
Basics of Financial Management

EXERCISES

Rien Brouwers MSc.
Wim Koetzier MSc.
Olaf Leppink MSc.

Second Edition



Noordhoff Uitgevers

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Any comments about this publication or others may be addressed to: Noordhoff Uitgevers bv, Afdeling Hoger Onderwijs, Antwoordnummer 13, 9700 VB Groningen, e-mail: info@noordhoff.nl

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Preface second edition

Simultaneously with the revision of *Basics of Financial Management*, the related exercise book was also translated. The set-up and chapters are equal to those of the theory book. Each chapter contains a large number of exercises, which complement the related subject material in the theory book. The sequence in which exercises are incorporated, is tailored as much as possible to the manner in which the chapters are structured in the theory book. All exercises are provided with a paragraph indication, easily recognized by the \blacklozenge , which refers to the related text in the theory book. The set-up is such, that generally speaking, the degree of difficulty increases, creating a distinction into three categories:

- 1 *Preparatory questions*, limited in size and subject, intended to allow the student to practise an isolated part of the subject material. These questions are also suitable to bridge level differences.
- 2 *Exercises* (marked with an **E**), or assignments with the objective of sound knowledge of the subject at examination level.
- 3 *Case studies* (marked with a **C**), which enter deeper into the subject material and link it to other parts, allowing an increased understanding of the coherence of the individual parts.

An answer book is available with this exercise book. In *Answers and solutions*, all answers to the preparatory questions are provided, and also approximately 50% of the exercises and 30% of the case studies. The related exercises and case studies are indicated in the exercise book with an asterisk (*). The answers to exercises and case studies, which are not included in *Answers and solutions* are available to the lecturer on the website (www.basicsfinancialmanagement.noordhoff.nl).

We trust that this approach offers students sufficient possibilities for an active approach and self evaluation.

In the attachment to this book, an overview is included with modifications compared to the previous print.

We are open to suggestions for improvement.

The authors,
Teteringen/Zwolle



Series Overview

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PART 1

Financial management in business



1

Businesses and their role in the economy



Preparatory questions

- 1
- ◆ §1.1 **1.1** Describe the term ‘business’.
- ◆ §1.1 **1.2** What annotation can be made with the following statement:
‘Businesses strive for maximum profit’?
- ◆ §1.1 **1.3** What is the difference between ‘effectiveness’ and ‘efficiency’?
- ◆ §1.2 **1.4** Indicate for the following organizations whether they are considered
to be companies or non-profit organizations:
- a** Energy supplier Eneco.
 - b** Municipal police.
 - c** The Dutch railway company.
 - d** Technical University InHolland.
 - e** The Red Cross.
- ◆ §1.2 **1.5** Which measure could be used to assess the effectiveness of:
- a** The fire brigade.
Mission: We are active in whatever manner possible, in the field of
fire safety and disaster control, from inspection of and advice on
building and fire safety regulations, to providing information.
 - b** Social rehabilitation services.
Mission: The social rehabilitation services in The Netherlands con-
tribute actively to society’s safety by curbing criminality and reducing
recidivism.
 - c** The Kidney Foundation.
Mission: The Kidney Foundation will do everything possible to assure
that people with a kidney disease stay alive and also really live.
- ◆ §1.3 **1.6** Indicate in which industry (agriculture, mining, industry, wholesale
trade, retail trade, service industry) the following companies mainly
operate:
- a** Hagemeyer.
Hagemeyer distributes electro-technical equipment to companies in
the building and installation industries.
 - b** Philips.
Philips is a diversified technology company, that strives to improve
people’s lives with useful innovations in the field of health care, con-
sumers’ lifestyle and lighting.
 - c** Bijenkorf.
The Bijenkorf is a leading department store, that with passion for the
client, turns every visit into an event.
- ◆ §1.3 **1.7** Indicate for the following activities whether they are related to mass
production, job production or batch production.
- a** Motor vehicle manufacturing.
 - b** Compost production.
 - c** The painting of a family portrait on commission.

- ◆ §1.4 **1.8** Indicate by which tax (income tax box 1, box 2, box 3, corporate tax) the following persons will be affected in the Netherlands:
- The owner of a sole proprietorship.
 - The managing director and shareholder of an LLC.
 - A private investor in a share-exchange listed PLC.
- ◆ §1.4 **1.9** Which of the following persons are *not* personally liable for the company's debts in the Netherlands?
- A member of a cooperative with excluded liability.
 - A partner in a partnership.
 - A shareholder of an LLC.
 - A member of a cooperative with limited liability.
- ◆ §1.5 **1.10** Indicate for the following activities whether value added tax is applicable.
- The rental of houses by a housing cooperative.
 - The export of trucks by a motor vehicle producer.
 - The sales of clothing by a fashion boutique.
 - The sales of vegetables by a supermarket.
- ◆ §1.5 **1.11** A wholesaler purchases 100 bicycles at €550 from a manufacturer and sells them to a bicycle retailer for €600 per piece. The amounts are exclusive 21% VAT.
- What is the balance of the VAT to be paid to the tax authorities for these transactions?
 - Calculate profit made by the wholesaler on these bicycles.
- ◆ §1.6 **1.12** Indicate for the following cases, if there is an expansion in the same industry, vertical integration or horizontal integration:
- A garden center will also start selling Christmas items.
 - A mobile phone provider takes over a competitor, who also offers mobile phone services.
 - A mail order company begins its own delivery service.
- ◆ §1.6 **1.13** In franchising, there is a form of co-operation between an entrepreneur and a 'chain'. Due to what reasons could the co-operation come under pressure?

Exercises

- ◆ §1.3 **E1.1** On page 14 the financial data of six companies are provided. These companies are:
- A tobacco wholesaler.
 - An accountancy firm.
 - A supermarket.
 - A brick manufacturer.
 - A jeweler.
 - A touring car company.

	(1)	(2)	(3)	(4)	(5)	(6)
<i>Assets as a % of total assets</i>						
Fixed assets	69%	42%	70%	7%	86%	57%
Inventory	0%	58%	30%	52%	0%	20%
Accounts receivable	31%	0%	0%	41%	14%	23%
	100%	100%	100%	100%	100%	100%
<i>Expenses as a % of the total expenses</i>						
Raw material or goods	0%	54%	81%	97%	0%	19%
Personnel expenses	71%	23%	10%	1%	38%	10%
Costs of fixed assets	7%	3%	4%	1%	15%	12%
Other operating expenses	22%	20%	5%	1%	47%	59%
	100%	100%	100%	100%	100%	100%

Which company matches which number?

◆ §1.4

E1.2

Two men, Smith and Jones, have joint their activities in a partnership *Networks*, which is active in the computer retail business. The profit share of partner Smith is $\frac{1}{3}$ and that of partner Jones $\frac{2}{3}$.

All is not going well with the partnership. Only the following assets remain (the amount behind each asset is an estimate of what will be received in the event of foreclosure):

Equipment	€30,000
Delivery van	€10,000
Inventory computers	€30,000

The partnership has a debt to the bank of €80,000. This debt must be paid next week. Furthermore, an amount of €20,000 still has to be paid to a computer supplier. This supplier has a 'claim of ownership', which is to say that the computers remain his property until they have been paid for by *Networks*.

Smith has €5,000 on his personal savings account and Jones has a car, which is worth about €8,000.

- a** Calculate the loss for the bank.

Suppose Smith is a silent partner.

- b** Calculate again the loss for the bank.

The following data are provided to be able to answer questions E1.3 through E1.7:

To calculate income tax, the following applies:

Box 1 Income tax rates

Tax bracket	Taxable income	Percentage
1	Up to €19,645	36.35%
2	As of €19,646 up to €33,363	42%
3	As of €33,364 up to €56,531	42%
4	As of €56,532 and higher	52%

The rate for dividend paid to a substantial business interest holder in box 2 of the income tax is 22% up to €250,000 and 25% for anything above.

Entrepreneurs can apply self-employed tax deduction to reduce their profit.

The self-employed tax deduction amounts to €7,280.

Profit exemption is 14%.

Tax credits can be deducted from the payable tax due. The general tax credit is €2,103 and can be applied by every taxpayer. The labor tax credit is provided in the following table:

Labor tax credit

Income earned above	Income earned not above	Labor tax credit
-	€ 8,913	1.807% × income
€ 8,913	€19,248	€161 + 18.724% × (Income earned - €8,913)
€19,248	€40,721	€2,097
€40,721	€83,971	€2,097 - 4% × (Income earned - €40,721)
€83,971	-	€367

For the calculation of corporate tax, the following applies:

Corporate tax rate

For the taxable amount	Rate
Up to €200,000	20%
Above €200,000	25%

- ◆ §1.4 **E1.3** Al Johnson is the owner of a successful sole proprietorship. Last year's profit was €170,000.
- Calculate the tax on income to be paid by Johnson.
 - Calculate Johnson's net income for the past year.
- ◆ §1.4 ***E1.4** Van de Zande has a successful bicycle store, which he operates as a sole proprietorship. Annual profit is €120,000.
- Calculate the annual income tax to be paid by van der Zande.
- Van der Zande wonders if there could be a financial advantage by changing his sole proprietorship into an LLC. In this situation, he would pay himself an annual salary of €80,000 bruto. Remaining profit would be kept in the LLC.
- Calculate the total annual corporate and income tax due in this situation.
- ◆ §1.4 ***E1.5** Çetin and Ünsal have a craft business called *Craftsmanship*. Çetin invested €60,000 and Ünsal €40,000. Over the past year the partnership generated €120,000 profit.
- Çetin and Ünsal decide to reserve 30% of the profit for investments planned in the near future.
The partners' profit share is based on their capital investment.
- Calculate the income tax to be paid by Çetin and Ünsal.
- ◆ §1.4 ***E1.6** Ingeborg Karelse set up an LLC of which she is the director and only shareholder. Last year's profit was €130,000. For profit calculation, the annual salary of Ingeborg Karelse for the amount of €50,000 was not considered, nor was the dividend of €15,000 she received last year.
- Calculate the total amount of tax due for the past year.
- ◆ §1.4 **E1.7** After years of running a successful sole proprietorship, Vaswani aims to give his business new impulse by working with Voltering. For the legal entity of the new business, they have the choice between a partnership and an LLC.
- Should they decide to form a partnership, they will both be entitled to an equal share of the net profit. Should they decide to form an LLC, they will both receive an annual salary of €40,000.
The new company is estimated to generate an annual profit of €250,000 (prior to deduction of the gross salaries of both partners.)
- What will be the consequences for both partners of the choice between a partnership and an LLC with regard to liability for the company's debts?
 - Calculate the total annual amount of tax to be paid, should they choose to form a partnership.

- c Calculate the total annual amount of tax to be paid, should they choose to form an LLC and no dividend payments are made.
- d For which amount of total dividend payout is the total annual amount of tax to be paid of the LLC, equal to that of the partnership.
- e What amount will be reserved every year, based on the annual dividend payout calculated in d?

↔ §1.5

***E1.8**

All amounts in this exercise are exclusive VAT.

Computer retail store *Online LLC* is located in the Zwolsestraat 21. During the first quarter of 2015, Online sent invoices for the sales of 250 computers, of which 200 were destined for customers in the Netherlands and 50 for customers in Belgium. The retail price was €500 per piece. Online received invoices from his Dutch supplier for the purchase of 280 computers at €400 each.

General practitioner Dr. Scussolini has his practice at Zwolsestraat 23. He charged bills to the health insurances for a total amount of €75,000 during the first quarter. He received an invoice from a contractor for the renovation of his surgery for an amount of €20,000. The value added tax rate is 21%.

Calculate the amounts Online and Dr. Scussolini each have to pay in value added tax to the Dutch tax authorities.

↔ §1.5

E1.9

Office supplies retailer *Press Paper* performs the following transactions in the first quarter of 2015. All amounts are exclusive value added tax:

Purchases

Suppliers	Holding location	Amount
<i>Wholesaler Negotiate</i>	Meppel	€15,000
<i>Bürosachen</i>	Bonn	€ 5,000

Sales

Customer	Holding location	Amount
<i>Insurance company The Policy</i>	Amersfoort	€ 2,000
<i>Bicycle factory Tempo</i>	Heerenveen	€ 3,500
<i>Travel agency Soleil</i>	Brussels	€ 1,500
Various individual private customers		€12,000

The value added tax rate is 21%.

- a Calculate the amount of value added tax to be paid to the Dutch tax authorities by *Press Paper* for the first quarter.
- b What are the consequences of the levy of value added tax for the clients of *Press Paper*?

Case study

◆ §1.4

C1.1

Elsbeth van Dam considers opening a small retail store, which will sell exotic tea varieties. She has the required expertise and is very knowledgeable on the subject of tea. However, she lacks the knowledge required to make an informed decision on the legal form of her new business.

As her friend Egbert offers to participate in her plans, the legal forms that she can consider are sole proprietorship, a partnership and a limited liability company.

Assist Elsbeth in her decision-making by creating an overview for the three legal forms indicating the consequences with respect to: responsibility, continuity, disclosure requirements and fiscal position.