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Tax Harmonisation in Europe: The Determination of Corporate Taxable Income in the EU Member States

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Tax Harmonisation in Europe

The Determination of Corporate Taxable Income in the EU Member States

Andreas Oestreicher and Christoph Spengel

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Zentrum für Europäische Wirtschaftsforschung GmbH
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Non-technical Summary

The diversity of company taxation in the EU causes several distortions and obstacles with respect to cross-border business activities (e.g. problems of double taxation on income, increased compliance costs etc). In order to reduce or even eliminate these distortions, the European Commission has suggested introducing a Common Consolidated Corporate Tax Base (CCCTB) for the EU-wide activities of multinationals. A proposal for a directive should be released till the end of 2008. The minimum degree is a harmonised tax base which should be based on a single set of tax accounting principles using the International Financial Reporting Standards (IFRS) as a starting point.

The aim of this paper is twofold. First, we want to examine whether and if so, to what extent, the concept of IFRS meets the requirements of a CCCTB so that elements of these standards may be imported into this common base. Second, we estimate the consequences on the effective levels of company tax burdens in selected EU member states if IFRS are considered as a tool for defining the tax base.

Concerning the ability of IFRS to serve as a starting point for designing a CCCTB, our analysis reveals that IFRS could provide elements of a common and harmonised European tax base in certain areas. Following our study, these areas could cover the recognition of assets and liabilities, the determination of cost values, amortisation, impairment and treatment of onerous contracts. It also follows that a common tax base would require common standards of loss compensation and the elimination of tax incentives from the tax base (in particular in the field of depreciation). Incentives in the tax base could be substituted by tax credits or grants. However, fair-value accounting is not in line with tax accounting if taxable profits are recognised before realisation. The same would be true with a standard of revenue recognition taking into account that the existence of a signed contract is a valuable asset. Altogether, IFRS provide a widely known and accepted standard of accounting provisions which could be used as a common denominator in developing an independent set of European tax accounting rules. Such a common tax base can, however, not be established by a formal link to IFRS.

With respect to the effective tax burdens of caompanies, a transition to tax accounting on the basis of IFRS as considered here has only minor effects. An exclusive harmonisation of the tax accounting rules cannot alleviate the current EU-wide differences of effective company tax burdens. For this purpose, additional measures are necessary, especially the convergence of the nominal tax rates on profits.

Tax Harmonisation in Europe

The Determination of Corporate Taxable Income in the EU Member States

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June 6th 2007

Abstract

The aim of this paper is twofold. First, we want to examine whether and if so, to what extent, the concept of International Financial Reporting Standards (IFRS) meets the requirements of a Common Consolidated Corporate Tax Base (CCCTB) for the EU-wide activities of multinationals as proposed by the European Commission. Second, we estimate the consequences on the effective levels of company tax burdens in selected EU member states if IFRS are considered as a tool for defining the tax base. Our analysis reveals that IFRS could provide elements of a common and harmonised European tax base in certain areas. In particular, tax accounting still has to follow the realisation principle. Therefore, IFRS "fair value-accounting" cannot be adopted for tax purposes. A transition to tax accounting on the basis of IFRS has only minor effects on the effective tax burdens of companies.

JEL-Classification: H21, H25

Keywords: International Company Taxation, Effective Tax Burden, Tax Accounting, International Accounting Standards/ International Financial Reporting Standards, Common Consolidated tax base, European Union

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A. Introduction

Company taxation in the EU reveals a great diversity. This causes several distortions with respect to cross-border activities within the EU. First, it affects decisions of investors with respect to the location of an investment, the type of investment and its source of finance. This violates the fundamental economic goals of the EC Treaty (Art. 2 EC) since no efficient allocation of resources is guaranteed. Second, the coexistence of 27 separate tax systems causes several tax obstacles to cross-border activities within the EU. The need to comply with different rules entails a considerable compliance cost and represents itself a significant tax obstacle. Moreover, since no single taxation of multinationals exists and each member state is a separate tax jurisdiction, this entails a number of further consequences. Since separate taxation in each member states prevails, double taxation may occur as a result of conflicting taxing rights. In particular, relief for losses incurred by associated companies located in other member states is not allowed in many cases. In addition, the allocation of profits of multinationals to different jurisdictions on an arm's length basis by transfer prices causes methodological problems and results in double taxation. Finally, cross-border reorganisations give rise to capital gains taxation and bear the risks of double taxation in many situations. Third, to protect their tax bases against profit shifting of multinationals member states introduced provisions such as the denial of cross-border loss relief, exit taxes, thin capitalisation rules, and CFC-legislation. These tax provisions may violate the fundamental freedoms of the EC Treaty. Without further tax coordination member states presumably are not able to reform their tax systems so that they respect the fundamental freedoms for cross-border activities and do not destroy the systems of domestic company taxation at the same time. Only a comprehensive solution can help to eliminate tax obstacles systematically. Already in 2001, the European Commission has proposed a Common Consolidated Corporate Tax Base (CCCTB) for the EU-wide activities of multinationals.[4] A proposal for a directive should be released till the end of 2008.[5]

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[4] European Commission, Company Taxation in the Internal Market, 2001.

[5] European Commission, Communication from the Commission to the Council, the European Parliament and the European Economic and Social Community, Implementing the Lisbon Programme: Programme to date an next step towards an Common Consolidated Corporate Tax Base (CCCTB), Brussels, 5.4.2006 COM(2006) 157 final.

The minimum degree is a harmonised tax base which should be based on a single set of tax accounting principles and includes a common practise for offsetting losses. According to the European Commission and others, a harmonised tax base within the EU could be established by using the International Financial Reporting Standards (IFRS) as a starting point for defining the tax base.[6] Therefore, it is essential to examine whether and if so, to what extent, the concept of IFRS meets the requirements of a CCCTB so that elements of these standards may be imported into this common base.

If one seeks to decide which elements of IFRS could be imported into the CCCTB it is necessary to compare these international accounting standards with the corresponding member states' tax practice. This is one of the major objectives of our recent study "The Determination of Corporate Taxable Income in the EU Member States", which has been performed with the support of PricewaterhouseCoopers.[7] The results of these comparisons renders it possible to identify common principles of tax accounting in the member states and to see which IFRS are in line with these principles and could therefore serve as a tool in designing the common tax base.

To this end, the following analyses focuses on tax accounting principles and refers to the tax practice of twenty-five EU member states.[8] If there are variations between IFRS and taxation practice in the member states, the general principles of tax accounting may serve as a benchmark when deriving common tax rules. Therefore, also consequences of IFRS-based tax accounting on the effective levels of company tax burdens in selected EU member states are taken into account. Consolidation and allocation raise further issues that are not considered here. Our survey of the European group taxation regimes shows, however, that in contrast to the rules for accounting, utilisation of the financial statement principles would not offer a workable solution.

This paper is organised as follows: Section B looks at the purpose of tax accounting and the common criteria for evaluating tax rules. Section C compares selected IFRS with the corresponding tax practice in the member states. In principle, we are dealing

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6 European Commission, Company Taxation in the Internal Market, 2001, p. 399; Oestreicher/Spengel, Recht der Internationalen Wirtschaft, 2001, pp. 889-902; Schön, European Taxation, 2004, pp. 432.

7 See Endres/Oestreicher/Scheffler/Spengel, The Determination of Corporate Taxable Income in the EU Member States, Kluwer Law International, Aalphen (NL), 2007.

8 Bulgaria and Romania were not included in our survey.

with the more basic issues relating to revenue recognition, the definition of assets and liabilities as well as key aspects of initial and subsequent measurement including the anticipation of losses. An interim conclusion completes this section. Section D focuses on company tax burdens. We consider the consequences on the effective levels of company tax burdens in selected EU member states, if IFRS are considered as a tool for defining the tax base. Finally, Section E concludes.

B. Purpose of tax accounting and common criteria for evaluating tax rules

I. Concept of Income

If income is defined as difference in net equity, profit implies that net equity is maintained; income arises only if inflows of assets exceed the amount, which is necessary to maintain the capital at the beginning of the period (principle of net income). For this reason, business expenses need to be taken into account. In the case that an investment spans more than one accounting period, the costs of assets are capitalised and depreciated or amortised on a regular basis over the useful life of the relevant assets in order to allocate the respective costs to stocks and work in progress. If the objective is to maintain the net equity at nominal value both expenses and depreciation amounts may only be charged at cost.

II. Criteria for evaluating tax rules

1. Equality

In the design of taxation measures, discretion is limited by a number of general principles of taxation. Amongst such general principles widely recognised is the principle of equality or fairness. For the tax legislator, this principle of equality includes the general requirement that the tax burden be distributed as evenly as possible. The consequence of this for tax legislation is that taxation must be aligned to the taxpayer's ability to pay.

Although the principle of taxation in accordance with the ability to pay is widely accepted, the concrete determination of the taxpayer's ability to pay is by no means

without its difficulties.[9] Since ability to pay is not clear-cut, it is far too vague as a regulator for taxable income. This applies, in particular, to the question as to what is to qualify as income – both composition and measurement.[10] At the same time, the legislator has to ensure that the definition of income is such that the various different methods and evaluation processes employed in its determination are applied equally.

2. Legal certainty

In addition to the principle of equality, that of legal certainty also belongs to the principles of a constitutional state. According to this principle, taxation can only be levied if the taxpayer realises a taxable event to which tax liability is attached by law. For this purpose, the taxable event must be sufficiently defined. It is necessary that in terms of content, object, aim and extent, a provision establishing grounds for taxation is determined in such a way that the tax burden is foreseeable and calculable for the taxpayer.[11] Imprecise legal terms allowing for variations in interpretation endanger the legal certainty of taxation. With regard to the consequences for taxation, the legality of administrative practice cannot be adequately monitored if the taxable event is not clearly defined. Whilst it is not possible to exclude completely indefinite legal terms from tax legislation, they should not be allowed to lead to the principle of legal certainty being abandoned. Rather, they shift to another level the task of defining the taxable events set out in the statute with objective and verifiable criteria.

3. Simplicity

The degree of equality is dependent on the resulting tax burden. The extent to which a tax arrangement fulfils the precept of equality therefore also depends on the enforcement of the law. Against this background, a sufficient degree of simplicity should be guaranteed in the statute so that equality is not violated through imperfect enforcement of the law. Standardisation is one of the measures used for simplification. For this, it is

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[9] Same opinion Nobes, A Conceptual Framework for the Taxable Income of Businesses, and How to Apply it under IFRS, London, 2004, p. 37; Schön, Tax Law Review, 2005, p. 129.

[10] With reference to measurement of income see also Macdonald, Aligning taxable income with accounting income, The Institute for Fiscal Studies, London, 2002, para. 2.19-2.22.

[11] See Whittington, British Tax Review, 1995, p. 452.

decisive that the administrative costs incurred should be in reasonable proportion to the tax revenue.[12] Administrative costs also arise for the taxpayer in the form of compliance costs. These costs arise not only from fulfilling tax reporting requirements but also from the efforts made to determine the tax consequences of business opportunities.[13] In the case that simplification is too far reaching, however, standardisation may result in the incentive to avoid taxation by tax planning, which, in turn, may harm economic efficiency and gives rise to planning costs both on the level of the tax payer and on the level of the legislator.

4. Neutrality

In contrast to the use of accrued income in order to account for profits, the economic efficiency of an investment project is assessed on the basis of payment flows. Since the timing of the profit-related tax payments is dependent on the regulations for the periodic allocation of income, these regulations can influence the economic efficiency of investment projects.[14]

In order to establish whether an investment project will be favoured or disadvantaged by profit determination rules, it is helpful to make a comparison with a decision-neutral tax system. Decision neutrality is achieved both by means of the taxation of cash flow and by the taxation of the true economic profit.[15] If income taxation is maintained,[16] then cash flow is not available as a measure for assessment, with the result that the neutrality of profit taxation must be assessed according to the concept of economic pro-

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[12] See for example Bizer et al., Steuern – einfach gemacht, Darmstädter Entwurf für eine pragmatische Politik der Steuervereinfachung, Darmstadt, 2002; Nobes, A Conceptual Framework for the Taxable Income of Businesses, and How to Apply it under IFRS, London, 2004, p. 40.

[13] Cf. Slemrod, Which is the Simplest Tax System of Them All?, The Economic Effects of Fundamental Tax Reform, Washington D.C, 1996, pp. 355-391; Slemrod/Sorum, National Tax Journal, 1984, pp. 461-474.

[14] Also Schön, Tax Law Review, 2005, p. 131; Macdonald, Aligning taxable income with accounting income, The Institute for Fiscal Studies, London, 2002, para. 2.24; Whittington, British Tax Review, 1995, p. 452.

[15] Also Schön, Tax Law Review, 2005, p.131.

[16] The alternative concept of cash flow taxation enjoys scarcely any political support within Europe as it is not in line with the traditional notion of the taxpayers' ability to pay; for further discussion of neutral tax systems and types of cash flow taxes see Gammie/Giannini/Klemm/Oestreicher/ Parascandolo/Spengel (2005), Achieving a Common Consolidated Corporate Tax Base in the EU, Centre for European Policy Studies, p. 21.

fit. On the other hand, the concept of economic profit cannot be transferred directly to the books of account, since the model assumes planning certainty and a capital market in competitive equilibrium. Furthermore, only in exceptional cases can the capitalised earnings value be derived from individual events or investment projects. Rather, it represents the entire enterprise and includes all accrued sums from tax depreciation, allocations to reserves, or the accumulation of prepaid and deferred items.[17] Finally, with a positive net present value, the total depreciation of the capitalised earnings value can exceed the maximum permitted historical cost pursuant to commercial and tax law.

Nevertheless, some conclusions can be drawn from model calculations, for example in the field of depreciation. It is also clear that differences regarding the

- determination of acquisition costs and production costs
- recognition of tangible and intangible assets
- accounting treatment of stock and long term manufacturing or
- accounting for future expenses

lead, for example, to favouring manufacturing as opposed to purchasing assets. The same applies to sectors with long-term order processing or products subject to wide price and currency fluctuations. In these, and other, cases the tax rules influence the investment decisions of an investor. Should one wish to remove influences of this nature, it is necessary to exclude the causes of unequal treatment.[18]

C. Analysis of common and fundamental accounting principles

I. Revenue recognition

The ability to pay principle implies that revenue (sales, fees, interest, dividends, royalties and rent) may not be recognised until the relevant inflow of economic benefits is realised. Realisation means that the substance of a relevant agreement has been fulfilled as, for example, the sale of a good has taken place or a service has been performed. No

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[17] See Wagner, Steuer und Wirtschaft, 2005, p. 101.

[18] This was given in-depth consideration in Oestreicher/Spengel, Maßgeblichkeit der International Accounting Standards für die Steuerliche Gewinnermittlung?, Baden-Baden, 1999, pp. 239-291, 457-490.

income should arise from revaluation or increases in the carrying amount of an asset. Instead the value of an asset should basically be reported at cost. Gains should only be recognised on disposal in an exchange transaction. In the case that a revaluation of assets shall be reflected in equity the increase in the carrying amount of an asset may be included in equity as revaluation reserves. By the same token, subsequent decreases, depreciation or amortisation may not be included in income as far as these amounts exceed the historical costs.

Revenue from the sale of goods or the rendering of services may be recognised by reference to different points in time. Possible alternatives are the stage of completion of the transaction, the point in time when the enterprise has transferred to the buyer the significant risks and rewards of ownership of the goods, the point in time when goods or services are delivered or the point in time when goods or services are paid. The latter has its merits as taxes would not have to be paid until cash accrues. Furthermore, the point in time when goods or services are paid would better fit in the rules that govern the determination of taxable income from various other sources (e.g. income from salary). Finally, the realisation of a cash inflow can easily be captured. On the other hand, IFRS and the tax practise in the EU member states indicate that the alternative dates should also be manageable.

Under IFRS (IAS 18) sales or service revenue is recognised at the time of performance, provided that the amount can be measured reliably and collection is reasonably assured. For the sale of goods, performance is when the significant risks and rewards of ownership are transferred to the buyer (therefore the IFRS box is located at alternative 4). The same holds true for the majority of the EU member states. In principle, there is no significant variation between IFRS and taxation practice in the EU Member States (displayed as a blue range, whereas the green line references the acceptable alternatives). Seven Member States define the realisation as the date of delivery; whilst the others define it more generally as the transfer of the significant risks of a transaction to the buyer (the average value of 4.24 indicates that the majority of the member states favours the transfer of risks and rewards). In any event, all Member States determine revenue from the sale of goods on an accrual rather than a cash basis.

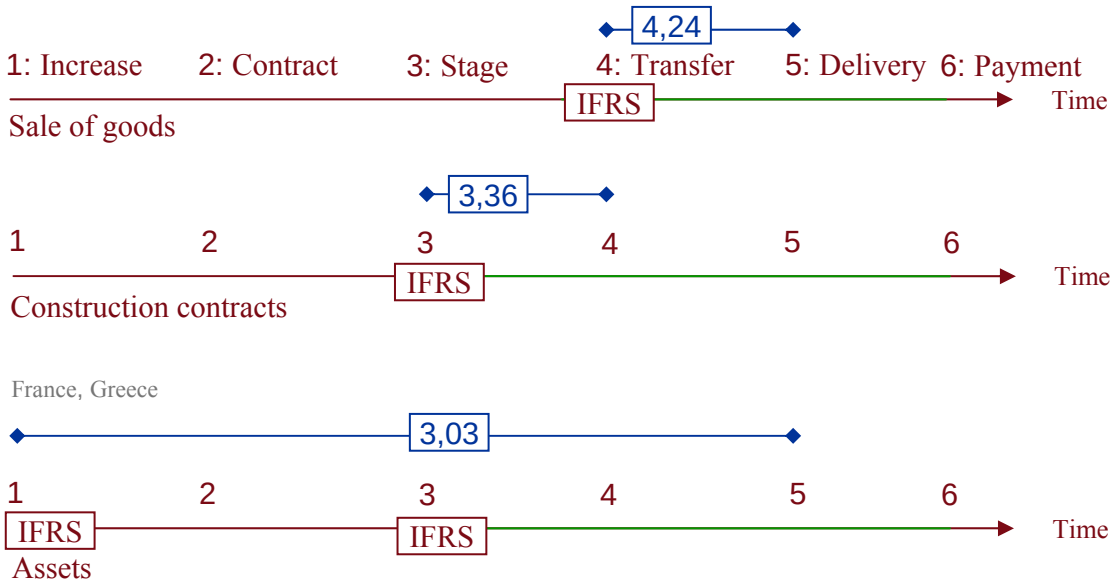

Figure 1: Revenue recognition – EU 25 and IFRS realisation date of earnings

As far as construction contracts and the rendering of services are concerned IFRS (IAS 11, 18) requires that revenue associated with the transaction should be recognised by reference to the stage of completion of the transaction at the balance sheet date if the outcome of a construction contract can be estimated reliably. The enterprise must be able to make a reliable estimate of total contract revenue, the stage of completion, and the costs to complete the contract. This contrasts with the completed-contract method which does not recognise revenue until all relevant obligations are fulfilled. There is therefore a timing difference between the two. With regard to tax accounting, the completed-contract method must be applied in nine Member States. Another seven allow the taxpayer the option, whilst the remaining nine take the IFRS position of the percentage-of-completion method.

According to IFRS (IAS 16) an entity shall choose either the cost model or the revaluation model as its accounting policy and shall apply that policy to an entire class of property, plant and equipment. The revaluation model presupposes that all the assets of a given class can be valued reliably. The assets are carried at a revalued amount, being the fair value at the date of the revaluation less any subsequent depreciation and impairment losses. Revaluations shall be made with sufficient regularity to ensure that the carrying

amount does not differ materially from that which would be determined using fair value at the balance sheet date. If an asset's carrying amount is increased as a result of a revaluation, the increase shall be credited directly to equity under the heading of revaluation surplus. However, the increase shall be taken to profit and loss to the extent that it reverses a devaluation of the same asset previously charged against revenue (IAS 16). A gain or loss arising from a change in the fair value of investment property shall be recognised in profit or loss for the period in which it arises (IAS 40).

Revaluation gains are not generally considered taxable, since funds do not accrue to the entity. Only France and Greece tax revaluation gains on tangible assets. Most Member States follow the principle of nominal value, according to which revaluation beyond acquisition cost is not allowed. Other Member States neutralise the gain by taking it to capital reserve, at least insofar as it exceeds recovery of a previous write-down (e.g. Belgium, Hungary or Ireland).

Fair value measurement of financial assets implying revaluation beyond acquisition cost is more common in Europe. However, a distinction must be made between financial assets held as current assets for sale or trading and long term holdings. Generally, the latter may not be revalued through the profit and loss account. Instead, the revaluation amount has to be taken to capital reserve. By contrast, current assets (marketable securities) are recognised at their present market value in some Member States and the unrealised gains or losses are part of taxable income. A similar distinction is drawn by IFRS (IAS 39) where only financial assets held for trading are revalued to the benefit of taxable income. By contrast, the revaluation of investments does not affect income since the revaluation gain is taken to reserves. Instruments held-to-maturity are reported at cost.

II. Accounting for Expenses

1. Capitalisation of assets

Expenses are recognised in the income statement on the basis of a direct association between the costs incurred and the earning of specific items of income (matching of costs with revenue). This concept requires accruals and deferrals. Here the question ari-

ses whether or not expenses are associated with future benefits which should be attributable to revenue of later periods. The principle of legal certainty, which calls for objective and verifiable criteria, however, does not allow the recognition of items in the balance sheet which do not meet the definition of assets or liabilities.

The concept of an asset, however, is not without its difficulties. According to the IFRS Framework 49, an asset is defined as being the source of probable future economic benefits obtained or controlled by a particular entity as a result of past transactions or events. An item that meets the definition of an asset should be recognised if it is probable that any future economic benefit associated with the item will flow to the enterprise; and the item has a cost or value that can be measured with reliability.

Whereas this definition focuses on future economic benefits, the "continental" approach to the definition of an asset refers to civil law and other test criteria of a distinct value and being potentially saleable proving the existence of an economic value. Both definitions have in common that an asset is characterized by its future economic benefit. This benefit needs to be identifiable and of a distinct value. In both cases an item that meets the condition of a future economic benefit may not be recognised if it is not probable that this benefit will flow to the enterprise. The difference is in the criteria that are employed to objectify the term asset. According to IFRS it is necessary that the source of probable future benefit has a cost value that can be measured with reliability; whereas the "continental" approach refers to a distinct value and to potential to being saleable. These differences may be significant. They make it clear, however, that the area of conflict between matching of costs with revenues (thus placing emphasis on the ability to pay) and reliability (placing emphasis on simplicity or legal certainty) can be resolved by different means.

Comparable findings result with respect to intangible assets. While accounting for purchased intangibles is generally not problematic, internally generated intangibles are often difficult to measure and thus to recognise in the balance sheet. Thus, recognising internally generated intangibles as expense would support simplicity. If it could be demonstrated that this intangible generates future economic benefits, however, such a provision would have the potential to violate the general principles of equality and neutrality. In contrast, IFRS do not differentiate between self-created intangibles and those ac-

quired from third parties. Instead it is decisive whether an entity classifies the generation of the asset into a research phase and a development phase. Whereas expenditure on research shall be recognised as an expense, since "in the research phase of an internal project, an entity cannot demonstrate that an intangible asset exists that will generate probable future economic benefits" (IAS 38.55 (2006)), an intangible asset arising from development (or from the development phase of an internal project) shall be recognised if, and only if, several conditions are met (IAS 38.55 (2006)).

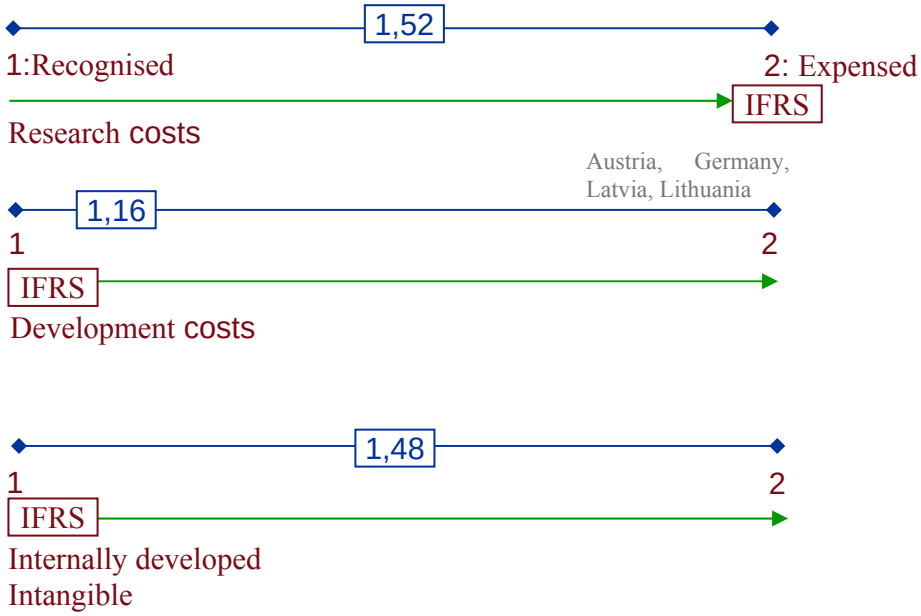

Figure 2: Accounting for expenses – EU 25 and IFRS capitalisation of assets

Most member states follow IFRS in taking research costs to expense immediately. Ten countries grant taxpayers the option of capitalising them. Only Cyprus and Ireland require that research costs are capitalised for tax purposes.

Research and development cost are not always easily distinguishable. However, ten countries, as well as IFRS, treat them differently. In about half of the Member States capitalisation of development costs is optional. Ten countries and IFRS require capitalisation. It appears that development costs are capitalised more often than research costs. This may be based on the notion that development leads to a product, making its future benefits more immediately apparent. Capitalisation depends in Ireland, Malta, Poland,

Slovakia, Slovenia, Spain and the United Kingdom as well as under IFRS on a benefit test, that is on the demonstration of a serious intention of completing the development phase and that future economic benefits are to be expected. Four countries prohibit the capitalisation of development expenses (Austria, Germany, Latvia, and Lithuania).

About half of the Member States prohibit the capitalisation of indigenous rights and intellectual property. These countries have as a precondition for capitalisation that intangibles must be acquired from third parties. In this respect, acquisition serves as an indicator for objectivity. However, it has to be kept in mind that some of the countries that refuse recognition of indigenous intangibles in the balance sheet require or allow capitalisation of development expenses. Thus, costs related to internally generated intangibles are not fully expensed as incurred.

2. Recognition of liabilities

Under the accrual basis of accounting the effects of transactions and other events are recognised when they occur. To this end not only past transactions involving the payment and receipt of cash but also obligations to pay cash in the future and of resources that represent cash to be received in the future are recorded in the accounting records and reported in the financial statements of the periods to which they relate.

From an economic perspective, it is crucial that the amount of the obligation is accrued. There is, however, no evidence as to the timing of the relevant business expenses. As a matter of principle, both retaining the amount of an obligation, at the point in time when this obligation arises or has to be fulfilled, and allocation over time are possible. It is, however, essential that the cash inflows of a period cover the relevant business expenses that are allocated to that period. By charging an obligation as business expenses only at that point in time when payment is due, the accrual could be easily determined. This treatment would support the principle of simplicity and practicability. On the other hand the ability of the taxpayer to fulfil his obligation would not be guaranteed since it is possible that the taxpayer may fail to generate a cash inflow that allows for retaining adequate funds.

In the case that full provision would be made as soon as the possible obligation occurs, the relevant accrual would exceed the amount that is necessary to fulfil the obliga-

tion at a later date, as the accrual will bear interest. Theoretically, accruing the due amount by instalments starting with the present value of the future obligation would be adequate.

However, determining which portion of the accrual belongs to relevant accounting periods is not an easy task. Since reasons that may justify any specific allocation are lacking and evidence is difficult to attain, there is support for allocating the amount of the provision uniformly to the time span until payment is due. Alternatively an allocation by use or service (for example in the case of mineral extraction) may be a solution. A neutral course of allocation, on the other hand, depends on the structure of the net payments. A general statement is thus not possible.

Provisions relating to future expenses that are not based on a legal or constructive obligation such as provisions for maintenance and deferred repair are not in line with the accrual principle. They serve the task of smoothing income between different accounting periods and thus contradict true measuring of periodical income.

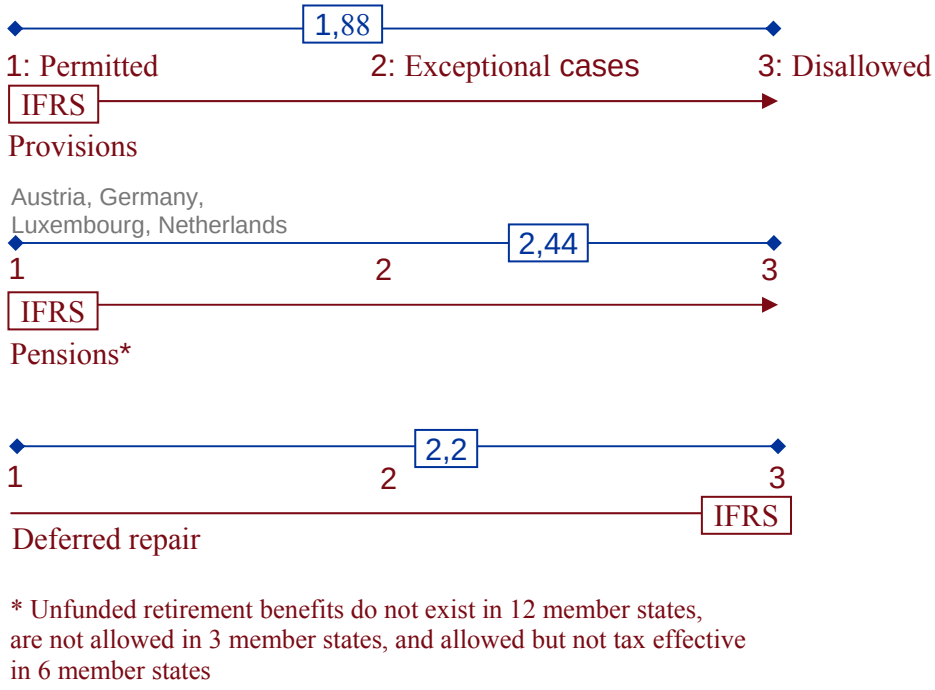

Figure 3: Accounting for expenses – EU 25 and IFRS recognition of liabilities

The survey shows that the relevant practice differs across the EU Member States. IFRS basically refer to legal or constructive obligations and explain how the general recognition and measurement requirements for provisions should be applied in the case of future operating losses, onerous contracts, and restructurings. The IFRS, however, do not permit provisions for deferred repair and maintenance. By contrast, accounting for provisions is not widely accepted in, particularly, the new EU Member States. By the same token, provisions for future expenses such as restructurings or deferred repair and maintenance are not accepted in more than half the Member States if these expenses do not reflect an obligation towards a third party. As far as pensions are concerned, unfunded retirement benefits are found in ten Member States. However, only four grant a tax deduction. In the others, the deduction is not available until the pension payments fall due. While in twelve Member States, unfunded retirement plans are not common, in Belgium, Denmark and Spain they are explicitly prohibited.

3. Determination of cost values

Matching expenses with revenue requires that the amount to be recognised as acquisition costs or as production costs include all relevant expenses. If this is not the case because, for example, a direct cost approach is applied, complete matching is not achieved. Instead a tax deferral results, since relevant expenses are charged against taxable income on occurrence whereas profit is not realised until the goods are sold. The same is true if interest or overhead costs are not included in cost values. If overheads related to production are excluded from recognition, production is more tax beneficial than acquisition. Moreover, the tax benefit is the greater, the longer the time span between production and sale. Therefore, excluding overhead costs from recognition also favours long manufacturing cycles over fast production runs and thus distorts the neutrality of taxation. An option as to whether or not overhead costs or interest costs are included in cost value would also harm the principle of equality since this would give leeway to manipulate the profit of an enterprise.

On the other hand recognition at full cost would imply that the value of finished goods corresponds to the value of all services and goods consumed in their manufacture. This may hold true as far as there is a direct link between, for example, material, components or direct labour hours and finished goods. The cost of administration or use of property,

plant and equipment, however, is not related to the manufacturing of a given item. Therefore, a conservative determination of taxable profit would dispense with the recognition of costs for use or services, which cannot be linked directly to the value of a specific item. Whereas an allocation may still be acceptable in the case of a causal relation between relevant costs and finished goods, it is not possible, however, to state whether and, if so, to what extent general overhead costs should be included in cost value. In order to avoid discretionary results, good arguments therefore exist for excluding general administrative costs from the cost base. Consequently, the definition of cost values according to IFRS could serve well as a blueprint for the common tax base in Europe.

Figure 4: Accounting for expenses – EU 25 and IFRS definitions of production costs

Although most Member States require or at least allow the full cost approach, there are differences in its spread. While material overhead cost, production overhead cost and depreciation are included in full cost, throughout, interest costs and general administration costs are treated differently. Inclusion of interest cost is optional in most Member States and under IFRS; only in four Member States is it mandatory. Nine states prohibit it.

General administration costs are also not treated consistently across Europe. Eight Member States and IFRS require them to be taken up if they relate to the production process. In five Member States the inclusion of administration costs is optional, whereas twelve Member States reject them.

4. Amortisation

On the basis of the economic profit model, it is possible to show that a neutral course of depreciation depends on the structure of the net payments. A general statement is thus not possible. It can, however, be shown that with a given interest rate the depreciation of capitalised earnings value only runs on a straight-line basis for a certain payment flow that diminishes slightly over time.[19] Moreover the straight-line depreciation can be easily determined. Further simplification effects can be achieved by means of a depreciation allowance on the pool model. For reasons of equality, however, the scope of option between various depreciation alternatives should be reduced.

Figure 5: Accounting for expenses – EU 25 and IFRS amortisation provisions

Both IFRS and taxation practice recognise the historical cost as a base (starting point) for regular depreciation. With respect to the method and rate of depreciation, there is, however, considerable variation between IFRS and taxation practice in the Member States. For tax purposes, tax law or administrative practices determine the method and the rate of depreciation depending on categories of assets. In many Member States standardised depreciation is independent of the useful life of assets.

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[19] See Schneider, Rechnungswesen, Bd. 2, München, 1997, p. 367.

Whereas the general approach of IFRS is to allocate depreciation or capital allowances respectively to the economic profile of the asset, without necessarily arriving at a neutral allocation, tax accounting in the Member States rather aims to allocate these expenses on a fixed pro rata basis to subsequent periods. This deviation can be traced back to the aforementioned reasons of simplification. In addition, somewhat restrictive rules for regular depreciation express a tax policy of "tax-rate-cut-cum-base-broadening" which seeks to attract direct investment. On this note, one has to bear in mind that according to IFRS the straight-line method should be applied in case no reliable estimates about the economic profile of the asset being depreciated exist. Therefore, IFRS also include elements of objectification in the area of regular depreciation and could be used here as a blueprint.

In the field of depreciation on fixed tangible assets (i.e. machinery), it becomes evident that a considerable number of Member States allow for the declining-balance method. The underlying objective is to grant incentives for new investments. In the case of a common tax base many Member States fear losing the power to control their tax bases and thus the most important element for granting tax incentives. This is particularly true for continental European countries such as Germany. One has to be aware, however, that in the event of a common tax base being established, other instruments for tax incentives in addition to the tax base still exist. Prominent examples are investment tax credits which are common in particular in Member States with Anglo-Saxon traditions and in France.[20]

The same should be true with respect to the possible application of a pool depreciation scheme, sometimes referred to as the "British model". Under the pool depreciation scheme the allocation of the amount to be amortised is basically not dependent upon the useful life of the depreciable assets. If, as is the case in the United Kingdom, the allocation is made largely over a period of eight years, the acquisition costs as well as the production costs of a long-term asset are amortised before a replacement of the relevant asset is due. As a consequence the pool depreciation scheme may favour enterprises that

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[20] See IBFD, Tax Treatment of Research & Development Expenses, Amsterdam, 2004; same opinion Bravenec, European Taxation, 2000, p. 455; Cnossen, Bulletin for international fiscal documentation, 2004, p.144.

employ assets with long useful lives. This conflict with the principle of equity could only be toned down with multiple pools for assets with different useful lives.

III. Anticipating losses

1. Area of application

The accounting for potential losses is a common principle of IFRS and taxation practice. Impairment and lower of cost or market valuation is accepted by both IFRS and taxation practice in most Member States. For taxation, however, it is not essential to measure income prudently. In any case, this principle does not play any role in respect to the rules that govern the determination of taxable income from various other sources (e.g. income from salary). Thus it cannot be excluded that measuring accounting profit prudently is in conflict with the basic principle of equality. If the tax base is limited to the total profit of an enterprise anticipating future losses is basically not relevant. Again, however, the question of timing arises. It is also essential that the cash inflows of the period when losses are recognised cover the relevant business expenses that are allocated to that period. In the case, however, that the regulations regarding the compensation of a potential loss are rather restrictive and, consequently, taxable income may exceed the total profit of an enterprise, accounting for contingent losses will help to prevent income that has not been accrued being taxed.

2. Impairment

Provisions for an extraordinary write-down of intangible assets can be found in about half of the Member States of the European Union. Tax law generally does not distinguish between different kinds of intangible fixed assets as long as they are carried on the balance sheet. Only Finland and Hungary restrict the right to an extraordinary write-down to certain kinds of intangible assets. Under Finnish tax legislation all intangible assets except research and development expenses qualify. In Hungary extraordinary amortisation may be only claimed on concessions or similar rights with a restriction on exercise, the capitalised value of unsuccessful experimental development and on other intellectual products that have been damaged owing to unavoidable external reasons.

In most countries, only apparently permanent decreases in value are reasons for a write-down. Only Belgium, France, Sweden and the United Kingdom allow an extraordinary write-down if the decrease in value is only temporary. Austria, Finland, Hungary and the Netherlands require write-down if the loss is both permanent and material. Hungary and the Netherlands permit write-down of immaterial items. The fair value of an asset is generally the market value or the going concern value.

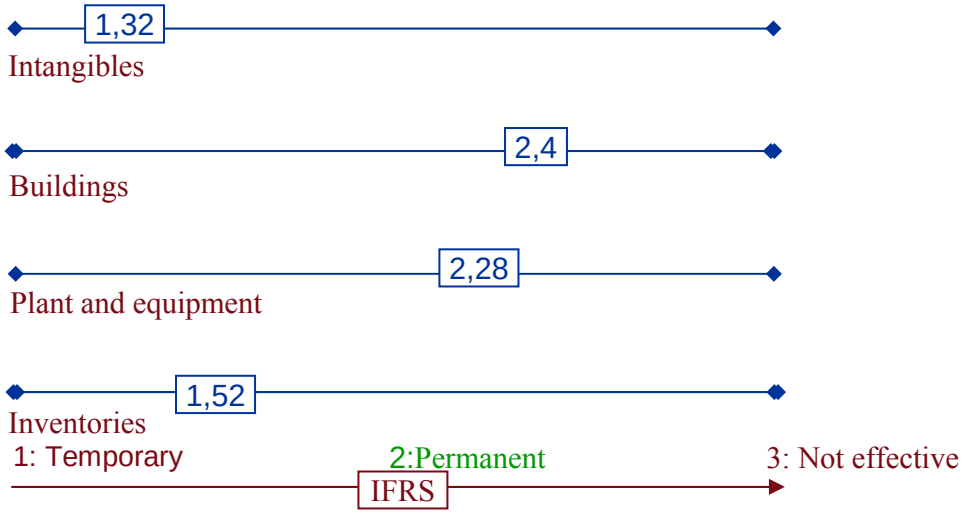

Figure 6: Anticipating losses – EU25 and IFRS impairment provisions

Special rules apply to the impairment of goodwill under IFRS and in Cyprus, Estonia and Malta, where reference is made to IFRS in this context. Acquired goodwill may not be depreciated on a systematic basis. Consequently, goodwill is only subject to an annual impairment test. Based on the notion that goodwill cannot be valued separately, IFRS requires the impairment test to be conducted on the aggregate of all assets including the goodwill allocated to every cash-generating unit. If the recoverable amount of a cash generating unit is less than its carrying value, an impairment write-down must be made. A reversal of an impairment identified with a cash generating unit is generally permitted. However, the recovery in value has to be ascribed first to the non-goodwill assets.

In case of buildings, eight Member States as well as IFRS require, and three Member States allow, the extraordinary write-down of the building if the fair value falls below book value. However, some of these states require the fall to be permanent. On the other hand, fourteen Member States do not allow an extraordinary write-down.

The similar finding applies to plant and equipment. If the fair value, or in some Member States going-concern value, is permanently lower than the book value, eight Member States follow IAS 36 in requiring an extraordinary write-down. Future losses must be taken up at the time they are identified. On the other hand fourteen states forbid this or at least neutralise its tax effect. Three Member States permit extraordinary write-downs, at least if the fall in value is permanent.

According to IFRS (IAS 2), inventories are required to be valued at lower of cost or net realisable value. Any write-down to net realisable value should be recognised as an expense in the period in which the write-down occurs. This lower-of-cost-or-market principle is also mandatory in twenty-one Member States. Four Member States prohibit writing inventory down to the lower market value for tax purposes. In those cases losses in value are deferred until realisation, normally disposal by way of sale or scrap.

Although twenty-one Member States follow the IFRS approach of the lower-of-cost-or-market principle, there are differences among them concerning the determination of the relevant market value. According to IFRS (IAS 2) net realizable value is the estimated selling price in the ordinary course of business, less the estimated cost of completion and the estimated costs necessary to make the sale. This sales market base applies to work-in-progress and finished goods in all twenty-one Member States allowing a write-down to a lower market value. Three Member States (Austria, Germany and Italy) write raw materials down to replacement cost determined from the procurement market.

3. Provisions

The IFRS explain the general recognition requirements for provisions in three specific cases: future operating losses, onerous contracts and restructurings. Provisions should not be made for future operating losses as such. However, an expectation of future operating losses may be an indication that certain assets of the operation have been impaired (IAS 37.65 (2006)). If an enterprise has a contract that is onerous, the present obli-

gation under the contract should be identified and the expected loss taken up as a provision. An onerous contract is one in which the unavoidable costs of meeting the obligations under the contract exceed the expected economic benefits (IAS 37.68 (2006)). Lastly, a provision for restructuring costs is taken up only when the general recognition criteria for provisions are met (IAS 37.71 2006)). This means that provision for future costs should only be made if the enterprise has no realistic way of avoiding them.

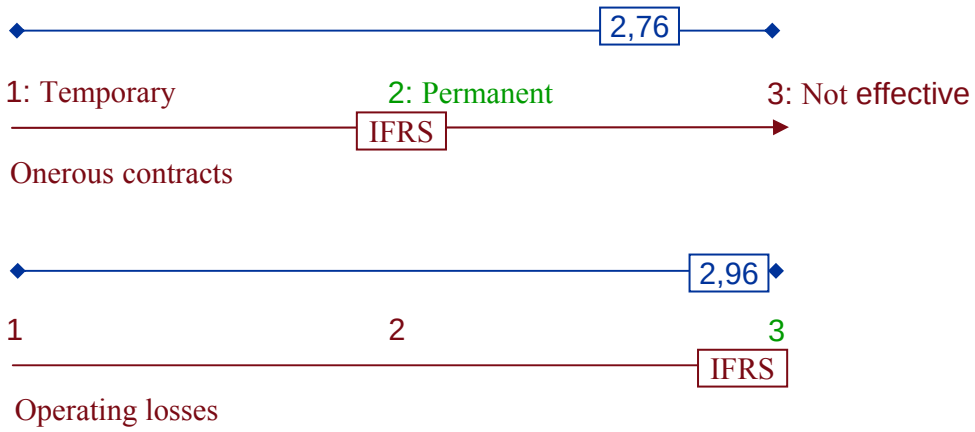

Figure 7: Anticipating losses – EU25 and IFRS rules regarding provisions

As far as the situation in the Member States is concerned, provision for future operating losses is confined to specific cases in the Netherlands only.

Moreover, most Member States do not accept provisions for anticipated losses on onerous contracts. Austria, Belgium, the Czech Republic, Estonia, France and the Netherlands permit such provisions.

IV. Conclusion

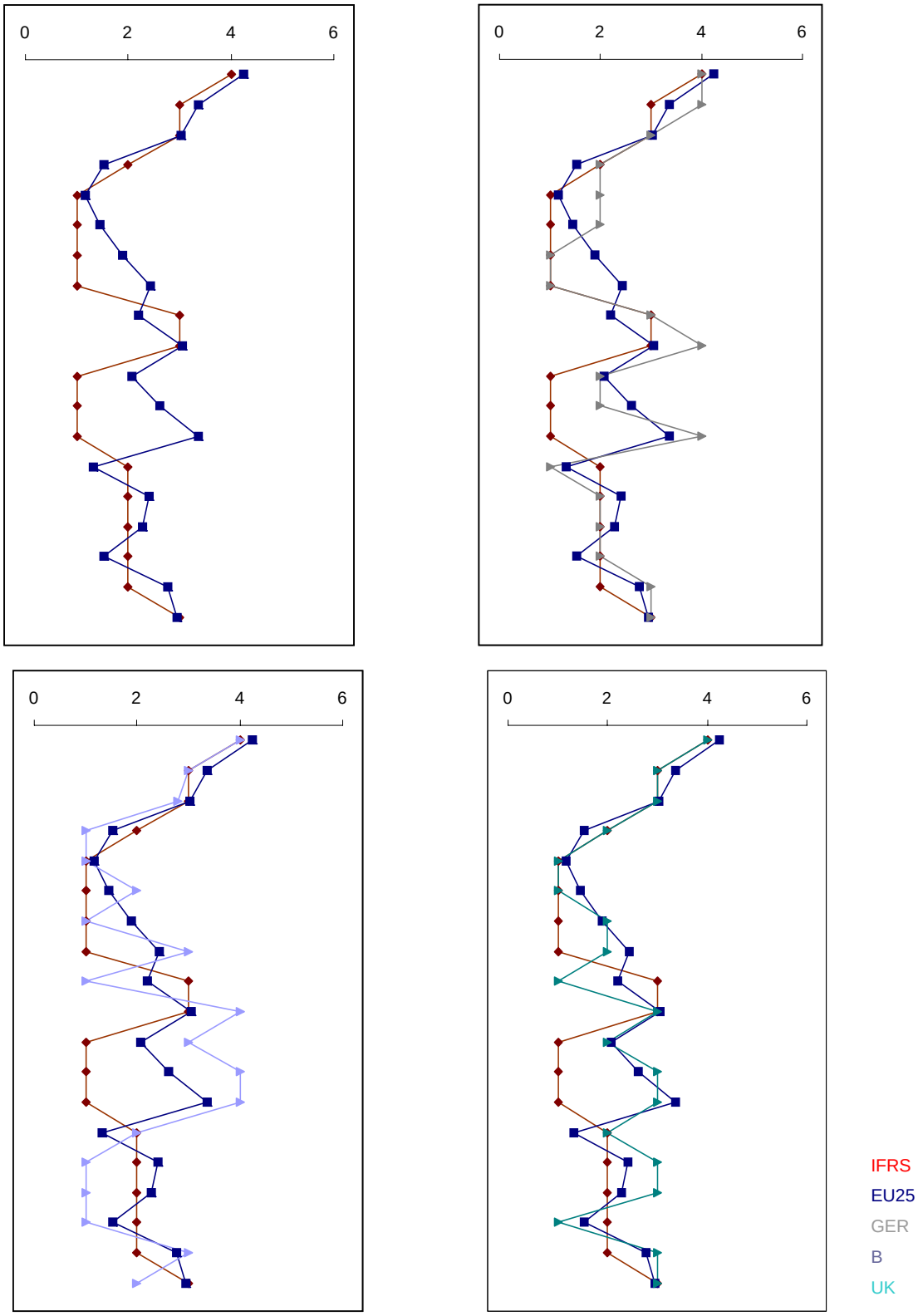

Figure 8: Conclusion – EU25 and IFRS accounting profiles

In order to draw a conclusion from our comparisons between the international accounting standards and the corresponding tax practice in the EU member states it may be helpful to combine the previous findings to a form of a "tax accounting profiles". These profiles make it clear that there are both similarities and differences. The profiles show that there is, for instance, a wide conformity with respect to revenue recognition and the treatment of research costs. Further, minor differences exist as to anticipating of losses through impairment or provisions. We appreciate that IFRS require fair value accounting with respect to financial assets held for trading. This revenue from increases in the carrying amount of certain financial assets, however, may be seen as an exception that proves the rule. By contrast, the revaluation of investments does not affect income since the revaluation gain is taken to reserves. The same is true if revaluation as an accounting model shall apply to a class of property, plant and equipment. By the way, fair value measurement of assets implying revaluation beyond acquisition costs is not uncommon in Europe. Some member states tax revaluation gains with respect to marketable securities (Czech Republic, France, Hungary, Italy, Ireland, the Netherlands, Slovakia, and the United Kingdom) or even tangible assets (France, Greece).

The profiles differ in terms of the capitalization of intangible assets and provisions. Further differences arise with respect to amortization. If we match these profiles with the results of our more normative considerations regarding proper tax accounting rules (green lines) it follows that there are good reasons for some of the EU member states to align their tax accounting rules with the international accounting principles. This holds especially for the capitalization of provisions but applies also to amortization. As far as the accounting for potential losses is concerned, a conclusion is not possible without taking the local rules regarding loss offset and inter-period loss compensation into account. However, our survey shows that different rules and various limitations exist. If a common European tax base is introduced, common standards for loss offset will be necessary. As a general rule, accounting for potential losses should be the more liberal; the greater limitations in the field of inter-period loss compensation exist.

Similar findings result, if we compare the international accounting principles with local tax accounting profiles. The German tax accounting profile, for example, displays a greater conformity with IFRS in terms of provisions and accounting for potential losses. Major differences arise in respect of cost values and amortization. Looking at Belgium

tax accounting provisions displays greater discrepancies in terms of cost values, amortization and impairment, which lead to a tax base that is comparatively small. Here, the amortization provisions, especially, may be fuelled by the potential objective to grant incentives for new investments. The tax accounting provisions for the United Kingdom, as a third example shows a widely comparable profile to the average of the EU member states. One major deviation refers only to the accounting for pensions. This can be traced back to the fact that in the United Kingdom unfunded retirement benefits exist but pension provisions are not tax-effective.

D. Effective Company Tax Burdens

I. Methodical Basics of Quantifying the Tax Effects

The consequences of the transition to tax accounting on a harmonised base using IFRS as a starting point on the effective tax burdens of companies are quantified using the European Tax Analyzer model. The non-tax framework of this model works as follows:[21] with the help of a computer-based company model, the development of a company is simulated over a period of ten years. As initial data for the tax calculations serve data of the asset equipment and funding as well as business plans. Business plans include variable estimates about production, sale, procurement, number of staff, staff costs and occupational pension schemes as well as investment, financing and distribution habits. In addition, economic data such as different lending and borrowing interest rates and inflation rates are taken into account. The company is funded with shareholders' equity and debt. With regard to the use of the profit it is implemented that besides the retention of profits the company may distribute dividends to its shareholders or invest in property, plant and equipment and financial assets.

For our investigation, the model includes the tax systems of Austria, Czech Republic, France, Germany, Ireland, Netherlands, Poland, and the United Kingdom. For the sake of comparability it is assumed here that companies in each country show identical business data before any taxation. Due to this necessary assumption any differences between

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[21] See Jacobs/Spengel, European Tax Analyzer, 1996; Jacobs/Spengel, Effective Tax Burden of Companies in Europe, 2002; Stetter/Spengel, European Taxation 2006, pp. 307-316 and 364-374.

pre- and post-tax data in the model can be solely attributed to taxation in the eight countries which are considered here. The tax liabilities in the countries are derived from the assessment of the companies over the ten year period under the rules of each country. Moreover, the effective tax burden is the expressed as the difference between the pre-tax and the post tax value of the firm at the end of the simulation period (i.e. period 10).

The calculations take into account all relevant taxes that may be influenced by the investments and financing. As the model firm is designed as a corporation, the tax burden can be calculated for the level of the corporation as well as for the level of the shareholders. However, the following concentrates on corporate taxes only (Table 1).

Country	Taxes
Austria	Grundsteuer (real property tax); Kommunalsteuer (payroll tax); Körperschaftsteuer (corporate income tax)
Czech Republic	Posemková daň (real property tax); Daň z příjmů právnických osob (corporate income tax)
France	Taxe foncière (real property tax); Taxe professionnelle (trade tax); Taxes et participations assises sur les salaires (employer's contributions); Impôt sur les sociétés (corporate income tax)
Germany	Grundsteuer (real property tax); Gewerbeertragsteuer (trade tax on profits); Körperschaftsteuer (corporate income tax); Solidaritätszuschlag (solidarity levy)
Ireland	Rates; Corporation tax
Netherlands	Onroerendezaakbelasting (real property tax); Vennootschapsbelasting (corporate income tax)
Poland	Podatek gruntowy (real property tax); Podatek dochodowy od osób prawnych (corporate income tax)
United Kingdom	Business rates; Corporation tax

Table 1: Company taxes considered

Referring to the tax bases, the most relevant items with regard to the assets and liabilities included in the capital stock and the effects of the corporate planning are considered. Furthermore, the tax module of the model allows to choose several accounting options (tax electives) enabling a company to influence its taxable profits. The rules for profit computation cover

- depreciation (methods and tax periods for all considered assets),
- inventory valuation (production costs, LiFo, FiFo and weighted average),
- development costs (immediate expensing or capitalization),
- contributions to employee pension schemes,

- elimination and mitigation of double taxation on foreign source income, and
- Loss relief.

II. Comparison of International Tax Burdens Based on National Accounting Rules

To estimate the consequences on the effective tax company tax burdens which result from the adoption of IFRS as a starting point for tax accounting, in a first step, the current tax situation is examined in the comparative countries. Therefore, information about the tax systems in operation as of 1 January 2006 is used. The first stage considers as a base data typical for a German manufacturing company of medium size. The model firm's most important financial ratios at the end of year six (the mid-point of the ten year comparison) based on the assumption of German taxation are shown in the first row of Table 2.

	Return on turnover %	Stocks / balance sheet %	Capital intensity %	Personnel intensity %	Equity ratio %	Return on equity %
Manufacturing industry (base case)	2.6	25.6	27.9	29.6	19.6	19.1
Chemical Engineering	2.9	21.4	31.9	22.9	27.9	16.1
Electrical Engineering	2.6	29.2	17.4	27.5	26.9	15.3
Food & Beverages	1.8	18.5	31.4	15.9	19.0	16.5
Automotive Vehicles	2.2	23.6	25.8	27.1	17.9	21.6
Engineering	2.6	31.6	18.6	32.8	21.5	17.6
Metal Production	2.7	24.6	29.0	25.6	21.3	22.7
Building & Construction	1.6	41.2	17.6	29.6	10.0	19.0
Service Trade	8.4	6.5	13.5	36.0	31.2	8.2
Commerce	1.1	35.4	19.6	11.7	16.3	16.9
Transport	-7.5	1.8	53.6	42.9	30.3	-19.3

Table 2: Financial ratios of companies from different industries (period 6)

Pre-tax data was derived from the Federal Reserve Bank of Germany.[22] The use of German pre-tax data simply is a matter of the availability of the data. However, it does not limit the scope of the model which, in principle, allows starting with any country specific pre-tax data. Moreover, in order to increase the relevance of the results, the

[22] See Deutsche Bundesbank, Verhältniszahlen aus Jahresabschlüssen deutscher Unternehmen von 1998 bis 2000, Statistische Sonderveröffentlichung 6, 2003, pp. 12-168.

second stage is to see how the results will be affected by alternative assumptions as regards the pre-tax data of the company.

Table 3 displays the effective tax burden of the base manufacturing company at the corporate level over the simulation period of ten years. From the results it is evident that there is a large dispersion of effective tax burdens which range between 768,473 € in Ireland and 2,471,896 € in France. These findings suggest that the attractiveness of particular locations from a tax perspective differs significantly. The model corporation assessed here bears a comparably low effective tax burden in Ireland and Poland. Company taxation in the Czech Republic, the Netherlands, and the United Kingdom can be deemed moderate, whereas Austria, France, and Germany can be classified as countries imposing a relatively high tax burden on corporations.

	Corporate income tax	Solidarity surcharge	Real estate tax	Payroll tax	Taxe Professionnelle	Trade tax	Overall Tax Burden
AT	1,139,413	-	91,844	488,026	-	-	1,719,283
CZ	1,160,549	-	14,665	-	-	-	1,175,214
DE	1,139,410	60,356	25,446	-	-	612,338	1,837,550
FR	1,649,127	-	80,890	334,699	407,180	-	2,471,896
IE	692,366	-	76,107	-	-	-	768,473
NL	1,344,502	-	25,372	-	-	-	1,369,874
PL	972,675	-	77,762	-	-	-	1,050,437
UK	1,045,076	-	210,279	-	-	-	1,255,355

Table 3: Impact of particular tax categories on the effective tax burden

In general, corporate income tax is the main determinant of the overall tax burden. Its share in the overall tax burden amounts to 90% and more in most countries. The highest corporate income tax burden is imposed by France and the Netherlands. Obviously, the high profit tax rates applied by these countries – 34% in France and 31.5% in the Netherlands – translate into high effective corporate income tax burdens. Accordingly, Ireland with a corporate income tax rate of 12.5%, displays the lowest effective corporate income tax burdens in our comparison. These results indicate that tax rates seem to determine the ranking of the countries regarding effective corporate income tax burden and, thus, the overall effective tax burden to a great extent, while rules for determining the taxable income (i.e. the tax base) seem to be only of minor importance. This becomes also evident if one compares the effective corporate income tax burdens in Aus-

tria (1,139,413 €) and Germany (1,139,410 €) displayed in Table 3. Both are almost equal and both country levy corporate income tax at rates of 25%.

In a certain number of countries, the effective corporate tax burden is also influenced by the levy of additional taxes – in particular in Austria, France, and Germany. Here, the proportion of additional taxes in the overall tax burden ranges between 33.3% in France and 34.7% in Germany as far as our base case is concerned. Although most countries levy only real estate tax in addition to corporate income tax, real estate tax is only of minor importance when determining the effective overall tax burden and cross-country differentials in tax burdens. However, this conclusion is not valid for the additional taxes imposed by Austria, France, and Germany. If these additional taxes are taken into account, the positions of these three countries worsen noticeable. For example, both Austria and Germany lose two positions in the country ranking.

The results discussed have been based on a company with a structure typical for a manufacturing business in Germany. To that extent, the differentials in effective tax burdens are the results of the specific facts of the case and should not be generalised. The conclusions depend on the extent to which the factors decisive for the application of the individual tax systems, the types of tax, the tax base and the tax rates, are relevant to the given business. This is also valid for the effects of differing accounting rules on the effective tax burdens. In particular, when examining the effective profit tax burdens it is not clear to what extent these differences are caused by variations of the tax bases or tax rates. Therefore, the following investigates the effects on the tax burden of changing the model in respect of the industry in which the business is active. In addition to the manufacturing industry, the chemical industry, electrical engineering, food and beverages, automotive vehicles, metal production, engineering, building and constructions, commerce, transport and service trade are examined. Table 2 shows the financial ratios for these companies, Table 4 the result of the simulations.

In Table 4 the German burden marks the zero line. The differentiation between the countries leads to different results depending on the relative weight placed on each factor relevant to taxation and therefore on the industry in which the business is active. This becomes especially obvious when one looks at the transport industry which, contrary to the model business taken here, will normally show only low profits or even

losses. In this case the total burden will be highly influenced by the non-profits taxes, which means that the French business must bear the highest burden by far. Also businesses located in Austria and the United Kingdom are bearing a higher tax burden compared to their German equivalent.

	AT	CZ	FR	IE	NL	PL	UK
Manufacturing Industry (Base Case)	-6.44%	-36.04%	34.52%	-58.18%	-25.45%	-42.83%	-31.68%
Transport	27.37%	-43.24%	126.36%	-34.38%	-26.86%	-22.70%	40.13%
Service Trade	-21.69%	-39.26%	4.36%	-61.18%	-26.88%	-50.16%	-21.10%
Metal Production	-12.33%	-36.54%	26.05%	-60.32%	-25.17%	-44.82%	-33.96%
Engineering	-9.25%	-35.28%	21.97%	-59.94%	-25.73%	-45.04%	-30.96%
Automotive Vehicles	-4.37%	-35.57%	42.09%	-59.31%	-25.26%	-42.94%	-36.58%
Food & Beverages	-13.96%	-38.36%	35.57%	-60.21%	-26.40%	-43.73%	-32.84%
Electrical Engineering	-14.92%	-36.05%	16.42%	-61.73%	-25.50%	-45.54%	-33.13%
Chemical Engineering	-14.53%	-36.50%	24.92%	-59.96%	-24.67%	-43.55%	-30.68%
Building & Construction	4.10%	-34.89%	36.77%	-57.00%	-26.80%	-44.89%	-34.22%
Commerce	-12.65%	-38.69%	15.20%	-63.05%	-27.60%	-45.74%	-39.67%

Table 4: Differences between the effective tax burdens for different industries in terms of current tax accounting rules from the German perspective

Applied to other businesses, the model shows that the burden differentials to Germany are sometimes lower and sometimes higher. There are various causes for this. The burden borne by German businesses in the building & construction industry is relatively low as a consequence of low profits. On the other hand, profitable businesses, such as service trade come off relatively badly in Germany.

In summary, the particular industry factor, in which the business operates, has a decisive influence on the amount by which the overall tax burden differs between one country and another. However, the results for our base case manufacturing company are, on the whole, confirmed for the other industries. In general, the effective burden in Germany remains the second highest in nearly all industries. Companies residing in France even bear a higher effective tax burden, as opposed to Ireland and Poland, where the tax burden is the lowest in our comparison. Moreover, the results also clearly show the considerably high current differences of effective company tax burdens within the EU which amount from 65.5 (service trade) to 169.6 percentage points (transport) depending on the industry.

III. Comparison of International Tax Burdens in Case IFRS Serve as a Starting Point for the Tax Bases

For the comparison of international tax burdens based on tax accounting according to IFRS as a starting point we assume that all countries considered here uniformly adopt certain standards. For the computation of the tax base according to IFRS the simulation takes into account those standards that reveal significant differences in the area of expenses. Indeed this analysis relies on the tax principle of realisation. Differences in connection with the realisation of revenues are disregarded (e. g. fair value accounting, percentage of completion method) since according to our findings in Section C the realisation principle is recognised and, thus, maintained as a general principle of tax accounting. Therefore, earlier recognition of revenues compared to current country practice is not possible. With regard to the deduction of expenses and costs respectively, the following five rules are considered simultaneously relevant:

- Depreciation method: depreciation on intangibles, buildings and tangible fixed assets is only allowed on a straight-line basis.
- Tax depreciation periods for buildings: manufacturing buildings are depreciated over 40 years and office buildings over 50 years.
- Production costs: in contrast to current country practice which optionally allows to account for partial costs, full costs are used in general.
- Valuation of inventories: The FIFO method is prescribed as a benchmark.
- Contributions to occupational pension schemes: IAS allow the projection of future developments on the balance sheet date (for commitments depending on salary as well as in regard to pension payments). In addition, the calculation interest rate is orientated on the long-term market interest rate.

The effects of an IFRS-based tax accounting for the international tax position of companies are determined under the premise that all countries uniformly take these specified IFRS as the basis for taxation. Therefore, an overlapping with special national tax rules and thus exceptions from the dependency principle shall not occur. Besides these accounting standards national tax accounting rules are still applied (e.g. elimination of double taxation on foreign income).

	AT	CZ	DE	FR	IE	NL	PL	UK
National GAAP (thousand €)	1,719	1,175	1,838	2,472	768	1,370	1,050	1,255
IAS/IFRS-based (thousand €)	1,737	1,215	1,861	2,507	770	1,375	1,059	1,301
Difference € (%)	1.05	3.40	1.30	1.42	0.26	0.36	0.86	3.67

Table 5: Changes in effective tax burdens in case of IFRS-based tax accounting (base case: manufacturing industry)

The changes in the effective tax burdens of the base case company of the manufacturing industry in case of a common tax base using the above mentioned IFRS as a starting point are displayed in Table 5. All countries show increases between 0.26% in Ireland and 3.67% in the United Kingdom. Therefore, the adoption of IFRS as a starting point for tax accounting would result in a broader tax base in all member states considered here. The expected increase of the effective tax burdens in the comparative countries can in essence be put down to the fact that the tax bases outside of Germany in regard to the funding of occupational pension schemes and the valuation of inventory are already mostly congruent with IFRS. However, the comparative countries have autonomous tax rules with respect to depreciation (capital allowances), which are especially more favourable in France and the Czech Republic, and the United Kingdom compared to the corresponding IFRS. This is documented by the highest increase of the tax burdens in these three countries compared to the other countries. Thus, abroad the additional burden in the area of depreciation caused by the transition to IFRS-based tax accounting is contrary to the situation in Germany not compensated through tax relieves in the area of expensing contributions to occupational pension schemes. Therefore, Germany takes a mid-position in the country ranking.

This result is confirmed for other industries. Table 6 shows the changes of the tax burdens from the German point of view for the transition from national to IFrS-based tax accounting. A positive (negative) sign signals either the reduction of disadvantages (advantages) in tax burden or the increase of advantages (disadvantages) in tax burden compared to the other countries from the point of view of the current tax law. Germany improves against the Czech Republic and the United Kingdom and loses positions against almost all other countries point of view.

	AT	CZ	FR	IE	NL	PL	UK
Manufacturing Industry	-0.24%	1.34%	0.18%	-0.44%	-0.70%	-0.29%	1.59%
Transport	-4.85%	0.58%	6.80%	-4.55%	-2.90%	0.09%	-0.65%
Service Trade	-0.01%	0.12%	-0.36%	-0.49%	-0.25%	0.08%	-0.69%
Metal Production	-0.10%	0.59%	0.45%	-0.66%	-0.56%	-0.29%	1.40%
Engineering	-0.19%	0.22%	-0.55%	-0.50%	-0.35%	-0.07%	0.49%
Automotive Vehicles	-0.18%	1.28%	-0.85%	-0.08%	-0.85%	0.16%	2.33%
Food & Beverages	-0.10%	0.81%	-0.54%	-0.96%	-0.73%	-0.26%	1.92%
Electrical Engineering	-0.03%	0.46%	-0.20%	-0.32%	-0.17%	0.03%	1.04%
Chemical Engineering	-0.11%	0.68%	-0.36%	-0.70%	-0.47%	-0.12%	-0.37%
Building & Construction	-0.21%	-0.64%	-2.18%	-1.57%	-1.17%	-0.36%	-1.63%
Commerce	-0.11%	0.04%	-0.75%	0.12%	-0.09%	-0.33%	-0.24%

Table 6: Changes in effective tax burdens from a transition to IFRS-based tax accounting for different industries from the German perspective

Finally, the tax consequences resulting from the adoption of IFRS as a starting point for tax accounting will be evaluated from the European perspective. From the perspective of the European Single Market, the transparency in the area of tax accounting will be improved through the creation of a common tax base in any case. This results in lower compliance costs for businesses. Moreover, obstacles in connection with cross-border activities would be reduced. The positive effects of such measures, for example the consequences from a cross-border loss setoff, however, are not examined in this paper because of its strict domestic view.

	AT	CZ	FR	IE	NL	PL	UK
Manufacturing Industry	-6.68%	-34.71%	34.70%	-58.62%	-26.15%	-43.12%	-30.10%
Transport	22.52%	-42.66%	133.16%	-38.93%	-29.76%	-22.61%	39.48%
Service Trade	-21.69%	-39.14%	4.01%	-61.67%	-27.13%	-50.08%	-21.79%
Metal Production	-12.42%	-35.95%	26.51%	-60.97%	-25.73%	-45.11%	-32.56%
Engineering	-9.44%	-35.06%	21.42%	-60.44%	-26.08%	-45.10%	-30.47%
Automotive Vehicles	-4.55%	-34.30%	41.24%	-59.39%	-26.11%	-42.77%	-34.25%
Food & Beverages	-14.06%	-37.55%	35.03%	-61.17%	-27.13%	-43.98%	-30.92%
Electrical Engineering	-14.95%	-35.59%	16.23%	-62.05%	-25.68%	-45.51%	-32.09%
Chemical Engineering	-14.64%	-35.82%	24.56%	-60.66%	-25.15%	-43.67%	-30.31%
Building & Construction	3.89%	-35.54%	34.59%	-58.57%	-27.97%	-45.25%	-35.85%
Commerce	-12.76%	-38.65%	14.46%	-62.93%	-27.69%	-46.07%	-39.91%

Table 7: Differences between the effective tax burdens for different industries in case of IFRS-based tax accounting rules from the German perspective

With respect to the results in Table 7, however, the cross-country differences in effective tax burdens are still too big for a homogenous economic area which is growing together faster and faster. As a result of the closer coordination of the tax bases, as it is the

case here, the remaining differences in tax burdens reflect the effects which result from the different national tax systems, types of tax and tax rates. Thus, a meaningful convergence of the tax competitive situation for companies within the EU demands more than just a harmonisation of tax accounting rules. One, especially, has to be aware of isolated interventions in national tax law because the current EU-wide differences of effective company tax burdens would rather increase than decrease in the future. Compared to the current situation (Table 4) the differences in tax burden depending on industry would increase from 65.5 to 65.7 percentage points in service trade (minimum) and from 169.6 to 175.8 percentage points in the transport industry (maximum).

The reason is that national tax systems are – as a general rule – designed as a whole; that is why comparative advantages and disadvantages of particular elements often offset each other. This is especially valid for the relation between the corporate tax base and the nominal tax rate which is often characterised through a 'broad' tax base and a 'low' tax rate or vice versa. Thus, in result of isolated interventions on the tax base, effects on the tax burden resulting from different nominal tax rates on profits become more apparent.[23] In addition, for very profitable companies which are examined in this paper the nominal tax rate compared to the tax base is crucially the more dominant factor (tax driver) on the effective tax burden.[24] Thus, the focus of the effort to converge the tax competitive situation for companies within the EU should in addition to the tax base lie on the nominal tax rates, especially an agreement about minimum tax rates would be an option with regard to the subsidiary principle.[25] This would also increase the attractiveness of the European market as a whole because the choice of location made by multinational investors in regard to homogenous economic markets shows a significant empirically provable correlation with the nominal tax burden.[26]

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[23] See the results in European Commission, Company Taxation in the Internal Market, 2001, p. 222.

[24] See for an analytical derivation of these connections Schreiber/Spengel/Lammersen, Schmalenbach Business Review 2002, pp. 6-17.

[25] Spengel, EC Tax Review 2007.

[26] This is shown in examinations about the choice of location for single EU member states by U.S. investors. See Devereux/Griffith, Journal of Public Economics 1998, pp. 335-367

E. Summary of results

Our comparison of tax accounting rules in the EU member states is based on selected accounting standards and the corresponding treatment for tax purposes. The analysis shows that IFRS could provide elements of a common and harmonised European tax base in certain areas. Following our study, these areas could cover the recognition of assets and liabilities, the determination of cost values, amortisation, impairment and treatment of onerous contracts.

From our survey it also follows that a common tax base would require common standards of loss compensation and the elimination of tax incentives from the tax base (in particular in the field of depreciation). Incentives in the tax base could be substituted by tax credits or grants.

However, fair-value accounting is not in line with tax accounting if taxable profits are recognised before realisation. The same would be true with a standard of revenue recognition taking into account that the existence of a signed contract is a valuable asset.

Altogether, IFRS provide a widely known and accepted standard of accounting provisions which could be used as a common denominator in developing an independent set of European tax accounting rules. Such a common tax base can, however, not be established by a formal link to IFRS.

A transition to tax accounting on the basis of IFRS as considered here has only minor effects on the effective tax burdens of companies.

An exclusive harmonisation of the tax accounting rules cannot alleviate the current EU-wide differences of effective company tax burdens. For this purpose, additional measures are necessary, especially the convergence of the nominal tax rates on profits.