LEVEL 1:
FINANCIAL REPORTING & ANALYSIS

Reading 23 (9th out of 12): INCOME TAXES

Difficulty: **medium**

Benchmark Study Time: **3.25h**

2022

THIS E-BOOK:

- is a selective summary of the corresponding Reading in your CFA® Program Curriculum,
- provides place for your own notes,
- helps you structure your study and revision time!

How to use this e-book to maximize your knowledge retention:

1. **Print** the e-book in duplex and bind it to keep **all** important info for this Reading **in one place.**
2. **Read** this e-book, best twice, to grasp the idea of what this Reading is about.
3. **Study** the Reading from your curriculum. **Here add** your notes, examples, formulas, definitions, etc.
4. **Review** the Reading using this e-book, e.g. write your summary of key concepts or revise the formulas at the end of this e-book (if applicable).
5. **Done?** Go to your study plan and change the Reading's status to **green**: (it will make your Chance-to-Pass-Score™ grow ☺).
6. **Come back** to this e-book from time to time to **regularly review for knowledge retention!**

NOTE: While studying or reviewing this Reading, you can use the tables at the end of this e-book and mark your study/review sessions to hold yourself accountable.

DEFINITIONS

accounting profit (income before taxes, pretax income) = reported in the company's income statement; forms a basis for computing tax expense:

$$\text{income tax expense} = \text{the company's tax rate} \times \text{accounting profit}$$

taxable income = income calculated for tax purposes; forms a basis for computing tax payable:

$$\text{tax payable} = \text{the company's tax rate} \times \text{taxable income}$$

tax recoverable = the amount of taxes that will be returned to the company

Also:

$$\text{income tax expense} = \text{tax payable} + \text{net increase in deferred tax liabilities} - \text{net increase in deferred tax assets}$$

DEFERRED TAX ASSET VS DEFERRED TAX LIABILITY

deferred tax asset/liability = created when tax payable and tax expense are not the same in a given period and the company expects that the difference will be covered in future periods.

tax payable > tax expense → the company has to pay more taxes than the income statement reveals **+ if** the company expects to recover the difference → the company should record a **deferred tax asset** in the balance sheet

$$\text{deferred tax assets} = \text{tax payable} - \text{tax expense}$$

tax payable < tax expense → the company has to pay less taxes than the income statement reveals **+ if** the company expects to pay the difference in future periods → the company should record a **deferred tax liability** in the balance sheet:

$$\text{deferred tax liability} = \text{tax expense} - \text{tax payable}$$

HERE KNOWLEDGE RETENTION HAPPENS | WRITE: notes, examples, formulas, definitions, relations, etc.

Deferred tax assets vs Valuation allowance

valuation allowance = under U.S. GAAP, a reserve created against a deferred tax asset if the probability of future economic benefit from the deferred asset becomes doubtful (under IFRS, the deferred tax asset would be reversed)

If, from one period to another, the valuation allowance decreases, it might suggest an increasing probability that the deferred tax asset will be fully utilized (before it expires) against future income, i.e. expectations of future earning power are bigger.

If, from one period to another, the valuation allowance increases, it might suggest a decreasing probability that the deferred tax asset will be fully utilized (before it expires) against future income, i.e. expectations of future earning power are lower.

Also decreasing valuation allowance means decreasing income tax expense, and vice versa.

Deferred tax liability analysis

deferred tax liability from the perspective of an analyst

- If expected to be reversed in the future → treat as **liability**
- If not expected to be reversed in the future → treat as **equity**
- If both the amount and the timing of the reversal is uncertain → exclude from **liabilities & equity**

RULE OF THUMB FOR DEFERRED TAX ASSETS & LIABILITIES IN YOUR EXAM

If during your exam you'll have problems deciding whether a deferred liability or asset should be recorded, remember that **the accounting equation must always hold**. For tax-related questions, we can write this equation in this simplified form that should help you visualize the problem:

$$\text{assets} - \text{tax payable} = \text{equity} - \text{tax expense} + \text{liabilities}$$

Tax payable is what is owned to the judiciary and it will decrease the cash, which is an asset. Tax expense is what is subtracted in the income statement and it will reduce the equity because retained earnings are part of equity.

So, if tax payable and tax expense are not equal, then:

- if tax expense < tax payable → we add deferred tax asset on the left side or reduce deferred tax liability on the right side to balance the accounting equation,
- if tax payable < tax expense → we add deferred tax liability on the right side or reduce deferred tax asset on the left side to balance the accounting equation.

HERE KNOWLEDGE RETENTION HAPPENS | WRITE: notes, examples, formulas, definitions, relations, etc.

DIFFERENCE BETWEEN TAX BASE & CARRYING AMOUNT OF THE ASSET

tax base = the value at which a balance sheet item is valued for tax purposes

carrying amount = the value at which a balance sheet item is valued for accounting purposes

tax base of an asset < carrying amount of an asset → deferred tax liability

tax base of an asset > carrying amount of an asset → deferred tax asset

tax base of a liability < carrying amount of a liability → deferred tax asset

tax base of a liability > carrying amount of a liability → deferred tax liability

A difference between tax payable and tax expense results from different values of taxable income and accounting profit.

PERMANENT DIFFERENCES VS TEMPORARY DIFFERENCES

Permanent differences between taxable income and accounting profit

If the difference between taxable income and accounting profit is permanent (and not covered in future periods), neither deferred tax asset nor deferred tax liability is created. A common example of a situation in which the difference is permanent is when some costs are included in the income statement but are not tax deductible, or when a part of income is not taxable, but it is included in the income statement.

Deductible expense & not taxable income

If an expense is deductible for tax purposes, it means that it can be deducted while computing taxable income.

If a part of income is not taxable, it means that we don't have to pay tax on it.

Temporary differences between taxable income and accounting profit

There is a temporary difference between taxable income and accounting profit when:

- some of the revenue is recognized in one period for tax purposes and in a different period for accounting purposes,
- some of the expenses are recognized in one period for tax purposes and in a different period for accounting purposes,
- the carrying amount and tax base of a balance sheet item are different.

HERE KNOWLEDGE RETENTION HAPPENS | WRITE: notes, examples, formulas, definitions, relations, etc.

TAX RATE CHANGES & EFFECTIVE TAX RATE

Tax rate changes

If the tax rate changes, deferred tax assets and liabilities should be adjusted and the current tax expense is impacted. The change should be reflected in the current accounting profit.

tax rate increases → deferred tax asset/liability increases →

→ usually current tax expense increases → net income decreases

tax rate decreases → deferred tax asset/liability decreases →

→ usually current tax expense decreases → net income increases

Effective tax rate

$$\text{effective tax rate} = \frac{\text{income tax expense}}{\text{pretax income (accounting income)}}$$

where:

$$\text{income tax expense} = \text{current income taxes} + \text{deferred taxes}$$

The effective tax rate will be different than statutory tax rate if there are permanent differences between taxable income and accounting profit. Also, if a company operates under different tax regimes (for example in 2 countries with different statutory tax rates), the effective tax rate will be different than statutory tax rates.

RECOGNITION, MEASUREMENT & CLASSIFICATION OF TAXES

Key points:

- current taxes payable are based on the tax rate applicable at the balance sheet date,
- deferred taxes are measured using the tax rate expected to be applicable at the future date (when the deferred asset will be realized or the deferred liability settled),
- we never compute the present value of deferred tax assets or liabilities to measure their value,
- both current taxes and deferred taxes are recognized on the income statement (exception: current and deferred taxes charged directly to equity or deferred taxes related to business combination),
- we reassess deferred taxes at the balance sheet date (take into account e.g. changes in tax rates, the probability of future economic benefit, etc.),

HERE KNOWLEDGE RETENTION HAPPENS | WRITE: notes, examples, formulas, definitions, relations, etc.

Key points:

- Under U.S. GAAP, the valuation allowance is a reserve created against a deferred tax asset if the probability of future economic benefit from the deferred asset becomes doubtful.
- Under IFRS, the deferred tax asset is reduced if the probability of future economic benefit from the deferred asset becomes doubtful.
- According to IFRS, if we reduce the carrying amount of deferred assets, we can increase it in future periods if there are circumstances that support it.
- According to U.S. GAAP, the valuation allowance can be reduced and the deferred asset increased in future periods if there are circumstances that support it.
- Both, under IFRS and U.S. GAAP, the recognition of a deferred tax liability should be similar to the recognition of the item that resulted in recording the deferred liability. In other words, if we are dealing with an item that goes directly to equity, e.g. revaluation surplus of PP&E, then the deferred liability related to this item should also go directly through equity (and omit the profit & loss statement).
- Under IFRS, deferred tax assets and liabilities are classified as noncurrent.
- Under U.S. GAAP, deferred tax assets and liabilities are classified as either current or non-current depending on the classification of the underlying item.

HERE KNOWLEDGE RETENTION HAPPENS | WRITE: notes, examples, formulas, definitions, relations, etc.

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Summarizing key concepts:

☐ Definitions

My summary:

☐ Deferred tax asset vs Deferred tax liability

My summary:

☐ Difference between tax base & carrying amount of the asset

My summary:

☐ Permanent differences vs Temporary differences

My summary:

☐ Tax rate changes & Effective tax rate

My summary:

☐ Recognition, Measurement & Classification of Taxes

My summary:

Reviewing formulas:

$$\text{income tax expense} = \text{the company's tax rate} \times \text{accounting profit}$$

Write down the formula:

$$\text{tax payable} = \text{the company's tax rate} \times \text{taxable income}$$

Write down the formula:

$$\text{income tax expense} = \text{tax payable} + \text{net increase in deferred tax liabilities} - \text{net increase in deferred tax assets}$$

Write down the formula:

$$\text{deferred tax assets} = \text{tax payable} - \text{tax expense}$$

Write down the formula:

$$\text{deferred tax liability} = \text{tax expense} - \text{tax payable}$$

Write down the formula:

$$\text{assets} - \text{tax payable} = \text{equity} - \text{tax expense} + \text{liabilities}$$

Write down the formula:

$$\text{effective tax rate} = \frac{\text{income tax expense}}{\text{pretax income (accounting income)}}$$

Write down the formula:

$$\text{income tax expense} = \text{current income taxes} + \text{deferred taxes}$$

Write down the formula:

Keeping myself accountable:

TABLE 1 | STUDY

When you sit down to study, you may want to **try the Pomodoro Technique** to handle your study sessions: study for 25 minutes, then take a 5-minute break. Repeat this 25+5 study-break sequence all throughout your daily study session.

✔ Tick off as you proceed.

POMODORO TIMETABLE: study-break sequences (25′ + 5′)													
date		date		date		date		date		date		date	
25′		25′		25′		25′		25′		25′		25′	
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25′		25′		25′		25′		25′		25′		25′	
5′		5′		5′		5′		5′		5′		5′	

TABLE 2 | REVIEW

Never ever neglect revision! Though it's not the most popular thing among CFA candidates, regular revision is what makes the difference. If you want to pass your exam, **schedule & do your review sessions.**

REVIEW TIMETABLE: When did I review this Reading?													
date		date		date		date		date		date		date	
date		date		date		date		date		date		date	