soleadea

LEVEL 1:
FINANCIAL REPORTING & ANALYSIS

Reading 24 (10th out of 12): LONG-TERM LIABILITIES

Difficulty: **medium**

Benchmark Study Time: **3.6h**

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.

BONDS

Basics

By a long-term liability we understand a liability that will result in an outflow of an economic benefit for a period of time longer than one year.

The most popular types of long-term debt are:

- bank loans,
- mortgages,
- bonds.

If the company incurs a long-term debt, there will occur a liability in the balance sheet:

bank loan → notes payable

mortgage → mortgage payable

bond → bond payable

Bonds valuation

A bond is a financial instrument for which the issuer agrees to pay certain amounts of money at specified dates in the future:

- the par value of a bond (principal value),
- coupons (interest).

$$P = \sum_{i=1}^{n} \frac{C}{(1 + YTM)^i} + \frac{FV}{(1 + YTM)^n}$$

Where:

- P – bond's value,
- FV – par value,
- C – coupon payment,
- n – number of periods to maturity,
- YTM – market discount rate.

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

Initial recognition of a long-term debt in the balance sheet

According to IFRS, the costs related to the issuance of a bond (e.g. legal fees, commissions) are included as part of bonds payable:

> If the sales proceeds are equal to USD 100 million and the issuance costs are equal to USD 2 million, then we will debit cash for USD 98 million and the bond payable will be initially recognized at USD 98 million.

Under U.S. GAAP, the costs related to the issuance of a bond are not included as part of bonds payable but – instead – they are treated as a deferred asset amortized over the life of the bond:

> If the sales proceeds are equal to USD 100 million and the issuance costs are equal to USD 2 million, then the bond payable will be initially recognized at USD 100 million and we will debit cash and deferred charge for USD 98 million and USD 2 million respectively.

Assuming no issuance costs – when the company issues bonds, in the statement of financial position:

- the cash account increases
- a bonds payable is recorded.

There is also a cash inflow in the financing section of the cash flow statement.

Measuring of a long-term debt in the subsequent periods

In the subsequent periods we can measure a long-term debt at:

- amortized cost, or
- fair value.

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Amortized cost

According to the amortized cost approach, a long-term debt is reported in a given period at the historical cost adjusted up or down by the amortization of a bond discount or premium, respectively.

If the company uses the amortized cost approach, it can use two methods to amortize the discount and the premium:

- the effective interest rate method, or
- the straight-line method.

The straight-line method is allowed only under U.S. GAAP

The general rule for both methods is the same. For discount bonds, in the consecutive years, we will adjust the historical cost up until we reach the bond's par value and for premium bonds we will adjust the historical cost down until we reach the par value. However, the straight-line method assumes that in each period throughout the bond's maturity the value of the adjustment is the same. According to the effective interest rate method, the adjustment reflects what the change in the bond price would be if we assumed that the market discount rate doesn't change.

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LEASING

Basics

Leasing is an agreement based on which the lessor, that is the owner of the asset, conveys a right to use the asset to the lessee for a specified period of time in exchange for periodic payments.

Major types of leases:

- finance lease (capital lease under U.S. GAAP),
- operating lease.

In the finance lease, the lessee recognises the leased asset and lease payable in its balance sheet and reports interest expense and depreciation expense in the income statement.

In the operating lease, the lessee reports only periodic lease payments in its income statement.

Operating lease has no influence on the lessee's balance sheet.

Finance lease (capital lease)

Under IFRS, leasing is treated as the finance lease when all rights and obligations regarding the leased asset are transferred to the lessee.

Under U.S. GAAP, for leasing to be defined as the finance lease at least one of a number of conditions has to be met::

- the ownership of the asset transfers to the lessee at the end of the lease,
- a bargain purchase option is available to the lessee, which means that the leased asset may be bought at a price much lower than its market value,
- the lease term is at least 75% of the useful life of the leased asset,
- the present value of lease payments is at least 90% of the fair value of the leased asset.

Leasing from the perspective of the lessee

<u>Operating lease</u>

In the case of the operating lease, periodic lease payments are recorded in the lessee's income statement. In the cash flow statement, lease payments are reported as operating cash outflows.

In the case of an operating lease, the whole lease expense is an operating cash outflow.

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

Finance lease

In the case of the finance lease, the leased asset is reported in the lessee's balance sheet in its fair value or as the present value of future lease payments. The lower of the values is always reported. Over the lease term, the asset is depreciated. In the income statement, the company reports depreciation expense and interest expense.

In the case of a finance lease, periodic lease payments are divided into principal and interest payments. According to U.S. GAAP, interest is reported as an operating cash outflow and principal payments as financing cash flows. Under IFRS, interest may be reported as either operating or financing cash outflow and principal payments are financing cash outflows.

operating cash flows are higher in the case of a finance lease

financing cash flows are higher in the case of an operating lease

Leasing from the perspective of the lessor

Operating lease

In the case of the operating lease, according to both IFRS and U.S. GAAP, the leased asset stays in the lessor's balance sheet and it is depreciated each year. In the income statement, the lessor reports periodic lease payments and depreciation expense.

Finance lease (IFRS)

According to IFRS:

- in the balance sheet the leased asset is derecognized, which means that the value of assets decreases and instead the lease receivable is reported.
- in the income statement, the lessor reports interest revenue.
- in the cash flow statement, the interest income is recognised as an operating or investing cash inflow. The principal payment is an investing cash inflow.

Capital lease (U.S. GAAP)

Under U.S. GAAP, capital lease may be treated as:

- sales-type lease, or
- direct financing lease.

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

If the present value of lease payments is greater than the carrying amount of the leased asset, leasing takes the form of a **sales-type lease**.

If the present value of lease payments is equal to the carrying amount of the leased asset, leasing takes the form of a **direct financing lease**.

The sales-type lease is like selling the asset and providing the financing to the lessee by the lessor. In the first year the lessor reports profit from the sale, which is equal to the present value of the lease payments less the carrying amount of the leased asset.

In the balance sheet, the leased asset is derecognized, which means that the value of assets is decreased and instead the lease receivable item, which amounts to the present value of the lease payments, is created. As the periodic lease payments are settled, the lease receivable gets reduced.

In the income statement the lessor reports:

- income resulting from the difference between the present value of the lease payments and the carrying amount of the leased asset (this income is reported in the first year), and
- interest revenue whose value in consecutive years is established based on the interest rate and the amount of the lease receivable.

In the cash flow statement, the interest income is an operating cash inflow and the principal payment is an investing cash inflow.

The direct financing lease consists only in providing financing to the lessee. In the case of direct financing lease the lessor does not report any profit on sales in the accounting books.

The value of assets gets reduced and the lease receivable is created.

In the income statement, an interest revenue is recognised.

The interest income is recognised as an operating cash inflow and the principal payment as an investing cash flow.

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

Summarizing key concepts:

☐ Bonds valuation

My summary:

☐ Initial recognition of a long-term debt in the balance sheet

My summary:

☐ Measuring of a long-term debt in the subsequent periods: Amortized cost vs Fair value

My summary:

☐ Amortized cost approach: Effective interest rate method vs Straight-line method

My summary:

☐ Finance lease (capital lease): Perspective of the lessee vs Perspective of the lessor

My summary:

☐ Operating lease: Perspective of the lessee vs Perspective of the lessor

My summary:

☐ Sales-type lease vs Direct financing lease

My summary:

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	