INTRODUCTION

Deferred income tax is a category of balance sheet law that is used to accurately and explicitly present financial statements. Its recognition is justified in those entities that are subject to two existing laws, namely the balance sheet law and tax laws. The fulfilment of the reporting obligations of these laws requires a separate recognition of the tax consequences of events [Gierusz and Martyniuk 2015]:

− in accordance with the balance sheet law – for the balance sheet law;
− in compliance with the tax law – to fulfil fiscal obligations by the entity.

Deferred income tax is one of the most challenging issues faced by contemporary accountants. It requires a good knowledge of tax and accounting (balance sheet) regulations, since temporary differences, based on which deferred tax is calculated, depend on the valuation of assets and liabilities following the Accounting Act and the Corporate Income Tax Act. This article aims to present the principles of deferred income tax and to show its impact on the financial results of an enterprise using a sample simulation.

The research was limited to Polish accounting and tax regulations – while the International Accounting Standards (also used in Poland) are uniform for all countries, the tax regulations in each country may be different. Comparing the impact of deferred income tax on financial results in Poland and other countries may be the subject of further research.

THE EFFECT OF DEFERRED INCOME TAX ON A COMPANY’S FINANCIAL RESULTS

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ABSTRACT

The purpose of the article is to present the principles of deferred income tax and to show its impact on a company’s financial result. The article contains a comprehensive, synthetic theoretical approach to the issue of deferred income tax and is enriched with examples of calculations, which means that in addition to the theoretical layer, it brings additional practical value. The essence of deferred income tax, the stages of its determination, and the significance of temporary differences as a basis for calculations, are presented. To implement the research problem, the authors used an example simulation in which the impact of deferred income tax on a company’s financial results was presented. The conducted research showed that deferred income tax might have a positive or negative effect on the net financial result of a given entity, depending on whether the enterprise identifies more temporary negative or positive differences.

Key words: income tax, deferred tax, financial results

JEL codes: G3, H2
THE ESSENCE OF DEFERRED INCOME TAX

Income tax can be divided into current and deferred income tax. Current income tax is the result of tax compliance by enterprises; it is calculated as the product of interest rate and taxable income earned: taxable revenues − tax costs. Deferred income tax is a balance category resulting from the application of accounting regulations; it is calculated as a product of temporary differences and the tax rate (more on temporary differences later in the article). The purpose of calculating and recognizing deferred tax is to show in the company’s financial statements the effects of temporary differences occurring in the enterprise. Temporary differences result, among other things, from various methods of valuation of assets and liabilities and a different moment of recognizing revenues and costs for balance sheet and tax purposes [Poszwa 2015]. What at the moment might constitute a balance sheet cost or income is not always a taxable income or cost.

The obligation to recognize deferred income tax derives from Article 37 of the Accounting Act, which refers to the need to create deferred tax income and liabilities arising as a result of temporary differences1. However, this does not apply to all entities, but only to those with the status of a legal person [Gierusz 2014b] (which are subject to the Corporate Income Tax Act) and whose annual reports are subject to an obligatory audit by a statutory auditor.

The entities who are subject to two laws (balance sheet and tax laws), are obliged to fulfil their obligations, including reporting. Since both laws pursue different purposes and serve opposite functions, they consequently apply various principles of value measurement [Gierusz 2014a]. In accordance with the principles of accounting (balance sheet law), enterprises determine their financial results and, in conformity with tax law, their taxable income. Through use of a different valuation method or a different moment when revenue and costs are recognized, so-called temporary differences can flow, i.e. differences between the balance sheet and tax valuation of a given asset or liability.

In pursing the method of balance sheet liabilities, the determination and settlement of deferred income tax can be divided into several stages as presented:
I. Determination of the tax and balance value of liabilities and assets at the end of the reporting period.
II. Determination of temporary differences.
III. Determining the amount of assets and provisions for deferred income tax.
IV. Booking deferred income tax as a reduction or increase of the financial result burden.
V. Recognition of deferred income tax in financial statement:
   − as an asset or liability for deferred income tax in the balance sheet;
   − as deferred income tax (increasing or decreasing the financial result) in the income statement.

In conformance with Article 37(10) of the Accounting Act, the simultaneous fulfilment of at least two of the three following conditions is necessary to determine deferred tax assets and liabilities:
   − total balance sheet assets at the end of the financial year: PLN 25.5 million;
   − net revenues from sales of goods and products for the fiscal year: PLN 51 million;
   − average annual employment per full-time equivalent: 50 people.

Therefore, the deferred income tax applies only to large entities. However, economic entities whose statements are not mandatorily audited by statutory auditors, do not have to recognize deferred income tax in their accounting books and further in the financial statements.

The deferred method, which is based on the measurement of the income-cost result, i.e. mainly the principle of proportionality of these categories, assumes the “cleanliness” of the financial result for a given reporting period as the main goal of measuring deferred tax. The principles of valuation of assets and liabilities are subject to this measurement [Nurnberg 1969].

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THE SIGNIFICANCE OF TEMPORARY DIFFERENCES FOR DETERMINING DEFERRED INCOME TAX

Other principles for the valuation of operating fixed assets for balance and tax purposes result in differences in tax and balance values of these assets [Seredyński et al. 2013]. Therefore, the calculation of a company’s financial result, following the balance sheet law, often presents a different value than when calculating it in accordance with the tax law. If the accounting result is higher or lower than the tax result, positive or negative differences occur. Considering the time criterion, these differences can be permanent or temporary.

In compliance with the balance sheet law, the lasting discrepancies between revenues and expenses are irreversible. This means that certain costs that decrease the financial result are not recognized by tax law, thus increasing the tax base in relation to the gross financial result (the balance sheet recognizes the cost that reduces the financial result; the tax cannot recognize the cost, so taxable income is higher than the financial result). On the other hand, revenues constituting accounting income are free (exempt) from taxation, i.e. they reduce the tax base in relation to the gross financial result [Walilińska et al. 2011]. The opposite situation is found in the case of costs – non-tax revenue will be included in the balance sheet, it will increase the financial result; in turn, it does not constitute income tax, so that the tax base will be lower than the financial result. Furthermore, if the differences are lasting, they are eliminated from the income tax base. In contrast, in the case of non-tax fixed assets, they increase the amount of current income tax, and reduce the current liability to the tax office from income tax with respect to permanently non-tax revenues. Most often, these differences have the nature of lasting negative differences (costs are shaping the financial result which is non-tax-deductible).

If the differences are temporary, they are the basis for determining deferred tax. Negative temporary differences arise when the carrying amount of the asset is lower than its tax base and when the carrying amount of liabilities is higher than their value as determined under tax regulations [Gierusz 2014b]:

\[ CV_A < TV_A \text{ and } CV_L > TV_L \]

\[ CV_A \] – carrying value of asset,
\[ TV_A \] – tax value of asset,
\[ CV_L \] – carrying value of liability,
\[ TV_L \] – tax value of liability.

As a result of the determined values of temporary differences, tax liability should be calculated in accordance with the applicable tax rate, as a result of which deferred income tax asset or liability is created (Table 1).

Periodic differences between the financial result and the tax stem from the fact that in conformity with the balance sheet and tax laws, moments of recognition of a given income as achieved and a cost as incurred, differ. These differences are evened out in subsequent periods. Therefore, it is necessary to settle tax over time (hence the name “deferred tax”) [Stemplewska 2015].

Furthermore, temporary differences, i.e. differences that result in taxable amounts taken into account in the determination of taxable income (tax loss) in future periods, when the carrying amount of an asset or liability is realized or settled, are therefore taxable differences in future periods [Borowska 2011].

The negative temporary difference occurs when an enterprise cannot recognize tax costs at the moment, but will be able to do so in the future (it will then gain

<table>
<thead>
<tr>
<th>Table 1. Effect on the temporary difference in the financial result</th>
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<tbody>
<tr>
<td>Temporary difference</td>
</tr>
<tr>
<td>Liability/Asset</td>
</tr>
<tr>
<td>Effect on the financial result</td>
</tr>
</tbody>
</table>

Source: Authors’ own work.

a tax benefit). If temporary negative temporary differences occur in an enterprise, the income tax charged on the gross financial result (adjusted by permanent differences) would be lower in a given period than the income tax calculated on the tax result [Frymark 2006].

THE POSITIVE AND NEGATIVE IMPACT OF DEFERRED INCOME TAX ON THE FINANCIAL RESULT

The amount of a company’s financial result depends on the achieved revenues and balance sheet costs as well as the calculated income tax (including deferred tax). Enterprises, despite the application of national and international accounting regulations, retain some discretion e.g. in the selection of valuation methods, the method of settlement, or even calculation and activation of balance sheet costs. The possibility of legally influencing the final financial result also results from the fact that some balance sheet items (e.g. provisions) are determined based on projections and estimates [Michalczyk 2012]. Estimated categories also include deferred income tax, which is the effect of the so-called temporary differences and their probability of realizing (turning around) in the future. If there are more negative differences in an enterprise, a deferred tax asset is created, resulting in a reduced deferred tax amount, and when the entity has positive temporary differences, a deferred tax reserve is determined that increases the value of deferred income tax recognized in profit and loss account [Skrodzka 2017]. Therefore, the deferred tax asset has a positive effect on the company’s financial result (because it reduces the amount of income tax in the current period, i.e. the net financial result is higher), and the deferred tax provision increases the amount of deferred tax causing the net financial result to be lower.

The National Accounting Standard No 2 defines deferred income tax asset as a value that will likely reduce the future income tax expense (profit), and which results from the temporary negative differences, losses and tax reliefs to be settled in the future. A similar definition is provided in the International Accounting Standard No 12 on income tax.

Deferred tax assets are calculated in accordance with the following formula [Walińska 2012]:

\[ A_{DT} = DN \cdot R_{IT}\% \quad \text{or} \quad A_{DT} = \text{tax-loss} \cdot R_{IT}\% \]

- \( A_{DT} \) – deferred income tax assets,
- \( DN \) – temporary negative differences,
- \( R_{IT}\% \) – income tax rate applicable for the year in which the tax obligation arises (expressed as a percentage),
- \( \text{tax-loss} \) – tax loss to be settled in future periods, which, like a temporary negative difference, is the basis for determining the deferred tax asset.

Example of determining deferred tax assets from a temporary negative difference

An entity has a receivable with a nominal value of 50,000 recognized in the balance sheet. In compliance with the balance sheet law, it adjusts its value by revaluation write-downs of the receivable in the amount of 25,000, which means that the carrying value of this receivable is 25,000. For tax purposes, this receivable is valued at the nominal value, i.e. 50,000. Write-downs on receivables are not taken into consideration under tax law until the debt becomes probable [Palka 2011]. The carrying value and tax value of this receivable are as follows (receivables in the balance sheet are in the asset position, so to determine the value of temporary differences and deferred income tax, the formula for assets should be used):

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2 Announcement No 13 of the Minister of Finance of 22 June 2010 regarding the announcement of the resolution of the Accounting Standards Committee regarding adoption of the revised national accounting standard No 2 “Income tax”.

3 Point II.2 of Resolution No 7/10 of the Accounting Standards Committee of 20 April 2010 regarding the adoption of the revised national accounting standard No 2 “Income tax”, p. 4.

\[ CV_A = 50,000 - 25,000 = 25,000 \]
\[ TV_A = 50,000 \]
\[ 25,000 < 50,000 \]
\[ CV_A < TV_A \]

As a result, a negative temporary difference of 25,000 arises \((25,000 - 50,000 = -25,000)\). The 19% tax calculated on it will be considered a deferred income tax asset.

\[
25,000 \cdot 19\% = 4,750 \rightarrow \text{deferred income tax asset}
\]

This amount would reduce deferred income tax disclosed in the profit and loss account in the current period by PLN 4,750. When the asset is realized, that is, in this case, e.g. receipt of a final court judgment regarding the enforcement of this claim, the value of the temporary difference, i.e. the amount of the write-off on receivables, would be included in tax costs, which would reduce the income tax payable. On the other hand, the deferred tax asset would be dissolved, which would result in an increase in deferred income tax by the same amount.

The asset calculated in conformance with the above rule is subject to recognition in the accounting books, provided that the entity is likely to achieve income in future periods allowing deduction of amounts resulting from negative differences and losses to be settled [Gierusz 2014a].

The deferred income tax liability is created based on temporary positive differences. In other words, the deferred income tax liability is the amount of tax that will be payable in future reporting periods resulting from the existence of temporary positive differences.\(^5\)

Temporary positive differences increase the tax base in the future – this situation takes place in periods when the carrying value of assets is realized and the liabilities are settled.\(^6\) It means that at the date of determining the temporary differences (end of the reporting period), the entity has balance sheet income that affects the financial result but is not recognized in the tax account at the same time. In the future, however, the tax revenue will be recognized, which will increase taxable income and thereby increase the amount of tax liability in the future.

The deferred income tax liability is calculated in pursuance of the following formula [Walinańska 2012]:

\[
L_{DT} = DP \cdot R_{IT}\%
\]

\(L_{DT}\) – deferred income tax liability,
\(DP\) – temporary positive difference,
\(R_{IT}\%\) – income tax rate appropriate for the year in which the tax obligation arises (expressed as a percentage).

**Example of determining deferred tax liability from a temporary positive difference**

An entity has granted a loan of 100,000 to another entity, with interest to be paid in future periods amounting to 30,000. For balance purposes, the loan receivable should be shown in the amount due, i.e. principal receivable + interest, in the value of 130,000. Tax interest should be recognized as revenue at the moment of actual receipt. It means that, for the purposes of tax assessment, this receivable should be included in the principal amount, i.e. 100,000. Receivables in the balance sheet are in the asset position, so the asset formula should be used to determine the value of temporary differences and deferred tax.

\[ CV_A = 100,000 + 30,000 = 130,000 \]
\[ TV_A = 100,000 \]
\[ 130,000 > 100,000 \]
\[ CV_A > TV_A \]

As a result, a positive temporary difference of 30,000 arises \((130,000 - 100,000 = 30,000)\). The 19% tax calculated on it will be considered a deferred income tax liability.

\[
30,000 \cdot 19\% = 5,700 \rightarrow \text{deferred income tax liability}
\]

This amount would increase the deferred income tax recognized in the income statement by PLN 5,700 in the current period. The temporary difference will be real-

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\(^6\) Point 2 of the Resolution No 7/10 of the Accounting Standards Committee dated as of 20 April 2010 on the adoption of the revised national accounting standard No 2 “Income tax”, p. 3.
ized when the company receives interest on the loan it granted. Then the tax revenue will be recognized for the interest received and the related need to pay current income tax. On the other hand, the deferred tax provision will be released (because the reserve has been used), which will reduce the value of deferred income tax.

Deferred income tax may have a negative impact on the financial result, such as the current income tax charge, which constitutes a liability to the tax office. Interestingly, deferred income tax may also have a positive effect on the financial result, as when its value is negative, it increases the financial result. Tables 2 and 3 present a simulation of two cases — the first showing the positive impact of deferred tax on the financial result and the other showing the negative impact on the financial result of an enterprise.

The deferred income tax asset caused by a temporary negative difference in the value of receivable, due to the write-down of receivable, decreased the income tax included in the accounting books and therefore the net financial result is higher than if the asset was not present. At the same time, it should be noted that the amount of 19,000 should be paid to the tax office which is an obligation for the entity in respect to the current income tax. The example presented in Table 2 shows that deferred income tax is an accounting category that is not directly subject to settlement with tax administration authorities.

The opposite of the above may also occur, i.e. there will be an advantage of positive temporary differences in the entity, which will, in turn, increase the tax burden as depicted in Table 2.

The deferred income tax liability caused by a temporary positive difference in the value of the receivable due to a loan, stemming from the different moment of recognition of interest income on receivables, increased income tax recognized in the accounting books. Therefore the net financial result is lower than if this reserve was not present. Similarly to the previous simulation, in the example presented in Table 2, an amount of 19,000 must be paid to the tax office, constituting a liability for current income tax.

### Table 2. The positive impact of deferred tax on the financial result

<table>
<thead>
<tr>
<th>Procedure for calculating the financial result</th>
<th>Value (PLN)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross financial result (calculated under the provisions of the Accounting Act)</td>
<td>100 000</td>
</tr>
<tr>
<td>Current income tax (assuming that the taxable income is equal to the financial result)</td>
<td>19% · 100 000 = 19 000</td>
</tr>
<tr>
<td>Deferred income tax: Deferred income tax asset (the effect of a temporary negative difference from the write-down for receivables(^a))</td>
<td>–25 000 · 19% = –4 750</td>
</tr>
<tr>
<td>Total income tax (current and deferred)</td>
<td>19 000 + (–) 4 750 = 14 250</td>
</tr>
<tr>
<td>Net financial result (after deducting income tax)</td>
<td>100 000 − 14 250 = 85 750</td>
</tr>
</tbody>
</table>

\(^a\) The tax effect of the temporary negative difference caused by the write-down on receivable was presented earlier.

Source: Authors’ own work.

### Table 3. The negative impact of deferred tax on the financial result

<table>
<thead>
<tr>
<th>Procedure for calculating the financial result</th>
<th>Value (PLN)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross financial result (calculated under the provisions of the Accounting Act)</td>
<td>100 000</td>
</tr>
<tr>
<td>Current income tax (assuming that the taxable income is equal to the financial result)</td>
<td>19% · 100 000 = 19 000</td>
</tr>
<tr>
<td>Deferred income tax: Deferred income tax liability (the effect of a temporary negative difference from the write-down for receivables(^a))</td>
<td>30 000 · 19% = 5 700</td>
</tr>
<tr>
<td>Total income tax (current and deferred)</td>
<td>19 000 + 5 700 = 24 700</td>
</tr>
<tr>
<td>Net financial result (after deducting income tax)</td>
<td>100 000 − 24 700 = 75 300</td>
</tr>
</tbody>
</table>

\(^a\) The tax effect of the temporary positive difference caused by interest on receivable from the loan granted was presented earlier.

Source: Authors’ own work.
SUMMARY

Deferred income tax is an indication of the future tax benefits or liabilities in the current reporting period that will be implemented in the future. The differences between the determination of the financial result for accounting purposes and the taxable income in accordance with the tax regulations can be so large that they could significantly distort an entity’s financial result. Deferred income tax is designed to show tax consequences of events recognized in compliance with the balance sheet law. Therefore, it serves as a means to eliminate distortions in the financial statements due to the need to use a dual approach: balance sheet and tax. The article contains a comprehensive, synthetic theoretical approach to the issue of deferred income tax, and by enriching it with examples of calculations, brings additional practical value in addition to the theoretical layer.

As research has shown, deferred tax may increase the income tax shown in the profit and loss account and, consequently, reduce the financial result. In economic practice, there may also be situations where deferred tax will have a positive effect on the financial result by reducing income tax (in part regarding deferral) in the profit and loss account. Hence, deferred income tax is often seen as either a cost or income for an enterprise. Deferred income tax is a kind of “buffer” that protects against sudden changes in the financial result due to events affecting income tax at another time. Entities obliged to demonstrate deferred income tax (and therefore deferred tax assets and provisions) protect themselves against the effect of positive or negative temporary differences. Due to the differences between balance sheet law and tax law, these differences in large entities are quite frequent.

Lawmakers narrowed the group of entities that are subject to this obligation to recognize deferred tax assets and liabilities by exempting from it natural persons who are conducting economic activity and other entities without legal personality, as well as legal persons whose financial statements are not subject to mandatory auditing by an auditor. In fact, this group now consists of large business entities in which both the accounting department and the registration system are usually very extensive.

Deferred income tax, in its essence, is quite complicated, as in addition to knowledge of accounting and tax regulation, it is based on the probability of future events. In some situations, the issue of probability can be difficult to determine. The most challenging task in the process of determining deferred income tax is identifying events that give rise to temporary differences. Then, the probability of realizing these differences in the future is determined and the correct valuation for balance and tax purposes is achieved (determining the amount of the temporary difference). Accountants responsible for calculating deferred income tax must be well acquainted, on the one hand, with the provisions of the Accounting Act (possibly in addition to National and/or International Accounting Standards), and on the other hand, with the Act on Corporate Income Tax. For this reason, deferred income tax is not an easy category, as it requires knowledge of many provisions from two seemingly similar, but different areas – balance sheet and tax law.

Investors can also use information about deferred income tax assets and liabilities as information about future liabilities or benefits due to income tax. Recognizing a deferred income tax asset indicates that an entity anticipates that income allowing this item to be realized will be generated in the future. Under the precautionary principle, in order to recognize a deferred income tax asset, it should be possible to obtain sufficiently high income in future periods, at least in the amount corresponding to temporary negative differences.

Since currently there are many discrepancies between accounting and tax regulations, it could be claimed that the role of deferred tax in the coming years shall not decrease. The long-term harmonization of accounting and tax regulations shall undoubtedly be a tedious and challenging process, which means that legal persons whose accounts are subject to obligatory audit by a statutory auditor shall not soon be able to forget about deferred income tax.

REFERENCES

PŁYW ODROCZONEGO PODATKU DOCHODOWEGO NA WYNIK FINANSOWY PRZEDSIĘBIORSTWA

STRESZCZENIE

Celem artykułu jest zaprezentowanie zasad funkcjonowania odroczonego podatku dochodowego oraz ukaza-
nie jego wpływu na wynik finansowy przedsiębiorstwa. W artykule zawarto kompleksowe, syntetyczne uję-
cie teoretyczne zagadnienia odroczonego podatku dochodowego oraz wzbogacono je o przykłady wyliczeń,
co powoduje, że oprócz warstwy teoretycznej wnosi on dodatkową wartość praktyczną. Przedstawiono istotę
funkcjonowania odroczonego podatku dochodowego, etapy jego ustalania oraz znaczenie różnic przejściowych
będących podstawą jego wyliczeń. Aby zrealizować postawione we wstępie problem badawczy, autorzy posłu-
żyli się przykładową symulacją, w której przedstawiono wpływ odroczonego podatku dochodowego na wynik
finansowy przedsiębiorstwa. Przeprowadzone badania wykazały, że odroczony podatek dochodowy może mieć
pozytywny lub negatywny wpływ na wysokość wyniku finansowego netto danej jednostki gospodarczej w za-
leżności od tego, czy przedsiębiorstwo identyfikuje więcej różnic przejściowych ujemnych, czy dodatnich.

Słowa kluczowe: podatek dochodowy, podatek odroczony, wynik finansowy