

The Basics of Financial Management

Exercises



Noordhoff Uitgevers

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3rd edition

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Preface Third 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 , 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

Basics of Financial Management

Basics of Financial Management - Exercises

Basics of Financial Management - Answers and solutions

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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** The fire department.
 - c** The Dutch railway company.
 - d** University of Applied Sciences InHolland
 - e** The Red Cross.
- ↔ §1.2 **1.5** Which measure could be used to assess the effectiveness of:
- a** The police
Mission: The police are always there. Making our country safer. The police protect democracy, uphold the law, and represent authority on the streets. The police help where needed. In emergency situations, they intervene decisively. Where others would back down, the police stand tall. Even if this requires force, or puts them at mortal risk. The police are actively engaged with civilians and partners. They are recognized and are mindful of what goes on in society. The police are there for everyone. Alert and at your service.
 - b** Social rehabilitation services.
Mission: The social rehabilitation services in The Netherlands contribute actively to society's safety by curbing criminality and reducing recidivism. We focus on risk-management and control, and by encouraging victims or suspects to change their behaviors.
 - c** The Kidney Foundation.
Mission: We actively attempt to combine knowledge and to accelerate research directed at curing kidney disease. An example is that of regenerative medicine, which is working on the repair of kidney damage using the body's own stem cells.
- ↔ §1.3 **1.6** Indicate in which industry (agriculture, mining, industry, wholesale trade, retail trade, service industry) the following companies mainly operate:
- a** Horecarama.
Horecamara offers a wide selection of products for the hospitality industry, from professional deep-fat fryers to ice-cube makers to furniture to cutlery from renowned brands.
 - b** Philips.
Philips is a leading provider of healthcare technologies aimed at improving human health and achieving better care within the full spectrum of the health continuum. From healthier living to diagnostics, from treatment to home care.
 - c** Bijenkorf.
The Bijenkorf is the Netherlands' number one inspirational, surprising, and creatively stimulating department store, where everyone is unique.

- ◆ §1.3 **1.7** Indicate for the following activities whether they are related to mass production, job production or batch production.
- Motor vehicle manufacturing.
 - Compost production.
 - The painting of a family portrait on commission.
- ◆ §1.4 **1.8** Indicate by which tax (income tax bracket 1, bracket 2, bracket 3, corporate tax) the following persons will be affected in the Netherlands:
- An own-account worker.
 - The managing director/shareholder of an LLC.
 - A private investor in a share-exchange listed Corporation.
- ◆ §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 in the Netherlands 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 producer and sells them to a bicycle retailer for €600 per unit.
The amounts do not include 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 enterprises are provided. These enterprises are:
- A tobacco wholesaler.
 - An accounting firm.
 - A supermarket.
 - A brick producer.
 - 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>Costs as a % of the total costs</i>						
Raw material or goods	0%	54%	81%	97%	0%	19%
Personnel costs	71%	23%	10%	1%	38%	10%
Costs of fixed assets	7%	3%	4%	1%	15%	12%
Other operating costs	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 the loss for the bank if this were the case.

The following data is needed 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 €20,142	36.55%
2	From €20,143 up to €33,994	40.85%
3	As of €33,995 up to €68,507	40.85%
4	From €68,507 and up	51.95%

The holder of a substantial business interest is taxed in box 2 of the income tax, with a rate of 25% applied to the dividend received from the corporation and for any profit that may have been obtained from the sale of shares.

Entrepreneurs may employ the specific entrepreneur tax deduction. Entrepreneurs may subtract the entrepreneur tax, as well as the start-up deduction, from their profit. Note that the startup deduction may only be subtracted during a company's first active year of business. The *self-employed deduction* is €7,280. The startup deduction is €2,123.

The SME exemption is 14%.

Tax credits may be subtracted from the amount of tax payable. The general tax credit depends on the amount of taxable income according to the following table:

General tax credit

Taxable income above	Taxable income below	General tax credit
€0	€20,142	€2,265
€20,142	€68,507	€2,265 - 4.683% × (taxable income - €20,142)
€68,507	-	€0

Labor tax credit is based on labor income:

Labor tax credit

Taxable income above	Taxable income not above	Labor tax credit
-	€ 9,468	1.764% × labor income
€ 9,468	€20,450	€167 + 28,064% × (labor income - €9,468)
€20,450	€33,112	€3,249
€33,112	€123,362	€3,249 - 3.6% × (labor income - €33,112)
€123,362	-	€0

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 a successful own-account worker. 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** Vanderzand 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 Vanderzand.
- Vanderzand 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 gross. The LLC pays 20% in employer contributions to social insurances on this salary. Vanderzand's salary and the contributions to insurances constitute labor costs for the LLC. 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, neither the annual gross salary of Ingeborg Karelse for the amount of €50,000, nor the 20% employer contribution to social insurances, nor the dividend of €15,000 she received last year have been taken into account.

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 gross salary of €70,000, with the LLC being liable for a 20% contribution to social insurances.

The new company is estimated to generate an annual profit of €200,000 (prior to deduction of the gross salaries and the employer contributions to social insurances for both partners.)

- a 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?
- b 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 VAT-excluded.

Computer retail store *Online LLC* is located in the Zwolsestraat 21. During the first quarter of 2018, 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 unit 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 over the first quarter.

⇒ §1.5

E1.9

Office supplies retailer *Press Paper* performs the following transactions in the first quarter of 2018. 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%.

- Calculate the amount of value added tax to be paid to the Dutch tax authorities by *Press Paper* for the first quarter.
- 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.

2

Financial Management Disciplines and Positions



Preparatory Questions

- 2
- ↔ §2.1 **2.1** Which subdivision is used in the discipline of financial management?
- ↔ §2.1 **2.2** Indicate to which part of financial management the following topics are related:
- a** Calculating the unit cost of a product.
 - b** Calculating profit for the past period.
 - c** Taking out a loan at a bank.
- ↔ §2.2 **2.3** Indicate to which discipline the following decisions are mainly related, choose from:
- Finance
 - Management accounting
 - Financial accounting
 - Auditing
 - Company law
 - Tax law
 - Marketing
- a** To decide whether the legal form of a new subsidiary will be a corporation or an LLC.
 - b** To decide whether the budget will be created on a quarterly or yearly basis.
 - c** To give customers a discount for cash payment, in order to receive payments earlier.
 - d** To consider whether it is cheaper to produce the semi-finished product in-house or to purchase it.
 - e** To enter the expenditures for product development on the balance sheet, instead of considering them as costs (entering them on the balance sheet will generate higher profit).
- ↔ §2.3 **2.4** Which particular discipline in the field of financial management do the following persons work in?
- a** Controller.
 - b** Internal auditor.
 - c** External accountant.
 - d** Treasurer.

Exercise

- ↔ §2.1 **E2.1** Aynur Aidin is the financial 'whizz kid' at *Boemboe* in Zalk, a small company that imports oriental spices. Management considers to produce its own spice mixtures for sate, gado-gado, spicy meatballs etc., and will directly import the spices from Indonesia without using a broker. Contacts have already been made with an agricultural cooperative in Kediri (Eastern Java). The current business premises in Zalk can be expanded in such manner that cleaning and cutting machines, and mixers can be installed. Technical personnel will be attracted for operating the machines. It is the intention to sell the spice mixtures to supermarkets.

Management has requested Aynur to produce an overview of possible queries that need answering before starting the project.

Assist Aynur in preparing such an overview. Indicate for the following disciplines a number of problems with regard to the project:

- a** Finance.
- b** Management accounting.
- c** Financial accounting.
- d** Marketing.
- e** Company law.
- f** Tax law.