# IMPORTANCE OF DEFERRED TAX REPORTING FOR EXTERNAL USERS – CASE OF CZECH REPUBLIC

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## ABSTRACT

The reporting of deferred tax is an instrument for distributable profit or loss regulation in a form of an accrual or a deferral. The research aimed at deferred tax in European companies is very limited. The majority of studies carried out in this issue concerns firms incorporated in the USA and covers period beginning 1994. The contribution to the current research in this issue is that the research is concerned to non US companies reporting according to IFRS. The materiality and structure of deferred tax category in the case of publicly traded companies operating in power and utilities sector in the Czech Republic is subject of the analysis. The research is built on results of the authors´ previous research. The materiality, structure and the impact on selected financial analysis ratios due to deferred tax reporting in periods before and after IFRS adoption are analyzed. The results of the analysis revealed the similar impact of the deferred tax category regardless to financial reporting system used.

**Keywords**: deferred tax, materiality, profit or loss, tax base.

## INTRODUCTION

The relationship between financial reporting and corporate income taxation has the complexity as a main attribute. The objectives of financial reporting and taxation are different and both are depending on local circumstances. While the aim of financial reporting is concentrated on fair reporting to users, it means the financial results must not be overestimated; the aim of taxation is to fill the state budget. From the perspective of business entities, there are efforts to minimalize the income tax base. Due to these facts, the reported profit or loss could differ from income tax base in majority states.

The level of difference is dependent on relationship between tax system and financial reporting system in a particular country. Differences between the tax base amount and the reported profit or loss can be characterized as permanent or temporary. Permanent differences´ effect (in the form of reduction or increase of taxable income comparing with reported income) is definitive. Temporary differences give rise to an accounting category called deferred tax. Deferred tax reflects the fact that the tax and rules for financial reporting in most countries differ.

Probability and time of realization of deferred tax assets (DTA) and deferred tax liabilities (DTL) are estimated for the most accurate deferred tax reporting. Reporting in accordance with deferred taxes model is a subject of challenge on several areas of research. The issue of deferred tax has been researched from various aspects. The majority of studies deal with the relationship of tax and accounting rules for income measurement [1], [2].

## LITERATURE AND THEORY

The deferred tax is only financial reporting category. The reporting of deferred tax is an instrument for distributable profit or loss regulation in a form of an accrual or a deferral, when in a period of lower payable income tax, the company postpones the part of the reported profit in a form of deferred tax liability. In a period of higher payable income tax, the company increases the reported profit by creation of deferred tax asset or by use of deferred tax liability.

According to [22] various approaches to the level of deferred taxes recognition are used in individual reporting systems (depending on special criteria – size, type of entity, financial reporting system used) - from ignoring deferred taxes through their partial recognition to full expression. Each of these approaches has a different effect on the financial statements and consequently provides a different information base for decision making of many users of these statements.

Non-recognition of deferred tax approach does not provide information applicable for a correct estimation of future tax payments, due to absence of insight into the future tax savings and tax payments. This approach does not consider business transactions which are recognized in that period when they are recognized by tax authorities, which may be before or after the period when the event itself is recognized in the financial statements. It does not record the relationship between accounting income and income tax expense in the income statement and leads to distortions in the net profit after tax.

The treatments for deferred tax reporting (for companies obliged for deferred tax reporting) do not differ significantly in particular financial reporting systems, while the income tax rules could be significantly different in particular countries. The deferred tax reporting issue is a main subject of IAS 12 – Income taxes within the IFRS. The similar treatment is in US GAAP ASC Topic 740 – 10 Income taxes.

According to IAS 12 the temporary differences are differences between the carrying amount of an asset or liability in the statement of financial position and its tax base. The tax base of an asset or a liability is the amount attributed to that asset or liability for tax purposes. These differences result in taxable or deductible amounts in future years:

a) Taxable temporary differences – which result in taxable amount in determining taxable profit or loss of future periods when the carrying amount of the asset or liability is recovered or settled, they could be result of earlier recognition of expenses or later recognition of revenues in determining taxable income in relation to accounting, which essentially leads to the postponement of tax payments for the reporting entity. A liability is reported on the company's balance sheet, and it measures the amount of the future tax liability that will be owed until the tax income is greater than the income reported in financial statements. This liability is called the deferred tax liability (DTL). It means that the payable income tax will be higher than if its calculation is based on reported profit or loss. The company makes a „provision" in a form of DTL for this part of the income tax payment and decreases the profit for distribution to owners, or
b) Deductible temporary differences – which result in amounts that are deductible in determining taxable profit or loss of future periods when the carrying amount of the asset or liability is recovered. They could be a result of later recognition of expenses or earlier revenue recognition in determining taxable income in relation to accounting, which means that the reporting entity expects tax savings in some future period, i.e. tax savings are subject of delay. Higher income tax will be paid to the government in present period, but it will be lowered in future periods. On the balance sheet of the company, a tax asset is included that measures the amount of future tax benefit that will be available when the book expense is expensed under financial reporting rules in present period, and it is deducted for tax purposes in future periods. This account is called the deferred tax asset account (DTA). In this case, the company saves on payable income tax in future, and it can increase the profit or loss for distribution to owners.

## Related Works

Many empirical studies [3], [2], [6], [4], [23], [24], [21], [20], [18], [14], [13], [19], [12], [25] were conducted in order to realize the size and sources of differences between reported profit or loss and taxable income and to research impacts of deferred tax reporting on different areas. These could be future tax payment, earning persistence, firm valuation, shares price or financial distress. A certain number of authors are concentrated only on temporary differences between accounting and taxable income and they especially focused on analysis of deferred taxes. The extent to which deferred taxes appear in financial statements determines how important they are for evaluation of companies` performances. For example [9] investigated materiality and structure of deferred tax for a sample of large (FORTUNE 50) U.S. corporations.

Study [4] approved a relation between book and tax reporting and firms' incentives to engage in earnings management activities. They used sample of firms incorporated in the U.S. because foreign firms face different financial accounting standards, tax rules, and incentives than U.S. firms. The dataset covers period 1994–2000. The conclusions of the study suggest that a deferred tax expense reporting can supplement accrual measures in detecting earnings management to avoid an earnings decline and to avoid a loss in future periods.

The study [18] investigates whether the implications of differences between book and taxable income for the persistence of earnings varies depending on the likely source of those differences. The sample covers all firms on the Compustat and CRSP data with non-missing asset and stock return data for the years 1993–2005.The results of the study provide the evidence that investors are able to look through to the source of large positive book-tax differences allowing them to correctly price the persistence of accruals. The study stresses the importance of considering the source of book-tax differences when using them as a signal of earnings quality.

[12] stress the effect of difference between taxable income and income reported in financial statements on bond ratings. The study is based on presumption that ratings affect debt pricing, ratings determine investment and firms more likely to issue debt than stock. The authors proved on the sample of 1,843 firms (US CRSP data 1994–2004) that firms with relatively large temporary differences are seen as higher risk and firms with small (large) relative taxable income are seen as higher risk.

[21] researched the association between book-tax differences (BTDs) and bankruptcy, no prior research had been published on bankruptcy had proposed the use of tax disclosures for predicting bankruptcy. Authors studied the efficiency of BTD information to predict bankruptcy during the 1995–2010 time period. They found that firms with extreme BTD changes relative to their industry median peers are more than twice as likely to experience bankruptcy over the 1 to 5 year's horizon. They proved that the abnormal change in BTDs is incrementally useful to an established financial statement measure used for bankruptcy prediction.

[20] considers important to examine whether deferred tax assets and liabilities actually provide incremental information about future tax payments. The research was carried out on a random sample of 200 out of 2,763 U.S. firms reporting for deferred tax in accordance with ASC 740 in a period 1994–2007. The results presented in his study indicate that there is an asymmetrical association between deferred tax assets and liabilities and future tax payments.

Some of the most recent studies link characteristics of BTDs with certain negative economic outcomes. [11] examine whether credit analysts utilize the information contained in the difference between book and taxable income (the book-tax difference) in analyzing a firm's credit risk (i.e., credit rating). They used a final sample consisting of 3,132 firm-year observations from 1994 to 2004 using U.S. Compustat database and CRSP stock return data. They found that large positive or negative changes in BTD signaling decreased earnings quality and/or increased off-balance sheet financing. They proved a significant negative association between positive changes in book-tax differences and credit rating changes and that large negative changes in book-tax differences are significantly associated with less favorable rating changes, consistent with these changes signaling decreased earnings quality (instead of decreased off-balance sheet financing).

[10] investigates the extent to which book-tax differences (BTDs) explain differences in cost of equity capital across firms. The analysis covers 1982–2006 period. The sample covers firm-years in the Compustat database that have non-missing asset data over the period 1977 through 2006. Sample sizes for the pre- and post- SFAS 109 sub-periods are 6,211 and 9,836 firm-years, respectively. The results indicate that variability in BTDs estimated over five or six years is positively and significantly related to cost of equity capital (estimated in various ways), whereas other BTD variables generally are not. If only a relatively short time-series of data is available, the absolute value of BTDs is positive and significantly related to cost of capital.

The most recent study [25] concerns the same issue – Book-Tax Differences and Future Earnings Changes. He examined a sample of U.S. incorporated firms from 1973–2006 with positive earnings, no net operating loss carryforwards, and non-negative tax expense. He revealed the evidence consistent with a negative association between temporary differences (identified with deferred taxes) and future changes in pretax earnings, and a positive association between permanent differences and future changes in tax expense.

It is difficult to find similar studies carried out for European firms. There are only studies [22], [7], and [16].

The first study carried out [22], covers the 20 largest non-financial companies and 20 banks in Serbia in the period 2009 – 2010. The research examines the materiality of DTA and DTL. The conclusions of [7] have shown the materiality of the deferred tax category in the Czech Republic – the median of deferred tax/total income tax ratio is 15.21% resp. 7.4% in the researched samples. As the most complex, the research [16] can be considered.

## METHODOLOGY

As can be clearly seen from the review of current results of research concerning the deferred tax, the research aimed at European companies is very limited. Moreover, the majority of studies covers period beginning 1994 and concerns firms incorporated in the USA. The year 1994 is the first year when the change of deferred tax can be computed due to effectiveness of SFAS 109 (respectively ASC 740). It means that the conclusions of all studies are based on similar dataset.

According to results of deferred tax research carried out in the U.S.A., the deferred tax category can be considered as material and necessary to meet the elementary quality characteristics and principles of financial reporting (accrual principle, the principle of prudence, faithful representation). The paper is concerned with the deferred tax issue in the Czech Republic context. The materiality and structure of deferred tax is necessary to be examined (the extent to which deferred taxes appear in financial statements determines how important they are for evaluation of companies` performances). Due to the fact that majority of previous researches carried out were concerned at companies reporting according to the US GAAP, the relation between profit or loss reported under US GAAP and tax base calculated according to US tax rules was researched. The relation between national GAAP and national rules for taxation in connection to deferred tax reporting in other countries was subject of the research only in minority of studies.

The paper concerns the impact of financial reporting system used on level of materiality of deferred tax reporting. The case of the Czech Republic was chosen due to the fact that publicly traded companies reported according to Czech national GAAP until the end 2004 and they are obliged to prepare their financial statements in an accord with IFRS since 2005 according to the regulation [1].

The research is based on results of previous study carried out by [7]. The materiality and the structure of reported deferred tax of non-financial publicly traded companies listed on Prague Stock Exchange operating in the sector Power & utilities in 2013 is the subject of the research. The dataset includes financial statements (amounts and components of deferred tax) of 5 companies (all listed companies operating in this sector in the Czech Republic) during 2010–2014. Our sample firms account for all publicly traded companies operating in the power and utilities sector in the Czech Republic.

Our research is divided into three parts. First, we evaluate the materiality of deferred tax category within our sample and we provide details on the most significant components of temporary differences. We are concerned with the changes in the structure of the deferred tax due to change in financial reporting system (comparison of deferred tax reporting according to the Czech accounting legislation (CAL) and IFRS. Second, we analyze the relation between deferred tax changes and the total income tax in the period and the relation between deferred tax changes and EBIT. Third, we compare the return on equity (ROE) and return on assets (ROA) to an adjusted ROE and ROA reflecting the elimination of deferred taxes effect.

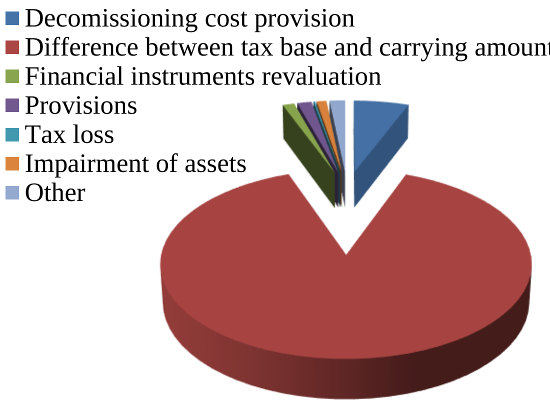
## RESULTS

The analysis of the materiality of the deferred tax category revealed that the share of deferred tax is in a range from 2.69% to 8.1% on the balance sheet total in the analyzed sample. The average share of deferred tax on balance sheet total is 5.63% and median is 5.53% in the analyzed sample. The results are very similar to conclusions of studies carried out in the USA. According to results of the study [9] 35.7% firms reported a net deferred tax position valued at more than five percent of total corporate assets. The following research [17] demonstrates that 35% of their sample firms report a net deferred tax position in excess of 5 percent of total assets and almost 10 percent report a net deferred tax position exceeding 10% of total assets. [15] analyzed the size of net DTA and net DTL (as share of total assets) on 2010 corporate balance sheets for all publicly traded companies and separately for S&P 500 companies. They showed that the mean size of the net DTL was 5.11% for all companies and 5.82% for the S&P. The mean size of the net DTA was 3.92% and 3.64%, respectively.

The titles for the deferred tax creation were subject of the following analysis and these were subject of a comparison with results of previous study carried out [15]. The most significant title for DTL or DTA creation is a difference between the tax base and carrying amount of fixed assets. This title represents almost 89% of DTL or DTA in average while the previous analysis of the authors revealed that the share was approximately 71%. The previous analysis was based on a data covering period 2002–2003. In this period, the companies prepared financial statements according to Czech accounting legislation which is based on the continental reporting system and reported profit or loss is close to the income tax base, while since 2005 the listed companies *(*companies in the sample*)* prepare financial statements in an accord with IFRS. The treatments for fixed assets reporting significantly differ in both systems due to possible application of revaluation model in IFRS, due to provisions for decommissioning costs as a part of cost of fixed asset reporting and due to time value of money considering in measurement*.* The decommissioning cost provision is the second most significant title for the deferred tax reporting in the analyzed sample *(*5.74*%).* This title could not be recognized in the previous research due to different rules for reporting in the previous period*.* The comparison of the deferred tax structure is the subject of the following table 1 and figures 1,2*.*

**Figure 1**

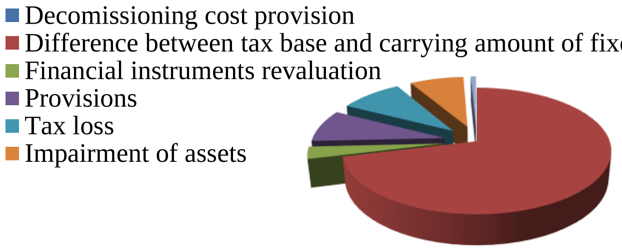
Structure of deferred tax category – period 2002-2003




Source*:* Authors´calculation

**Figure 2**

Structure of deferred tax category – period 2010-2014




Source*:* Authors´calculation

**Table 1**

Structure of deferred tax category

| **Title / Period** | **2002-2003** | **2010-2014** | **Change** |
|---|---|---|---|
| Decomissioning cost provision | 0 | 5,74 | 5,74 |
| Difference between tax base and carrying amount of fixed assets | 71,15 | 88,72 | 17,57 |
| Financial instruments revaluation | 3,07 | 1,22 | -1,85 |
| Provisions | 8,3 | 1,48 | -6,87 |
| Tax loss | 8,97 | 0,20 | -8,77 |
| Impairment of assets | 7,75 | 1,01 | -6,74 |
| Other | 0,76 | 1,63 | 0,87 |

Source*:* Authors´calculation

The analysis of the relations between deferred tax changes and the total income tax and Earnings after tax (EAT) in periods before and after adoption of IFRS revealed significant differences. In the period before obligatory adoption of IFRS (2002–2003) the share of deferred tax on income tax total and on EAT was significantly higher, the reason for these differences are the subjects of following research in this issue. In the period after adoption of IFRS the share of deferred tax decreases. The results of the analysis are a subject of following table 2.

**Table 2**

Share of deferred tax change on income tax total and EAT

| **Ratio/Year** | **2003** | **2004** | **2010** | **2011** | **2012** | **2013** |
|---|---|---|---|---|---|---|
| **deferred tax/ income tax total** | 37,19 | 36,6 | 9,832594 | 8,430682 | 11,53531 | 6,965385 |
| **deferred tax / EAT** | 16,70 | 29,50 | 2,423596 | 2,094966 | 3,106731 | 1,696705 |

Source*:* Authors´calculation

The comparison of ROE and ROA to an adjusted ROE and ROA reflecting the elimination of deferred taxes effect reveals that the effect of deferred tax reporting is not so high. The impact of deferred tax reporting was in a range from 0 to 8.29 before the IFRS adoption and from 0.02 to 1.17. It is evident that the effect of deferred tax reporting is less significant after adoption of IFRS by Czech companies operating in power and utilities sector. The reasons for these changes are subject of following research. The results of the analysis are a subject of following table 3.

**Table 3**

Impact of deferred tax reporting on ROE and ROA

| **Ratio/Year** | **2003** | **2004** | **2010** | **2011** | **2012** | **2013** |
|---|---|---|---|---|---|---|
| **ROE DT eliminated** | 12,53 | 15,80 | 15,89 | 16,92 | 15,03 | 15,02 |
| **ROE** | 11,75 | 15,64 | 15,43 | 16,48 | 14,57 | 14,78 |
| **ROA DT eliminated** | N/A | N/A | 8,93 | 9,83 | 8,90 | 9,11 |
| **ROA** | N/A | N/A | 8,68 | 9,56 | 8,61 | 8,96 |

Source*:* Authors´calculation

## CONCLUSIONS

The results presented in the paper are initial part of the research concerning the deferred tax reporting within the EU companies. We have investigated the materiality, structure and impact of deferred tax according to IAS 12 reporting. We have made a comparison of deferred tax according to the CAL and IFRS reporting effect. The data in a form of financial statements of publicly listed companies in the Czech Republic were processed. We have found that the structure of deferred tax does differ significantly, the most common title for DTA or DTL creation is difference between tax base and carrying amount of long–term assets (property, plant and equipment and intangible assets) in both systems (CAL and IFRS). The share of DTA or DTL on a balance sheet total is not material. The analysis showed that this share is not significantly different regardless to reporting system (5.63% in average for analyzed sample reporting according to IFRS, 5.11% for sample reporting according to US GAAP [17]). The conclusion is based on limited dataset. It is supposed, the future research involved in this issue will be submitted by more robust dataset concerning the financial data for majority of EU-listed companies. The issue will be researched also in context of European Small and Medium companies and their reporting.

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