### FINANCIAL ACCOUNTING II



UNDERGRADUATE COURSES: MANAGEMENT, ECONOMICS AND FINANCE

2024/2025

18



1

2

#### **SYLLABUS**



3) BUSINESS COMBINATIONS

Mergers & Acquisitions

Consolidated financial statements



# **Business Combinations**

3

Readings: Chapter 13

3

4

#### **Financial investments**



Active (value creation)
Long term
Strategic view

 $\neq$  financial instruments (marketable securities, passive: "wait and see", held for a short period of time, measured at fair value)

#### **Types of investments**



Shares in subsidiaries

Shares in associates

Shares in other investments, including joint arrangements and joint ventures

Loans to subsidiaries, associated companies, and other investments

5

6

# ISEG

### **Business combinations: basic scenarios**

Legal mergers

Acquisition of shares of a company that remains a separate legal entity

Acquisition of all outstanding shares of a company which is dissolved; all assets and liabilities are merged in the accounts of the acquirer (statutory merger)

Two companies merge (are dissolved as legal entities) to become a third entity (statutory consolidation)

Creation of a holding entity: joint combination of activities by two companies (neither company is dissolved)

Acquisition of assets of a company that is liquidated; first liabilities are paid and afterwards shareholders get the surplus

The method used to record the above situations is known as "acquisition method"

## **Business combinations: acquisition method**







- 1. Identifying the "acquirer"
- 2. Determining the "acquisition date"
- 3. Recognizing and measuring the identifiable assets and liabilities of the "acquiree"
- 4. Recognizing and measuring goodwill or a gain from a bargain purchase

7

8

## **Business combinations: goodwill**



Goodwill recognized in a business combination is an asset representing the future economic benefits arising from other assets acquired in a business combination that are not indivdually identified and separately recognized

Subsequent measurement:

No amortization

Annual impairment test (in accordance with IAS 36 Impairment of assets)

No reversal of the impairment loss



## Legal mergers: major accounting issues

- 1) Determination of the value of each business (fair values)
- 2) Determination of the rate of exchange of shares
- 3) Determination of the number of shares to issue
- 4) Determination of the merger premium

Accounting entries for recording the merger so as to be able to produce a relevant new balance sheet

9

10

## Legal mergers – example (1/7)



Facts of the merger:

Firm A (acquirer) merges with Firm B (acquiree), which is dissolved

The "acquisition method" is applied

Firm B balance sheet items:



In c.u.

| Firm B Assets                               | Book value | Fair value | Difference                        |
|---|------------|------------|-----------------------------------|
| Assets                                      | 500,000    | 520,000    | 20,000 (potential gain on assets) |
| Other non-recorded or identifiable elements | 0          | 30,000     | 30,000 (potential goodwill)       |

Source: Example (Chapter 13) in Stolowy, Ding & Paugam (2024)

### Legal mergers – example (2/7)



Balance sheet of each firm before the merger:

| ln | $\mathbf{c}$ | 1 |
|----|--------------|---|

| Assets                             | Firm A    | Firm B  | SE & L                 | Firm A    | Firm B  |
|------------------------------------|-----------|---------|------------------------|-----------|---------|
| Assets                             | 1,500,000 | 500,000 | Capital                | 400,000   | 200,000 |
|                                    |           |         | Retained E. & Reserves | 800,000   | 50,000  |
|                                    |           |         | Liabilities            | 300,000   | 250,000 |
| <b>Total Assets</b>                | 1,500,000 | 500,000 | Total SE&L             | 1,500,000 | 500,000 |
| No. Shares included in the capital |           |         |                        | 4,000     | 2,000   |
| Par value                          |           |         |                        | 100       | 100     |

Source: Table 13.18 from Stolowy, Ding & Paugam (2024)

11

12

## Legal mergers – example (3/7)



1) Determination of the fair value of each company:

In c.u.

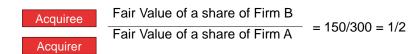
|  | Firm A    | Firm B  |
|--|-----------|---------|
| (1) Capital                                    | 400,000   | 200,000 |
| (2) Retained Earnings & Reserves               | 800,000   | 50,000  |
| (3) Total Shareholders' Equity (3)=(1)+(2)     | 1,200,000 | 250,000 |
| (4) No. shares                                 | 4,000     | 2,000   |
| (5) Book value per share (5)=(3)/(4)           | 300       | 125     |
| (6a) Potential gain on assets                  | 0         | 20,000  |
| (6b) Goodwill                                  | -         | 30,000  |
| (7) Net assets at fair value (7)=(3)+(6a)+(6b) | 1,200,000 | 300,000 |
| (8) Fair value per share (8)=(7)/(4)           | 300       | 150     |

Source: Table 13.19 from Stolowy, Ding & Paugam (2024)

### Legal mergers – example (4/7)



2) Determination of the rate of exchange of shares:



FV of a share of Firm  $B = 0.5 \times FV$  of a share of Firm A



2 shares of B = 1 share of A

13

14

### Legal mergers – example (5/7)



3) Determination of the number of shares to issue:



1 share of A = 2 shares of B

A should issue = 2,000 (number of shares in B) x 1/2 = 1,000 new shares to be awarded to the former shareholders of B so they will retain the same value

one share of A has the same value as 2 shares of B:  $300 \times 1 = 150 \times 2$ 



### Legal mergers – example (6/7)

- 4) Determination of the Merger Premium:
- · Capital increase =
  - = 100 c.u. (par value shares) × 1,000 (new shares issued by Firm A)
  - = 100,000 c.u.
- Merger Premium =
  - = Net assets of Firm B at fair value (300,000 c.u.) minus Capital increase (100,000 c.u.)
  - = 200,000 c.u.

Source: Table 13.20 from Stolowy, Ding & Paugam (2024)

15

16

Legal mergers – example (7/7)



5) Accounting for the merger:

In c.u.

Includes gain on assets

|                        | Firm A – Balance Sheet before the merger | Merger entries | Firm A – Balance<br>Sheet after the merger |
|------------------------|--|----------------|--|
| Assets                 | 1,500,000                                | 520,000        | 2,020,000                                  |
| Goodwill               |  | 30,000         | 30,000                                     |
| Total Assets           | 1,500,000                                | 550,000        | 2,050,000                                  |
| Share Capital          | 400,000                                  | 100,000        | 500,000                                    |
| Merger Premium         |  | 200,000        | 200,000                                    |
| Retained E. & Reserves | 800,000                                  |                | 800,000                                    |
| Liabilities            | 300,000                                  | 250,000        | 550,000                                    |
| Total SE & L           | 1,500,000                                | 550,000        | 2,050,000                                  |

Source: Table 13.21 from Stolowy, Ding & Paugam (2024)

#### **Definitions related to a Group of** companies



IFRS 10

Group: "a parent and all its subsidiaries" (IFRS 10, Appendix A) Subsidiary: an entity that "is controlled" by a parent company

•Control: power and ability to use its power over the investee, and exposure and right to variable returns regarding the investee

Associate: "an entity over which the investor has significant influence" (IAS 28,  $\S$  3)

•Significant influence: power to influence economic decisions, without control (presumed >20% of voting rights)

Joint arrangement (operation / venture): when two or more parties have joint control over the arrangement where decisions require unanimous consent of the parties

17

18

### Percentage of control versus Percentage of interest (1/3)

#### Percentage of control:

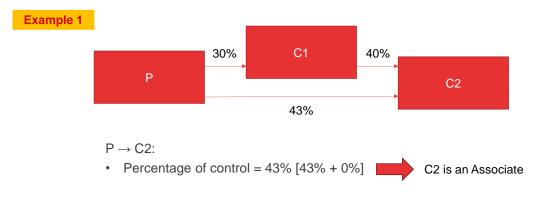
measures the proportion of voting rights held by the parent is used to determine which method of consolidation (full consolidation or equity method)

#### Percentage of interest:

measures the percentage of ownership held by the parent is used to calculate controlling and non-controlling interests

## Percentage of control *versus*Percentage of interest (2/3)





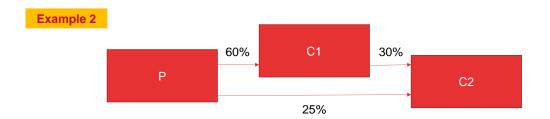
• Percentage of interest = 55% [43% + (30 % × 40%)]

19

20

## Percentage of control *versus*Percentage of interest (3/3)





 $P \rightarrow C2$ :

- Percentage of control = 55% [25% + 30%]
   C2 is a Subsidiary
- Percentage of interest = 43% [25% + (60 % × 30%)]

#### **Consolidated financial statements**



Consolidated financial statements: financial statements of a group (parent + subsidiaries) presented as if the entities were a single economic entity

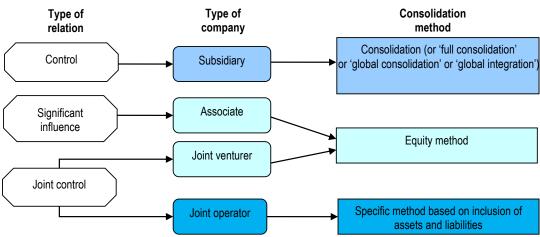
Consolidation methods: differ depending on the type of relationship between the parent company and the investee (subsidiary, associate or joint arrangement)

21

22

#### **Consolidation methods**





Source: Figure 13.2 from Stolowy, Ding & Paugam (2024)



#### Full consolidation - phases

- 1Add the items of the Balance Sheet and Income Statement of the parent-company and the subsidiaries ("combined" items)
- 2 Elimination of the investment of the parent-company in the subsidiaries and of the part of the subsidiaries' equity belonging to the parent-company
  - $\rightarrow$  this step originates "consolidation differences", namely "valuation differences" and "goodwill"
- Recognize non-controlling interests (shown separately under "Equity" on the Balance Sheet and also separately on the Income Statement)
- 4 Elimination of intra-group transactions (ex: sales and services rendered between companies, distribution of dividends)

23

24



### Full consolidation – example 1 (1/3)

Price paid for acquisition = book-value of shares of acquired company

#### In year X1:

Acquisition by Firm P of 90% of the shares of Firm S

Price paid in cash = 288, corresponding to 90% of the book value of shares (Share capital: 200; Retained earnings/reserves: 100; Net income: 20)

10% of Firm S's shares are in the hands of "non-controlling shareholders"

## Full consolidation – example 1 (2/3)



Source: Table 13.7 from Stolowy, Ding & Paugam (2024)

Elimination of the investment of Firm P in Firm S and of the part of Firm S's equity belonging to Firm P and of the consolidation reserve

b) Non-controlling interests = 10% x (Firm S's share capital + retained earnings/reserves + net income)

| As at 31 December X3          | Firm P (standalone)                     | Firm S (standalone) | Combined         |     | imination<br>itries and | Consolidated<br>balance sheet |                 |
|-------------------------------|---|---------------------|------------------|-----|-------------------------|-------------------------------|-----------------|
|                               | (4)                                     | (0)                 | (0) (1) (0)      | ad  | ustments                | (5) (0) (4)                   |                 |
|                               | (1)                                     | (2)                 | (3)=(1)+(2)      |     | (4)                     | (5)=(3)+(4)                   |                 |
| Assets                        |   |                     |                  |     |                         | \                             | Book-value      |
| Investment in Firm S          | 288                                     |                     | 288              | (a) | -288                    | 0                             | of Firm S in X1 |
| Other assets (including cash) | 1,912                                   | 600                 | 2,512            |     |                         | 2,512                         | ΑI              |
| Total                         | 2,200*                                  | 600                 | 2,800            |     | -288                    | 2,512                         |                 |
| Equity and liabilities        |   |                     |                  |     |                         |                               | Percentage      |
| Share capital                 | 600                                     | 200                 | 800              | (a) | (-180                   | )                             | of interest x   |
|                               |   |                     |                  | (b) | <del>-20</del>          | 600                           | Share           |
| Retained earnings/Reserves    | 500                                     | 300                 | 800              |     | -270                    |                               | Capital         |
| J                             |   |                     | -                | (b) | -30                     | 500                           |                 |
| Consolidation reserve         |   |                     |                  | (a) | 162                     | 162                           | Percentage      |
| Net income**                  | 50                                      | 40                  | 90               | (b) | (-4                     | 86                            | of interest x   |
| Non-controlling interests     | 00                                      | 40                  | ( 30             | (b) | 54                      | 54                            | Retained        |
| Liabilities                   | 1,050                                   | 60                  | 1,110            |     |                         | 1,110                         | E./Reserves     |
|                               |   |                     |                  | _   | 200                     |                               |                 |
| Total                         | 2,200                                   | 600                 | 2,800            |     | -288                    | 2,512                         |                 |
| Consolidation reserve =       | (200 + 300) x                           | 90% - 288 =         | = 162 4          |     |                         |                               |                 |
|                               | ( == ================================== |                     |                  |     |                         |                               |                 |
|                               |   |                     |                  |     |                         |                               |                 |
| **We assume the shareholders  | voted not to distr                      | ibute the income    | e of the period. |     |                         |                               |                 |

25

26

### Full consolidation – example 1 (3/3)



Source: Table 13.8 from Stolowy, Ding & Paugam (2024)

| Year X3  | Firm P       | Firm S       | Combined | Eliminations | Consolidated |
|--|--------------|--------------|----------|--------------|--------------|
|  | (standalone) | (standalone) |          | and          | income       |
|  |              |              |          | adjustments  | statement    |
| Sales  | 1,000        | 400          | 1,400    |              | 1,400        |
| Expenses   | -950         | -360         | -1,310   |              | -1,310       |
| Net income of consolidated entity                          | 50           | 40           | 90       |              | 90           |
| Non-controlling interests (10%) in subsidiary's net income |              |              |          | -4           | -4           |
| Net income of owners of the parent                         |              |              |          |              | 86           |

### Full consolidation - example 2 (1/2)

Price paid for acquisition ≠ book-value of shares of acquired company

#### In year X1: There are no Noncontrolling Interests

Acquisition by Firm P of 100% of the shares of Firm S

Firm S's book-value = 320 (share capital: 200; retained earnings/reserves: 100; net income: 20)

Firm S's fair-value of identifiable assets and liabilities = 390

Price paid for Firm S, in cash = 420 (cost of investment)

Valuation difference: difference between fair values and book values of identifiable assets and liabilities =  $= (100\% \times 390) - (100\% \times 320) = 70$ 

Goodwill: excess value above fair values (due to assets not identifiable such as customer loyalty, know how) =  $= 420 - (100\% \times 390) = 30$ 

27

28

### Full consolidation – example 2 (2/2)



Source: Table 13.10 from Stolowy, Ding & Paugam (2024)

- Elimination of the investment of Firm P in Firm S and of the part of Firm S's equity belonging to Firm P and of the consolidation reserve
- Difference arising on acquisition: Valuation Difference (70) + Goodwill (30)

| As at 31 December X3  | Firm P<br>(standalone) | Firm S<br>(standalone) | Combined    | Elimination entries and adjustments |                  | Consolidated balance sheet |
|---|------------------------|------------------------|-------------|-------------------------------------|------------------|----------------------------|
|   | (1)                    | (2)                    | (3)=(1)+(2) |                                     | (4)              | (5)=(3)+(4)                |
| Assets Investment in Firm S   | 420                    | 0                      | 420         | (a)                                 | -320             | )———                       |
| Of which: difference arising<br>on first consolidation (based<br>on fair values dating back to<br>X1) | 100                    |                        |             | (b)                                 | <del>-10</del> 0 | 0                          |
| Goodwill  |                        |                        |             | (b)                                 | 30               | 30                         |
| Other assets (including cash)   | 1,780                  | 600                    | 2,380       |                                     | 70               | 2,450                      |
| Total   | 2,200*                 | 600                    | 2,800       | . ,                                 | -320             | 2,480                      |
| Equity and liabilities<br>Share capital   | 600                    | 200                    | 800         | (a)                                 | -200             | 600                        |
| Retained earnings/Reserves Consolidation reserve  | 500                    | 300                    | 800         | (a)<br>(a)                          | -300<br>180      | 500<br>180                 |
| Net income**  | 50                     | 40                     | 90          |                                     | 0                | 90                         |
| Liabilities   | 1,050                  | 60                     | 1,110       |                                     |                  | 1,110                      |
| Total   | 2,200                  | 600                    | 2,800       |                                     | -320             | 2,480                      |

Percentage of interest x (Share Capital + R. Earnings and Reserves)

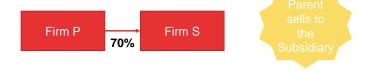
Book-value of

\*\*We assume the shareholders voted not to distribute the income of the period.



# Full consolidation – elimination of intragroup transactions

#### **EXAMPLE 1:**



Firm P has in the Sales account 200,000 € of sales to Firm S Firm S sold all of the inventories to customers outside the group for 350,000 € Firm P has a margin of 30% over the selling price

29

30

## Full consolidation – elimination of intra-group transactions



#### **EXAMPLE 1 (cont.):**

|                       | Firm P  | Firm S  | Firm P + Firm S | Group   |
|-----------------------|---------|---------|-----------------|---------|
| Sales                 | 200,000 | 350,000 | 550,000         | 350,000 |
| COGS                  | 140,000 | 200,000 | 340,000         | 140,000 |
| Remaining inventories | 0       | 0       | 0               | 0       |

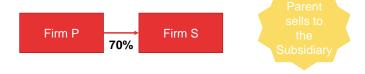
#### Adjustment entries:

Sales  $\rightarrow$  Debit: 200,000 COGS  $\rightarrow$  Credit: 200,000

## Full consolidation – elimination of intra-group transactions



#### **EXAMPLE 2:**



Firm P has in the Sales account 200,000 € (100,000 units at 2€/unit) of sales to Firm S

Firm S is still in possession of the merchandize

Firm P has a margin of 30% over the selling price

31

32

## Full consolidation – elimination of intra-group transactions



#### **EXAMPLE 2 (cont.):**

|                       | Firm P  | Firm S  | Firm P + Firm S | Group   |
|-----------------------|---------|---------|-----------------|---------|
| Sales                 | 200,000 | 0       | 200,000         | 0       |
| COGS                  | 140,000 | 0       | 140,000         | 0       |
| Remaining inventories | 0       | 200,000 | 200,000         | 140,000 |

#### Adjustment entries:

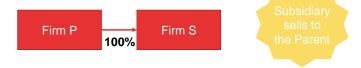
Sales  $\rightarrow$  Debit: 200,000 COGS  $\rightarrow$  Credit: 140,000

Inventories (merchandize) → Credit: 60,000

## Full consolidation – elimination of intra-group transactions



#### **EXAMPLE 3:**



Firm S has in the Sales account 100,000 € (10,000 units at 10€/unit) of sales to Firm P

Firm P sold 7,000 units for 15 €/unit and is still in possession of 3,000 units Firm S has a margin of 30% over the selling price

33

34

## Full consolidation – elimination of intra-group transactions



#### **EXAMPLE 3 (cont.):**

|                       | Firm S  | Firm P  | Firm P + Firm S | Group   |                  |
|-----------------------|---------|---------|-----------------|---------|------------------|
| Sales                 | 100,000 | 105,000 | 205,000         | 105,000 | 7,000 x 15€/unit |
| COGS                  | 70,000  | 70,000  | 140,000         | 49,000  | 7,000 x 7€/unit  |
| Remaining inventories | 0       | 30,000  | 30,000          | 21,000  | 3,000 x 7€/unit  |

#### Adjustment entries:

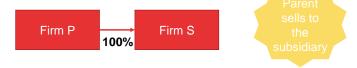
Sales  $\rightarrow$  Debit: 100,000 COGS  $\rightarrow$  Credit: 91,000

Inventories (merchandize) → Credit: 9,000

## Full consolidation – elimination of intra-group transactions



#### **EXAMPLE 4:**



Firm P sold a vehicle to Firm S for 20,000 €

Firm P purchased the vehicle for 50,000 €, depreciated for 2 years at a depreciation rate of 20%

Firm S estimated a useful life of 2 years for the vehicle and depreciates the vehicle on the first year

35

36

## Full consolidation – elimination of intra-group transactions



#### **EXAMPLE 4 (cont.):**

|                   | Firm P   | Firm S | Firm P + Firm S | Group  |
|-------------------|----------|--------|-----------------|--------|
| Sale amount       | 20,000   | -      | -               | -      |
| Acquisition cost  | 50,000   | 20,000 | 20,000          | 50,000 |
| Acc. Depreciation | 20,000   | 10,000 | 10,000          | 30,000 |
| Carrying amount   | 30,000   | 10,000 | 10,000          | 20,000 |
| Gain / (Loss)     | (10,000) | 0      | (10,000)        | 0      |

PPE → Debit: 30,000

Acc. Depreciation  $\rightarrow$  Credit: 20,000

Other expenses & losses → Credit: 10,000

### **Equity method**



Method used when the parent company exerts a significant influence in the associate company or when the parent company exerts joint control of a joint venture

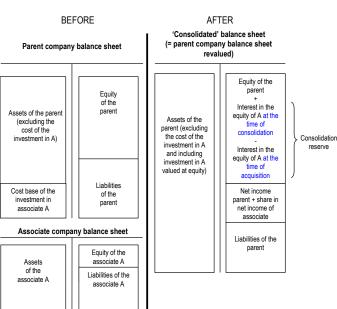
Reevaluation, in the accounts of the parent company, of the investment in the investee No "consolidation" in the strict sense since there is no accumulation of assets and liabilities

37

38

### **Equity method**





Source: Figure 13.5 from Stolowy, Ding & Paugam (2024)

38

#### Equity method – example (1/4)



Price paid for acquisition = book-value of shares of acquired company

In year X1 (year of acquisition):

 $= (200 + 100 + 20) \times 25\% = 80$ 

Acquisition by Firm Investor of 25% of the shares of Firm Investee

Cost of investment =

(Share capital + Retained Earnings/Reserves + Net income) x 25% =

39

40

# ISEC

## Equity method – example (2/4)

In year X3 (year of consolidation):



- (a) Interest in the equity of Firm Investee (excluding net income) at the date of consolidation (year X3) =  $(200 + 300) \times 25\% = 125$
- (b) Interest in the equity of Firm Investee (including net income) at the date of acquisition (year X1) =  $(200 + 100 + 20) \times 25\% = 80$

Consolidation reserve (year X3) = (a) – (b) = 45

Claim over the net income (year X3) of Firm Investee = 40 x 25% = 10

Value of the investment (year X3) in Firm Investee = 125 + 10 = 135

|                              | Year X1 (date of acquisition) | Year X3<br>(date of consolidation) |
|------------------------------|-------------------------------|------------------------------------|
| Share Capital                | 200                           | 200                                |
| Retained Earnings / Reserves | 100                           | 300                                |
| Net Income                   | 20                            | 40                                 |

## **Equity method – example (3/4)**



Source: Table 13.11 from Stolowy, Ding & Paugam (2024)

| Balance sheets                                       | Investor with  | Investor With    |                           |
|--|----------------|------------------|---------------------------|
|  | investment     | investment       |                           |
|  | valued at cost | valued at equity |                           |
| Assets   |                | _                |                           |
| Investmen Firm Investee                              | 80             | (135*)           | $\Delta = 55$             |
| Other assets (including cash)                        | 2,120          | 2,120            |                           |
| Total  | 2,200**        | 2,255            |                           |
| Equity and liabilities                               |                |                  |                           |
| Share capital  | 600            | 600              |                           |
| Retained earnings/Reserves                           | 500            | 500              |                           |
| Consolidation reserve                                |                | 45)              |                           |
| Net income***  | 50             | 50               | $\rightarrow \Delta = 55$ |
| Share of Investor net income resulting from Investor |                | (10)             |                           |
| 25% of Investee equity                               |                |                  |                           |
| Liabilities  | 1,050          | 1,050            |                           |
| Total  | 2,200          | 2,255            |                           |
| *Valued at equity                                    |                |                  |                           |
|  |                |                  |                           |
|  |                |                  |                           |
|  |                | -                |                           |
|  |                |                  |                           |

41

42

## Equity method – example (4/4)



Source: Table 13.12 from Stolowy, Ding & Paugam (2024)

| Year X3                                      | (standalone) | Adjustment due to the equity interest in Investee | Consolidated income statement |
|--|--------------|---|-------------------------------|
| Sales  | 1,000        |   | 1,000                         |
| Expenses                                     | -950         |   | -950                          |
| Net income resulting from equity in Investee |              | 10  | 10                            |
| Net income                                   | 50           | 10  | 60                            |

## FINANCIAL ACCOUNTING II

UNDERGRADUATE COURSES: MANAGEMENT, ECONOMICS AND FINANCE

2024/2025

**1S** 



