities allowed without a connection to eligible ones</li> <li>– No clear conditions concerning the (economic) substance required (e.g. creation of new jobs, establishment of premises, machinery, etc.)</li> <li>– No limitation in time for enjoying the benefits</li> <li>– The relocation of domestic activities is disallowed</li> <li>– Dealings principally with non-residents in the special economic zones</li> <li>– Accelerated depreciation is allowed in some cases</li> <li>– Minimum percentage of foreign investment</li> </ul>	base reduction/ reduced rates

(1) In some cases dependent or associated territories, outermost regions and small islands operate special or free economic zones as well.

Source: Commission Services

**Although special tax regimes might be justified as a measure for the government to address regional differences they are not necessarily efficient from a general economic perspective. In fact, a**



large literature on tax competition emphasises that governments tend to underestimate the revenue losses associated with a lowering of taxes (Buettner, 2014). In addition, when a special tax regime is found to violate State aid rules or the criteria of the EU Code of Conduct for Business Taxation – which means mainly that the relevant measure lacks transparency, departs from internationally accepted principles and standards, and is not compatible with a sound functioning of the Single Market, – governments could alternatively attempt to attract foreign businesses through more general business tax incentives instead, which might serve as a substitute to the special tax regime. This might also open up further profit-shifting opportunities for multinationals and result in revenue losses.<sup>(38)</sup>

## 6.2. REDUCED RATES FOR SMES AND COMPANIES OPERATING IN SPECIFIC REGIONS OR SECTORS

**A large number of Member States favours specific types of companies by granting them reduced corporate income tax rates or special regimes.** In most cases, the reduced rates are provided for small and medium-sized enterprises (SMEs), for companies operating in economically-distressed regions or for companies operating in specific economic sectors. The preferential treatment of SMEs may find its roots in the general perception that corporate taxation could be regressive, in the wish to address possible market imperfections, such as difficulties in accessing finance in the form of term debt and equity, asymmetric information about the investment environment abroad, absence of large economies of scale for SMEs or their lack of resources to optimise their tax burden. Therefore, taxation plays a more important role in the cost structure of SMEs as compared to large enterprises.

**Compared with alternative spending programs, often included in special investment laws, using the tax system to correct these possible economic distortions does not seem to be the first-best solution.** Strong evidence of specific market failures or spill over effects should be required before a specific tax incentive is considered. Instead, considerations of political economy may lie behind the choice to provide SMEs with reduced CIT rates, even though the latter can encourage entrepreneurs to incorporate for tax purposes and discourage companies to grow (Mirrlees et al., 2011). In addition, such a tax expenditure policy may reduce differences between the efficient and non-efficient companies, which would consequently affect their investment decisions.

**More than one third of EU Member States provide tax incentives for SMEs in the form of reduced corporate income tax rates.** As can be seen in Table 6.2, ten Member States applied reduced rates in 2013 based on specific profit levels. In most cases, additional conditions related to the level of turnover or staff size are applied.

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<sup>(38)</sup> Fundamental CIT reforms, such as the introduction of an Allowance for Corporate Equity (ACE) have to be seen differently as they reduce the distortion caused by the tax-favoured treatment of debt compared to equity.

Table 6.2: Reduced corporate income tax rates for small businesses, 2013

Country	Standard rate	Reduced rates for SMEs	Eligibility criteria for reduced rates / thresholds for lower rates
BE	33%		Companies that fulfil a number of conditions relating to the activities of the company, the shareholding of the company, the rate of return of distributed profits and the remuneration of their managers benefit from reduced rates.  The effective CIT rate can be substantially reduced by the allowance for corporate equity, the effective tax rate being only half of the nominal tax rate when the return on equity before tax is twice the nominal interest rate, i.e. 3.242 % for SMEs (2013).
		24.25%	profits of up to € 5
		31%	profits between €25,000 and €90,000
		34.5%	profits between €90,000 and €322,500
	+ 3% austerity surcharge on income tax rate		
ES	30%	25%	Companies with a turnover below €10 million. Only on a taxable base of up to €300,000.*
		20%	In 2009-2012: micro-enterprises with a turnover less than €5 million, employing fewer than 25 employees and maintaining or increasing employment. Only on a taxable base of up to €300,000.
FR	33.33%	15%	Largely independent businesses with an annual turnover no greater than €7.63 million and on the part of the profit that does not exceed €38,120
LU	21%	20%	Taxable base up to €15,000
		+ 5% solidarity tax	
NL	25%	20%	On the first €200,000 of taxable income. Income derived from locally-created R&D is taxed at a rate of 5%
LV	15%	9%	Micro-enterprises with a turnover less than LVL 70,000, employing up to 5 employees (if turnover above, excess taxed at 20%)
LT	15%	5%	Companies with a taxable profit less than LTL 1 million, employing up to 10 employees
HU	19%	10%	On the first HUF 500 million of profits per annum, without any specific limitations
UK	24%	20%	Companies with tax-adjusted profits under GBP 300,000. Marginal relief is available on profits between GBP 300 000 and GBP 1.5 million

Notes: \* As of 2011, companies in Spain that grow above the limits applicable for small companies can benefit from the lower rate for three years after losing their small-business status.

Source: Commission services, national authorities.

**In some Member States companies operating in specific, often economically-distressed, regions may also benefit from reduced tax rates.** This is meant to encourage critically needed entrepreneurial business development and influence the decision of companies to locate and perform their activities within an economically-depressed area. Table 6.3 indicates those Member States which grant tax relief to companies solely on the basis of their location, (often) independently of their economic activity.

**Specific sectors of activity are sometimes also granted a favourable tax regime.** Such tax regimes affect the tax rate to which those sectors are in principle subject to, resulting in lower tax revenues. <sup>(39)</sup> For instance, many Member States provide a specific corporate tax regime for the shipping sector ('tonnage tax') under which the taxable income is determined based on the volume transported (tonnage of vessels) rather than the income generated.

<sup>(39)</sup> Some Member States, like Hungary, also apply surcharges to specific sectors.

Table 6.3: Reduced corporate income tax rates and special tax regimes for specific regions and sectors

Country	Standard Rate	Reduced rates for economically-distressed regions	Special tax regimes for specific sectors
BE	33% + austerity surcharge		Sh
DE	31%		Sh
IE	12.5%		Sh
EL	26%		Sh
ES	30%	Canary Islands (4%) Ceuta and Melilla (15%)	Sh
FR	33.3%	Overseas departments (0% for newly-created companies)	Sh
IT	31%		Sh
CY	12.5%		Sh
MT	35%		Sh, In
NL	25.5%		Sh
PT	25%	Azores (17.5%) Madeira (20%)	
SI	17%	Koper and Maribor (10%)	Sh, In (0%)
FI	26%		Sh
BG	10%	High unemployment regions (0% only for manufacturing)	(Sh, Ag)
CZ	19%		In (5%)
DK	25%		Sh
LV	15%	Free Economic Zones (3%)	Sh
LT	15%	Free Economic Zones (0%)	Sh
HU	19%		Tr (0%)
PL	19%		Sh
UK	24%		Sh, Tr (0%)

Note: The list of economic sectors is non-exhaustive. 'Sh' refers to the shipping sector (tonnage tax), 'Ag' refers to the agricultural sector, 'In' refers to investment companies, and 'Tr' refers to trusts. In Spain special rates of (28%) for Basque Country and (20%-27%) and Navarra are applied.

Source: Commission services

### 6.3. TAX INCENTIVES FOR R&D

**Tax codes provide a number of incentives to promote R&D.**<sup>(40)</sup> Public support to business undertaking R&D finds its economic rationale in the market failures (knowledge spill-overs and appropriability of the results), which might keep innovation activities below their socially optimal level from a growth-promoting perspective.<sup>(41)</sup> In this respect, in terms of the taxonomy set out above, public support satisfies the microeconomic efficiency principle and responds to the need to reach strategic objectives. Moreover, the tax relief instruments are often combined with measures of more direct support, such as grants and loans. As documented in OECD (2013), while differences still exist in the policy mix across countries, the recent trend has been towards granting more generous tax incentives in the context of a cut-back of direct subsidies.

<sup>(40)</sup> A study on R&D tax incentives has recently been commissioned by the European Commission. The study reviews existing instruments in place in the EU Member States and evaluates their effectiveness using on the basis of the results available in the literature.

<sup>(41)</sup> The Europe 2020 strategy sets a 3% target for R&D expenditure (both private and public) over GDP.

**Tax incentives for R&D can take different forms.** Such incentives can, for instance, concern the income generated by the R&D process, provide special treatment of technology acquisition, be targeted at specific types of expenditure, or take the form of withholding tax credits for wages of employees engaged in R&D activities. Nonetheless, the most common types of tax reliefs are based on standard instruments of the tax codes, such as allowances and tax credits for R&D-related capital expenditure. Special or accelerated depreciation rules for fixed assets used in R&D activities are also common (Andrews and Criscuolo, 2013). The latter can have the total volume of the outlays for innovation activities as a reference, or be designed to promote the incremental expenditure above a certain threshold, or alternatively be a combination of two.

**The potential benefits and limitations of these tax incentives should be discussed in comparison with the alternative available tools.** <sup>(42)</sup> In general, those take the form of direct subsidies to R&D private spending. Direct subsidies can be targeted to specific categories of firms/projects and be assigned on a competitive basis, rather than in an automatic way like reliefs embedded in the tax system. Precisely for that, however, they might be more costly to administer than tax incentives, *ceteris paribus*.

**By lowering the marginal cost of the investment, tax incentives can increase business expenditure in innovative activities.** The economic literature has found significant effects, both at the macro and at the micro level. For instance, Bloom et al. (2002) find a unit elasticity of R&D expenditure to the cost of capital in the long term, whereas the lower effects in the short term – around ten times – confirms the strong complementarity of this expenditure with the demand for highly skilled labour. Micro-level studies on the experience of single countries are too numerous to cite (see for instance Mulkay and Mairesse (2013), Ientile and Mairesse (2009) for France, Lokshin and Mohnen (2007, 2009) for the Netherlands, Guceri (2013) for the UK). Although the estimated impacts differ depending on the time period, the type of analysis and the institutional setting, they corroborate the view that fiscal incentives positively impact R&D expenditure.

**There are risks and unintended consequences associated with tax incentives for R&D.** A first issue is the one of re-labelling of other ‘standard’ expenditure as R&D outlays in order to benefit from the more generous fiscal treatment (Hall and Van Reenen, 2000). Secondly, there is a concrete risk that, if the supply of highly skilled workers is rigid, at least in the short term, fiscal incentives will result in increased prices (in the form of wages for scientists) rather than in larger volumes of R&D (Goolsbee, 1999). The presence of that and similar imperfections can alter the relative efficiency of different fiscal instrument.<sup>(43)</sup> Thirdly, by providing an implicit subsidy, tax incentives might promote projects with low productivity which potentially would not have been viable otherwise, or might not generate the highest social return. Related to that, such tax reliefs might affect the dynamics of firms’ growth by favouring incumbents rather than new entrants. All in all, they would slow down the reallocation of resources across firms within industries, particularly the R&D intensive ones (Bravo-Biosca et al., 2012). All these issues will ultimately soften the link between R&D and productivity which provides the rationale for government intervention in promoting innovative activities.

**The design of the R&D tax incentives needs to be carefully considered, particularly in times of large remaining fiscal consolidation needs.** Furthermore, as underlined in OECD (2013b), the stability of these R&D tax incentives is essential for their efficiency: R&D involves long-run investments which should not be weakened by funding uncertainty. As it is apparent from the discussion above, while tax

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<sup>(42)</sup> Some types of R&D-related tax benefits have impacts on cross-border strategies used by multinationals to reduce their tax payments. For instance, a special treatment of (income from) patents in CIT creates room for profit shifting, rather than incentivising innovative outlays. If the incentive is granted regardless of whether the intellectual property for which the patent is granted is acquired or developed by the tax payer himself.

<sup>(43)</sup> For instance, simulations with an endogenous DSGE model by Roeger et al. (2008) concluded that wage subsidies in the R&D sector are more efficient than tax credits reducing the cost of R&D capital. However, the results may be reversed in the presence of crowding out in the form of higher wages for high skilled workers and of a positive mark-up in the intermediate goods sector.

reliefs for R&D might prove effective in stimulating firms' innovative activities, they might entail risks that could increase their social cost beyond what is (more or less) immediately visible in terms of foregone revenues. In this respect, the costs for administering the schemes and the compliance cost associated with taking-up the benefits need to be taken into account as well. For instance, tax credits for the incremental expenditure seem to provide an adequate tool both in terms of fiscal costs and in terms of effectiveness in promoting only additional investment, that is, in minimising the risk of supporting activities which would have been undertaken even without the fiscal incentives. However, they might imply larger administrative and compliance costs (particularly for small and young firms) than the more standard credits based on the total volume of expenditure. At the same time it is acknowledged that in some specific cases of tax cuts targeted at R&D, tax expenditures proved to be an efficient instrument resulting in a decreased administrative burden. All in all, the need for evaluating and monitoring such incentives, in combination with the other public support measures potentially available, is essential.

**While tax incentives targeted at R&D expenses can successfully encourage innovation by lowering the marginal cost of investment, other schemes focusing on mobile income rather than real economic activities might offer opportunities for increased harmful tax competition.** Some Member State have introduced in recent years 'patent boxes' which target income from intellectual property. Such schemes could have negative effects on tax revenues (Griffith et al., 2011) and distort the geographical location of patents rather than increasing the underlying research and innovation activities (Dischinger and Riedel, 2011). This aspect is being examined by the Code of Conduct on Business Taxation and it is also under examination in the OECD BEPS project.<sup>(44)</sup> Moreover, Commission services are gathering information on patent boxes in several Member States under EU State rules.<sup>(45)</sup> In summary, the need for evaluating and monitoring such incentives in combination with other public support measures potentially available, is essential.

**The interaction of R&D tax incentives with other policies, in terms of complementarity and/or substitutability, needs to be taken into account.** In this respect, the use of targeted subsidies and loans has been advocated as a more effective instrument to promote R&D from small and young firms, which are likely to be financially constrained and thus in need of upfront cash-flow to undertake an R&D project.<sup>(46)</sup> Likewise, targeted grants provided on a competitive basis enable the authorities to select projects with high social returns. The drawback of such targeted schemes is again the larger administrative and compliance costs compared to a system of general tax reliefs. All in all, cost-benefit analyses would most likely point to a mix of instruments to be used to support R&D, whereby the relative importance of tax incentives depends not only on the specific policy goals but also on the underlying economic environment.

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<sup>(44)</sup> <http://www.oecd.org/ctp/beps.htm>

<sup>(45)</sup> ) See [http://europa.eu/rapid/press-release\\_IP-14-309\\_en.htm](http://europa.eu/rapid/press-release_IP-14-309_en.htm)

<sup>(46)</sup> R&D tax incentives can envisage carry-over and immediate cash refunds provisions to support loss-making firms.



## 7. CONCLUDING REMARKS

**In times of fiscal consolidation, the issue of the economic efficiency of tax expenditures ranks high on the tax policy agenda.** Reported tax expenditures add up to a non-negligible share of GDP in many EU Member States and to an even larger share of collected revenue. In the last decade, the size of reported tax expenditures in direct taxation has increased significantly. The economic downturn has led Member States to introduce or extend tax expenditures both to support low-income earners and to encourage investment and business activity. On the other hand, some Member States may consider reducing the amount of tax expenditures somewhat to help meet consolidation targets.

**The issues of definition, measurability and comparability hamper sound cross-country quantitative analyses.** As pointed out in the paper, differences in levels of reported tax expenditures across Member States may reflect differences in recording practices as well as differences in tax policies.

**Reporting tax expenditure regularly and systematically plays an important role in increasing the transparency of tax systems and assisting tax reforms efforts.** Member States not reporting their tax expenditures regularly should consider doing so, by producing and releasing this information in some form, in compliance with the Directive on requirements for budgetary frameworks of the Member States, adopted in December 2011. Such information can give insights about the scope for increasing economic efficiency and about avenues to support fiscal consolidation. Tax expenditures should be part of the budgetary process and simultaneously subject to regular evaluation.

**A careful assessment of the efficiency of tax expenditures requires identifying relevant policy areas and examining how tax expenditures could – or not – help meet given economic objectives in these areas.** Tax expenditures could be justified and enhance positive spill-overs, but the decision whether to introduce or keep tax expenditures in place should be based on a clear analysis of costs and benefits. A case-by-case analysis with the focus on specific groups of tax expenditures associated with specific economic issues is needed in order to identify policy options. Such a ‘bottom-up/thematic’ approach by economic issue is more fruitful than a comprehensive analysis of tax expenditures.

**The economic relevance of tax expenditures in each area could be assessed against a small number of criteria.** These will help develop policy options for strategic and prudent management of individual tax expenditure items. A first group of criteria covers various facets of the microeconomic efficiency. The second group of criteria reflects the capacity to meet social or strategic objectives defined by the government with the best instruments available, which are not necessarily tax expenditures. The last group of criteria relates to the efficient functioning of fiscal policy. Based on these criteria, the paper aims at identifying i) possible risks attached to their use and ii) dimensions to watch so as to ensure the economic efficiency, alongside with arguments in favour of specific tax expenditure items. Such an evaluation will help limit the use of tax expenditures to cases where market failures exist and where obvious administrative advantages over comparable spending programs can be identified. Some first policy conclusions for several relevant policy areas are summarised in Table 7.1. These conclusions should be read cautiously because the actual effects of specific policies depend greatly on the particular context in which they are applied in individual Member States.

Table 7.1: Evaluation of tax expenditures in some major areas

	Arguments in favour	Points to watch	Reasons to remove tax expenditures
General arguments applying to all tax	<ul style="list-style-type: none"> <li>• Internalising externalities</li> <li>• Reducing distortions generated by taxation (second best approach)</li> <li>• Possible desired distributional effects</li> <li>• May complement non-tax policy instruments to reach the government's objectives</li> </ul>	<ul style="list-style-type: none"> <li>• Revenue impact</li> <li>• Complexification of tax systems</li> <li>• Administrative and compliance costs</li> <li>• Rent-seeking behaviour</li> <li>• Lack of transparency of (new) tax measures</li> </ul>	<ul style="list-style-type: none"> <li>• Too expansive: potentially large revenue shortfall</li> <li>• Design too complex</li> <li>• Scope for fraud</li> <li>• Alternative measures more efficient</li> </ul>
Making Work Pay	<ul style="list-style-type: none"> <li>• Capacity for offsetting benefit "dependence" (unemployment and inactivity traps)</li> <li>• Avoid increasing labour costs, while stimulating labour supply</li> </ul>	<ul style="list-style-type: none"> <li>• Could be costly if not targeted to the most vulnerable (although positive behaviour-induced revenue effects via job creation)</li> <li>• Lack of real-time effect</li> <li>• Interaction with other factors (e.g. social contributions, benefits, features of the labour market demand side, etc.)</li> </ul>	<ul style="list-style-type: none"> <li>• Complexity of design and risk of fraud</li> <li>• Generating poverty traps or threshold effects (in case of mean-tested advantages)</li> </ul>
For self-employed	<ul style="list-style-type: none"> <li>• Foster entrepreneurship</li> </ul>	<ul style="list-style-type: none"> <li>• Target entrepreneurship facing a higher degree of uncertainty</li> </ul>	<ul style="list-style-type: none"> <li>• Circumvention of labour market and social security protection laws by companies</li> <li>• Contributing factor to 'bogus self-employed'</li> </ul>
Pension-related	<ul style="list-style-type: none"> <li>• May be necessary to smooth income over the person's lifetime and prevent old-age poverty</li> <li>• Encourage saving in general, improving long-term growth</li> <li>• Can be necessary to encourage private pension savings to compensate for reduced public pension benefits</li> </ul>	<ul style="list-style-type: none"> <li>• Possible unjustifiable tax advantages over other forms of savings and risk of tax avoidance</li> <li>• Risk of substituting other forms of equivalent saving, resulting in high revenue costs without sufficiently increasing the overall pension savings rate</li> <li>• Risk of substantially supporting high earners</li> </ul>	<ul style="list-style-type: none"> <li>• Considerable windfall losses (substitution of comparable savings)</li> <li>• Unintended redistributive outcomes (in particular, advantages for high earners from deductions due to higher tax rates; greater take-up at higher income levels)</li> </ul>
For education	<ul style="list-style-type: none"> <li>• Increase quality of opportunity</li> <li>• Encourage skills development</li> <li>• Promote lifelong and adult learning</li> </ul>	<ul style="list-style-type: none"> <li>• Possibility of creating perverse redistribution consequences favouring highly educated/high-income individuals and large businesses</li> <li>• Possible negative impact on tax measures for higher education if tax incentives are not considered supplementary measures</li> <li>• Must be particularly clear about the types of activities and the individuals supported to avoid distortions and uncertainties</li> </ul>	<ul style="list-style-type: none"> <li>• Possible deadweight effects, especially on large businesses and highly qualified individuals</li> </ul>
Housing-related	<ul style="list-style-type: none"> <li>• Positive externalities (e.g. create wealth, encourage saving)</li> <li>• Encourage housing investment</li> <li>• Could stabilise housing market</li> <li>• Encourage home ownership</li> <li>• Social reasons</li> </ul>	<ul style="list-style-type: none"> <li>• Misallocation of resources, resulting in higher house prices</li> <li>• Effects on banks' solvency and liquidity</li> <li>• Regressive policy</li> </ul>	<ul style="list-style-type: none"> <li>• Contribute to housing prices boom</li> <li>• High debt bias in housing taxation</li> </ul>
For SMEs and special economic zones	<ul style="list-style-type: none"> <li>• Address possible market imperfections (e.g. the financing of SMEs, the absence of large economies of scale, a lack of resources, etc.)</li> <li>• Influence companies' decision to locate in an economically depressed area</li> <li>• Encourage investment in specific economic sectors</li> </ul>	<ul style="list-style-type: none"> <li>• Cause distortions (e.g. preferential tax treatment discourages companies from growing)</li> <li>• Special tax rules for SMEs may conflict with each other (e.g. tax equity vs system simplicity; improving revenue collection vs giving SMEs incentives to grow; encouraging vs discouraging SMEs to grow)</li> </ul>	<ul style="list-style-type: none"> <li>• Eligible activities are not limited to economic sectors requiring genuine economic activity</li> <li>• Rules for profit determination deviate from internationally accepted principles (e.g. within a multinational group of companies)</li> <li>• Hinder the smooth functioning of the single market (mismatches, possibility of tax competition)</li> </ul>
For R&D	<ul style="list-style-type: none"> <li>• Positive impact on R&amp;D expenditure and other innovative activities</li> <li>• Possibly less administrative costs (compared with targeted subsidies)</li> </ul>	<ul style="list-style-type: none"> <li>• Possible re-labelling of other 'standard' expenditure as R&amp;D outlays</li> <li>• May result in increased wages if the supply of highly skilled workers is rigid</li> <li>• Interaction of tax incentives with other policies, in terms of complementarity and/or substitutability</li> <li>• Possibility of aggressive tax planning and use of cross-border strategies by multinationals (e.g. profit-shifting and tax base erosion in the case of intellectual property income)</li> </ul>	<ul style="list-style-type: none"> <li>• Overlap with other public support measures</li> <li>• As a general scheme, it is not targeted to the most productive projects</li> </ul>

Source: Commission services



# ANNEX

Table A.1: Top statutory tax rates in personal and corporate income taxation, in %

	Top personal income tax rate						Adjusted top corporate income tax rate					
	1995	2000	2005	2010	2013	2014	1995	2000	2005	2010	2013	2014
BE	60,6	60,6	53,7	53,7	53,7	53,7	40,2	40,2	34,0	34,0	34,0	34,0
BG	50,0	40,0	24,0	10,0	10,0	10,0	40,0	32,5	15,0	10,0	10,0	10,0
CZ	43,0	32,0	32,0	15,0	22,0	22,0	41,0	31,0	26,0	19,0	19,0	19,0
DK	65,7	62,9	62,3	55,4	55,6	55,6	34,0	32,0	28,0	25,0	25,0	24,5
DE	57,0	53,8	44,3	47,5	47,5	47,5	56,8	51,6	38,7	30,2	30,2	30,2
EE	26,0	26,0	24,0	21,0	21,0	21,0	26,0	26,0	24,0	21,0	21,0	21,0
IE	48,0	44,0	42,0	47,0	48,0	48,0	40,0	24,0	12,5	12,5	12,5	12,5
EL	45,0	45,0	40,0	49,0	46,0	46,0	40,0	40,0	32,0	24,0	26,0	26,0
ES	56,0	48,0	45,0	43,0	52,0	52,0	35,0	35,0	35,0	30,0	30,0	30,0
FR	59,1	59,0	53,5	45,8	(50,3)	(50,3)	36,7	37,8	35,0	34,4	36,1	38,0
HR	42,9	41,3	53,1	50,2	47,2	47,2	25,0	35,0	20,0	20,0	20,0	20,0
IT	51,0	45,9	44,1	45,2	47,3	47,9	52,2	41,3	37,3	31,4	31,4	31,0
CY	40,0	40,0	30,0	30,0	35,0	35,0	25,0	29,0	10,0	10,0	12,5	12,5
LV	25,0	25,0	25,0	26,0	24,0	24,0	25,0	25,0	15,0	15,0	15,0	15,0
LT	33,0	33,0	33,0	15,0	15,0	15,0	29,0	24,0	15,0	15,0	15,0	15,0
LU	51,3	47,2	39,0	39,0	43,6	43,6	40,9	37,5	30,4	28,6	29,2	29,2
HU	44,0	44,0	38,0	40,6	16,0	16,0	19,6	19,6	17,5	20,6	20,6	20,6
MT	35,0	35,0	35,0	35,0	35,0	35,0	35,0	35,0	35,0	35,0	35,0	35,0
NL	60,0	60,0	52,0	52,0	52,0	52,0	35,0	35,0	31,5	25,5	25,0	25,0
AT	50,0	50,0	50,0	50,0	50,0	50,0	34,0	34,0	25,0	25,0	25,0	25,0
PL	45,0	40,0	40,0	32,0	32,0	32,0	40,0	30,0	19,0	19,0	19,0	19,0
PT	40,0	40,0	40,0	45,9	56,5	56,5	39,6	35,2	27,5	29,0	31,5	31,5
RO	40,0	40,0	16,0	16,0	16,0	16,0	38,0	25,0	16,0	16,0	16,0	16,0
SI	50,0	50,0	50,0	41,0	50,0	50,0	25,0	25,0	25,0	20,0	17,0	17,0
SK	42,0	42,0	19,0	19,0	25,0	25,0	40,0	29,0	19,0	19,0	23,0	22,0
FI	62,2	54,0	51,0	49,0	51,1	51,5	25,0	29,0	26,0	26,0	24,5	24,5
SE	61,3	51,5	56,6	56,6	56,7	56,9	28,0	28,0	28,0	26,3	22,0	22,0
UK	40,0	40,0	40,0	50,0	45,0	45,0	33,0	30,0	30,0	28,0	23,0	21,0
EU arithmetic	47,2	44,6	40,4	38,6	39,4	39,4	35,0	32,0	25,3	23,2	23,2	23,1
EA arithmetic	47,7	45,9	41,0	41,1	43,8	43,8	36,2	33,9	27,4	25,0	25,5	25,5

Note: The PIT rate reflects the statutory tax rate for the highest income bracket. It does not differentiate by source of income and therefore surcharges and deductions for specific income source are not taken into account. Regarding CIT, the 'basic' (non-targeted) adjusted top rate is presented here; some countries apply small profit rates or special rates, e.g., in case the investment is financed through issuing new equity, or alternative rates for different sectors. Such targeted tax rates can be substantially lower than the standard statutory top rate. Existing surcharges and local taxes are included. For details of the calculation of the top PIT and CIT rates, see European Commission (2014).

Source: Commission services

Table A.2: References to national publications on tax expenditures

Regular publications				
Country	Publisher (in english)	Publisher (in national language(s))	Document(s)	Year of publication
BE	The Belgium Chamber of Representatives	Chambre des Représentants de Belgique/Belgische Kamer van Volksvertegenwoordigers	Annexe au Budget des Voies et Moyens de l'année budgétaire 2013, Inventaire 2011 des exonérations, abattements et réductions qui influencent les recettes de l'État, doc 53 2521/002./Bijlage tot de Rijksmiddelenbegroting voor het begrotingsjaar 2013, Inventaris 2011 van de vrijstellingen, aftrekken en verminderingen die de ontvangsten van de Staat beïnvloeden, doc 53 2521/002	
DK	Ministry of Taxation	Skatteministeriet	list on homepage of the ministry	
DE	Ministry of Finance	Bundesministerium der Finanzen	Dreißundzwanzigster Subventionsbericht	
EE	Ministry of Finance	Rahandus-Ministeerium	Stability Programme 2013	
EL	Ministry of Finance	Υπουργείο Οικονομικών	Κρατικός Προϋπολογισμός 2014, Νοέμβριος 2013	
ES	Ministry of Finance and Public Administration	Ministerio de hacienda y administraciones publicas	Presupuestos Generales del Estado. Memoria de beneficios fiscales	
FR	Ministry of Finance Ministry of Finance and Ministry of Social Affairs and Health	Ministère de l'Economie et des Finances Ministère de l'Economie et des Finances et Ministère des Affaires Sociales et de la Santé	Dépenses fiscales, annexe au projet de loi de finances 2013 Projet de loi de financement de la Sécurité sociale - Annexe 5 : Présentation des mesures d'exonérations de cotisations et contributions et de leurs compensations	
IT	Ministry of Economy and Finance	Ministero dell'Economia e delle Finanze	Bilancio dello Stato. In particolare gli allegati A e B "Effetti Finanziari delle Disposizioni Vigenti Recanti Esenzioni o Riduzioni del Prelievo Obbligatorio" della Tabella N.1 "Stato di Previsione dell'Entrata"	
LV	Ministry of Finance	Finansu Ministrija	Informātvais ziņojums	
HU	Ministry of National Economy	Nemzetgazdasági Minisztérium	„jedzivotaju ienākuma nodokļa atvieglojumi	
NL	House of Representatives of the States-General	Tweede Kamer der Staten-Generaal	Törvényjavaslat magyarorszáig 2013. évi központi költségvetéséről Nota over de toestand van 's rijks financiën and Toelichting op de belastinguitgaven	
AT	Ministry of Finance	Bundesministerium für Finanzen	Förderungsbericht 2011	
PL	Ministry of Finance	Ministerstwo Finansów	Preferencje podatkowe w Polsce	
PT	Ministry of Finance	Ministerio das Finanças	Despesa fiscal 2013	
SK	Ministry of Finance	Ministerstvo financii Slovenskej republiky	Návrh rozpočtu verejnej správy na roky 2014-2016	
SE	Ministry of Finance	Finansdepartementet	Redovisning av skatteutgifter 2013	
FI	Ministry of Finance	Valtiovarainministeriö/ Finansministeriet	Valtion talousarvioesitys 2013/ Statens budgetproposition 2013	
FI	Government Institute for Economic Research (VATT)	Valtion taloudellinen tutkimuskeskus (VATT)	Verotuet Suomessa 2009-2012	
UK	Her Majesty's Revenue and Customs(HMRC)	Her Majesty's Revenue and Customs(HMRC)	Various documents available on the homepage	
Non-Regular publications				
Country	Publisher (in english)	Publisher (in national language(s))	Document(s)	Year of publication
BG	Ministry of Finance	Министерство на финансите	Presentation of reporting in english on the homepage	2011
DE	Fifo Köln, Copenhagen Economics and ZEW	Fifo Köln, Copenhagen Economics and ZEW	Evaluierung von Steuervergünstigungen. Band 1-3.	2009
IE	Ministry of Finance	Ministry of Finance	Commission on Taxation	2009
FR	Ministry of Finance	Ministère de l'Economie et des Finances	Comité d'évaluation des dépenses fiscales et des niches sociales	2011
IT	Senate's services for public budget	Servizio del bilancio del Senato	Esenzioni e riduzioni del prelievo obbligatorio. Una analisi del bilancio per il 2011	2010
	Ministry of Economic and Finance	Ministero dell'Economia e delle Finanze	Gruppo di lavoro sull'erosione fiscale. Relazione Finale	2011
FI	Government Institute for Economic Research (VATT)	Valtion taloudellinen tutkimuskeskus (VATT)	Valmisteluraportit 5. Verotuet Suomessa 2009	2010

Source: Commission services

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