

01/06/2022 – Exercise 1

The following information is known about Jacheze S.r.l.:

Net asset value at book value	\$ 700,000
Net asset value at fair value	\$ 1,900,000
Fair value of unrecognized (*) assets	\$ 1,070,000
Fair value of unrecognized (*) liabilities	\$ 330,000

(*) identifiable assets and liabilities that on the basis of current accounting principles have not been recorded in the financial statements of the Company

Micheze S.p.A. is a company specially set up by some local investors to acquire Jacheze. Currently the only asset in its assets is cash in the amount of \$2.4 million. On the liabilities side of the balance sheet, a loan in the amount of \$1.8 million is recorded. The equity consists entirely of contributed capital.

Consider - alternatively - the following options:

1. Micheze buys all the issued share capital of Jacheze for an amount equal to its fair value (1.9 million).
2. Micheze acquires an 80 per cent stake in Jacheze. Considering that a majority is thus acquired, the price paid is set at \$1.7 million.

Relative to each option:

1. Calculate the value of the goodwill to be recorded in the consolidated financial statements at acquisition date. Ignore any deferred tax considerations. With reference to hypothesis number 2 (partial ownership of shares issued by the subsidiary) clarify the assumptions made to calculate the value of goodwill. Clearly the more detailed the answer, the better it will be judged.
2. Knowing that the total liabilities of Jacheze S.r.l. are \$2.5 million at book value, determine the total amount of the sources of capital in the consolidated financial statements after the consolidation adjustments and eliminations at the acquisition date (clearly there are no intra-group transactions between the two companies).
3. Provide the consolidation entries at the date of acquisition.

SOLUTIONS:

Question 1

The first step is to understand what portion of the fair value of the subsidiary's entire net worth is attributable to separately identifiable assets and liabilities and what portion is attributable to goodwill (whether positive or negative).

The difference between the fair value of the subsidiary's equity and its book value is \$1.2 million (\$1.9 -0.7 million).

Of this \$1.2 million, the portion of value associated with the recognition of the previously unrecognized value of separately identifiable assets and liabilities is \$740,000 (\$1.070-0.33 million).

The two options presented by the text can be considered at this point.

Hypothesis 1

Note that the price paid for all the shares coincides (not coincidentally) with the fair value of the entire capital of the subsidiary. The value of goodwill is determined by subtracting from the fair value of consideration transferred (\$ 1,9 million) the fair value of the net identifiable assets acquired (\$ 1,44 million). This is equal to 1.44 million, which is the sum of the book value of the subsidiary's shareholder's equity plus the portion of the attributable differential value of the separately identifiable assets and liabilities.

The answer to the first question is, therefore, as follows.

+ Fair value of consideration transferred	\$ 1,900,000
– Fair value of net identifiable assets	– \$ 1,440,000

= Goodwill on acquisition date	\$ 460,000

Hypothesis 2

In this instance the value of goodwill is determined by subtracting from the fair value of consideration transferred (\$ 1,7 million) the fair value of the net identifiable assets proportional to the percentage of ownership obtained. The answer to the first question is, therefore, as follows.

+ Fair value of consideration transferred	\$ 1,700,000
– 80% of the fair value of net identifiable assets	– \$ 1,152,000

= Partial goodwill on acquisition date	\$ 548,000

Note that the goodwill relative to 80 per cent of the capital is in this case greater than the goodwill relative to the entire company. This is because it has been assumed that the consideration paid to acquire the controlling interest is greater than the proportionate value of the company's equity (estimated at fair value). As can be seen, the value paid for 80 per cent of the company is very close to the value paid, in the previous assumption, for 100 per cent.

In any case, the value thus determined is the so-called partial goodwill. It corresponds, in fact, to only that portion of the subsidiary's assets that is attributable to the parent company.

We can stop at this point or determine the value of the total goodwill, which, in addition to considering the goodwill relating to the portion pertaining to the parent company, attempts to determine the portion of goodwill attributable to the minority shareholders (even though no payment has been made for this portion).

To do this, we must determine the fair value attributable to the minority portion of the subsidiary's capital, the portion for which no transaction with the parent company has taken place. In this specific case, in the absence of other information, we can imagine calculating the value attributable to the percentage of the capital held by the minority shareholders directly from the figure given at the beginning of the text, by applying the percentage of ownership pertaining to the minority shareholders to the value of the entire assets of the subsidiary estimated at fair value.

We can therefore calculate the value of the goodwill pertaining to the minority shareholders in the following way:

+ 20% of the fair value of the set of <u>net assets</u>	\$ 380,000
– 20% of the fair value of the set of <u>net identifiable assets</u>	– \$ 288,000

= Goodwill pertaining to the minority shareholders	\$ 92,000

We will then have that:

$$\text{Total Goodwill} = \$ 548,000 + \$ 92,000 = \$ 640,000$$

Question 2

According to the text, Michize's funds come from liabilities of \$1.8 million and \$600,000 from shareholders' equity.

Loan	\$ 1,800,000
Shareholders' Equity	\$ 600,000

Total Liabilities & Shareholders' Equity	\$ 2,400,000

Note that the structure of the sources does not change after the purchase of the shareholding in the subsidiary, in either case being paid in cash.

Hypothesis 1

Under this hypothesis, given that Jachize S.r.l. is entirely controlled by Michize S.p.A. (the parent company has in fact acquired 100% of the shares issued by the subsidiary) there are no minority interests. This means that the group's net equity coincides with that of the parent company.

On the other hand, the liabilities of the parent company must be considered at book value (there has not, in fact, been any transaction capable of legitimizing the use of a new measurement basis), while the liabilities of the subsidiary must be considered at fair value (because a transaction of that type has taken place in relation to them).

+ Liabilities of the parent company (at book value)	\$ 1,800,000
+ Liabilities of the subsidiary (at fair value)	\$ 2,830,000
= Liabilities of the group	\$ 4,630,000
+ Parent company's shareholders' equity	\$ 600,000
= Total sources for the group	\$ 5,230,000

Hypothesis 2

In the hypothesis of partial control, the group's source structure changes as a portion of the equity financing is provided not by the shareholders of the parent company, but by the minority shareholders. It is also necessary to consider two possible values of the latter entity, since the value attributed to the minority interest depends on the criterion chosen to determine goodwill (and, therefore, whether the goodwill considered in the consolidated financial statements is partial or total)

In the scenario where goodwill is calculated only in respect of the shareholding acquired by the parent company (partial goodwill), we will have the following source structure:

+ Liabilities of the parent company (at book value)	\$ 1,800,000
+ Liabilities of the subsidiary (at fair value)	\$ 2,830,000
= Liabilities of the group	\$ 4,630,000
+ Parent company's shareholders' equity	\$ 600,000
+ Minority interest	\$ 288,000
= Total sources for the group	\$ 5,518,000

If, on the other hand, total goodwill is represented, we will have the following structure:

+ Liabilities of the parent company (at book value)	\$ 1,800,000
+ Liabilities of the subsidiary (at fair value)	\$ 2,830,000
= Liabilities of the group	\$ 4,630,000
+ Parent company's shareholders' equity	\$ 600,000
+ Minority interest	\$ 380,000
= Total sources for the group	\$ 5,619,000

Question 3

Given the high level of summary data provided, the accounting entries are very simple and, to some extent, only evocative of what really needs to be done.

Let's start with the journal entries required to adjust Subsidiary's 's book values to fair values. They are exactly the same in the two hypotheses considered

Dr Subsidiary's Net Assets (*)	\$ 720,000	
Cr Subsidiary's Shareholders' Equity		\$ 720,000

(*) in fact, the relevant accounts of individually identifiable assets and liabilities must be debited and credited, both those already recorded (when the book value is to be adjusted to fair value) and those not previously recognized and emerging as a result of the consolidation process.

At this point, the investment in the subsidiary can be eliminated and the goodwill can be recognized. Clearly, at this new stage, journal entries differ in the two hypotheses.

Hypothesis 1

Dr Subsidiary's shareholders' equity	\$ 1,440,000	
Dr Goodwill	\$ 460,000	
Cr Investment in the Subsidiary		\$ 1,900,000

Hypothesis 2

Dr Subsidiary's shareholders' equity	\$ 1,152,000	
Dr Goodwill	\$ 548,000	
Cr Investment in the Subsidiary		\$ 1,700,000

Dr	Subsidiary's shareholders' equity	\$ 288,000	
	Cr Non-controlling Interest		\$ 288,000

If we wish to record goodwill pertaining to minority shareholders, supplementing the partial goodwill recognized to this point to reach total goodwill, we must add the following accounting entry:

Dr	Goodwill	\$ 92,000	
	Cr Non-controlling Interest		\$ 92,000

01/06/2022 – Questions

Answer the following two questions. The answer should be brief if possible, but comprehensive (do not dwell on inessential, collateral, or general considerations).

1. Why must inventory transfer to related companies be eliminated in preparing consolidated financial statements?
2. What consolidation entry/entries is/are needed when inventory is sold to an affiliate at a loss and it is not resold before the end of the period?

I do not consider it necessary to answer these questions because I believe the student is capable of doing so on his or her own. I just want to point out a very common mistake made by those who took the exam in answering the first question, a mistake that unfortunately shows a lot of superficiality in preparation.

Many students answered question 1 by saying that adjustment entries are necessary, in this case, "to avoid double counting of inventories". Well, think about it, if A sells to B the goods leave A's assets and enter B's assets. There is no possibility of any double counting!

The value attributed to the inventory of goods may be wrong because it differs from the original cost value and is not based on a price formed in an arm's length transaction. In that case it must be changed, but we cannot say that there is double counting.

Double counting may, on the other hand, occur when the goods are sold again (from B to C) but it concerns the sales revenues and the cost of goods sold, not the inventory items!

22/06/2022 - Exercise 1

The following information is known about Target Inco.:

	Carrying Amount	Fair Value
Identifiable Assets	\$ 540,000	\$ 485,000
Identifiable Liabilities	\$ 150,000	\$ 190,000

The total number of shares issued by the target is 20,000. The average stock market price of a share is \$ 23.

Shell Limited is a company specially set up by some local investors to acquire Target. Currently the only asset in the debit side of its balance sheet is cash in the amount of \$ 600,000. On the liabilities side of the balance sheet, a loan in the amount of \$ 510,000 is recorded. The equity consists entirely of contributed capital.

Consider - alternatively - the following options:

3. Shell buys for cash all the issued share capital of Target for \$ 510,000
4. Shell acquires (for cash) an 82 per cent stake in Target. Considering that a majority is thus acquired, the price paid is set at \$ 425,000.

Relative to each option:

- a) Calculate the value of the goodwill to be recorded in the consolidated financial statements at acquisition date. Ignore any deferred tax considerations. With reference to hypothesis number 2 (partial ownership of shares issued by the subsidiary) clarify the assumptions made to calculate the value of goodwill. Clearly the more detailed the answer, the better it will be judged.
- b) Provide the consolidation entries at the date of acquisition. Please note: all journal entries, not only those relating to the elimination of the investment.
- c) Provide the consolidated balance sheet of the group at the date of acquisition.

SOLUTIONS:

Question A

The first thing to do to answer the question was to determine the fair value of the set of net identifiable assets (made up of all the identifiable assets acquired and liabilities assumed) of the subsidiary expressed at fair value. In determining this value, we can simultaneously highlight variations from the carrying values.

	Carrying Amount	Fair Value	Changes
Identifiable Assets	\$ 540,000	\$ 485,000	(55,000)
Identifiable Liabilities	\$ 150,000	\$ 190,000	40,000
	-----	-----	-----
Net Identifiable Assets	\$ 390,000	\$ 295,000	(95,000)

Hypothesis 1

Clearly the value of goodwill is determined by subtracting from the fair value of consideration transferred (\$ 510,000) the fair value of the net identifiable assets acquired. The answer to the first question is, therefore, as follows.

+ Fair value of consideration transferred	\$ 510,000
– Fair value of net identifiable assets	– \$ 295,000

= Goodwill on acquisition date	\$ 215,000

Hypothesis 2

In this instance the value of goodwill is determined by subtracting from the fair value of consideration transferred (\$ 425,000) the fair value of the net identifiable assets proportional to the percentage of ownership obtained. The answer to the first question is, therefore, as follows.

+ Fair value of consideration transferred	\$ 425,000
– 82% of the fair value of net identifiable assets	– \$ 241,900

= Partial goodwill on acquisition date	\$ 183,100

The value thus determined is the so-called partial goodwill. It corresponds, in fact, to only that portion of the subsidiary's assets that is attributable to the parent company.

We can stop at this point or determine the value of the total goodwill, which, in addition to considering the goodwill relating to the portion pertaining to the parent company, attempts to determine the portion of goodwill attributable to the minority shareholders (even though no payment has been made for this portion).

To do this, we must determine the fair value attributable to the minority portion of the subsidiary's capital, the portion for which no transaction with the parent company has taken place. The text comes to our assistance by providing the "total number of shares issued by the target" and the "average stock market price" for those shares. We can therefore calculate the value of the goodwill pertaining to the minority shareholders in the following way:

+ 3,600 shares * 23 \$/share	\$ 82,800
– 18% of the fair value of the set of net identifiable assets	– \$ 53,100

= Goodwill pertaining to the minority shareholders	\$ 29,700

We will then have that:

$$\text{Total Goodwill} = \$ 183,100 + \$ 29,700 = \$ 265,900$$

Question B

The journal entries required to adjust Target's book values to fair values are equal in the two hypotheses and are as follows:

Dr Target's shareholders' equity	\$ 95,000	
Cr Identifiable Assets		\$ 55,000
Cr Identifiable Liabilities		\$ 40,000

Note how these accounting entries serve to incorporate into the consolidated financial statements the changes we calculated earlier, bringing the value of the subsidiary to fair value of its Net Identifiable Assets.

We can now move on to the next step in the consolidation process by eliminating the investment in the subsidiary contained in the assets of the parent company and offsetting this with the value of the net assets of the subsidiary (proportional to the investment made). As is well known, positive or negative goodwill may arise at this stage of the process, as well as minority interests in equity.

Clearly, at this stage, journal entries differ in the two hypotheses.

Hypothesis 1

Dr	Subsidiary's shareholders' equity	\$ 295,000	
Dr	Goodwill	\$ 215,000	
	Cr	Investment in the Subsidiary	\$ 510,000

Hypothesis 2

Dr	Subsidiary's shareholders' equity	\$ 241,900	
Dr	Goodwill	\$ 183,100	
	Cr	Investment in the Subsidiary	\$ 425,000

Dr	Subsidiary's shareholders' equity	\$ 53,100	
	Cr	Non-controlling Interest	\$ 53,100

If we wish to record goodwill pertaining to minority shareholders, supplementing the partial goodwill recognized to this point to reach total goodwill, we must add the following accounting entry:

Dr	Goodwill	\$ 29,700	
	Cr	Non-controlling Interest	\$ 29,700

As can be clearly seen by analyzing the journal entries that provide an answer to Question #3 the only change in the value of the investment that has an effect on the investor's income is linked to the recognition of the income earned by the investee company. The effect caused on the income by the investment in the period considered is therefore an increase in the income of \$ 87,500

Question C

To answer this question correctly, it is necessary to understand Shell's financial position. Before the purchase of Target's shares, its balance sheet is as follows:

Cash	\$ 600,000

Total assets	\$ 600,000
Loan	\$ 510,000
Shareholders' Equity	\$ 90,000

Total Liabilities & Shareholders' Equity	\$ 600,000

After the purchase of Target's shares, its balance sheet is as follows:

Hypothesis 1

Cash	\$ 90,000
Investment in Target	\$ 510,000

Total assets	\$ 600,000
Loan	\$ 510,000
Shareholders' Equity	\$ 90,000

Total Liabilities & Shareholders' Equity	\$ 600,000

Hypothesis 2

Cash	\$ 175,000
Investment in Target	\$ 425,000

Total assets	\$ 600,000
Loan	\$ 510,000
Shareholders' Equity	\$ 90,000

Total Liabilities & Shareholders' Equity	\$ 600,000

The following page shows the three different balance sheet situations arising (under the three different factual assumptions considered) from the application of the consolidation process to the financial statements of Shell and Target. Note that the amount of the group's assets and net assets depend on the application of the reasoning described above. The overall process that leads to the formation of the values contained in the three documents should be clear to you.

Hypothesis 1

Cash	\$ 90,000
Target's Identifiable Assets	\$ 485,000
Goodwill	\$ 215,000
Total assets for the group	\$ 790,000

Loan	\$ 510,000
Target's Identifiable Liabilities	\$ 190,000
Total liabilities for the group	\$ 700,000
Shareholders' Equity	\$ 90,000
Total Liabilities & Shareholders' Equity	\$ 790,000

Hypothesis 2 (a) – Partial Goodwill

Cash	\$ 175,000
Target's Identifiable Assets	\$ 485,000
Goodwill	\$ 183,100
Total assets for the group	\$ 843,100

Loan	\$ 510,000
Target's Identifiable Liabilities	\$ 190,000
Total liabilities for the group	\$ 700,000
Parent's Shareholders' Equity	\$ 90,000
Non-Controlling Interest	\$ 53,100
Total Liabilities & Shareholders' Equity	\$ 843,100

Hypothesis 2 (b) – Total Goodwill

Cash	\$ 175,000
Target's Identifiable Assets	\$ 485,000
Goodwill	\$ 212,800
Total assets for the group	\$ 872,800

Loan	\$ 510,000
Target's Identifiable Liabilities	\$ 190,000
Total liabilities for the group	\$ 700,000
Parent's Shareholders' Equity	\$ 90,000
Non-Controlling Interest	\$ 82,800
Total Liabilities & Shareholders' Equity	\$ 872,800

22/06/2022 - Exercise 2

The parent company sells a batch of goods (merchandises), previously purchased for \$ 12,000, to one of its subsidiaries. Deliberately the transaction is carried out below cost, thereby recording a loss of €3,000 on the transaction. The sale took place on credit, so that the consideration is still due at the end of the period

Knowing that:

- both companies use the perpetual inventory method in their accounting process
- the group operates in a “tax haven”, so there are no requirements for taxes

Required (A):

Provide the journal entries:

- of the parent company at the time of the sale
- of the subsidiary at the time of purchase
- necessary to eliminate the effect of intergroup sales.

Imagine now that - contrary to the assumption made up to this point - the initial internal transaction is followed by the sale to a third party of 2/3 the goods tranfered wiyhin the group. The total consideration for the sale is \$8,500 and is settled immediately in cash

Required (B):

Provide the consolidation journal entries (if they are necessary) needed to eliminate the effect of intergroup sales in this hypothesis.

SOLUTIONS:

The solution to this exercise requires knowledge of the basic entries relating to the purchase and sale of goods in a mercantile company (knowledge assumed to have been acquired during the first year). The student must, first of all, know that:

- in purchasing transactions, neither profit nor loss is determined, but only changes in the level of assets and liabilities
- gross profits and losses on sales are recorded in the accounting system by the contraposition of sales revenue and cost of sales.

Question A

A.1 Journal entries of the Parent Company at the time of the sale

Dr	Cost of Goods Sold	\$ 12,000	
	Cr Merchandise Inventory		\$ 12,000
Dr	Account Receivables	\$ 9,000	
	Cr Sales Revenue		\$ 9,000

A.2 Journal entries of the Subsidiary at the time of the purchase

Dr Merchandise Inventory	\$ 9,000	
Cr Account Payables		\$ 9,000

After the previous entries, the situation in the accounts of the two companies is as follows:

PARENT		SUBSIDIARY	
BALANCE SHEET		BALANCE SHEET	
Inventory	→	Inventory	→
Dr 12,000		Dr 9,000	
Cr 12,000	→		
nil			
Account Receivables. Dr 9,000			Cr 9,000 Account Payables
INCOME STATEMENT		INCOME STATEMENT	
Cost of Goods Sold 12,000			
	Sales Revenue 9,000		

A.3 Journal entries necessary to eliminate the effect of intergroup sales

As can be seen in the accounts of the parent company, there is a cost of goods sold and a sales revenue that corresponds to an internal transaction and must therefore be eliminated in full. In addition, it can be seen that the inventory of goods is valued at less than cost, so the value must be restored to its original value.

Moreover, in the balance sheets of the two companies forming the group, there are mutual receivables and payables which clearly must be eliminated.

Dr Sales Revenue	\$ 9,000	
Dr Merchandise Inventory	\$ 3,000	
Cr Cost of Goods Sold		\$ 12,000

Dr Accounts Payable	\$ 9,000	
Cr Accounts Receivables		\$ 9,000

B. Journal entries necessary to eliminate the effect of intergroup sales

In this case, the initial sale, which is internal to the group, is followed by a subsequent sale to external parties and thus an arm's length transaction. The sale in question does not concern the entire batch of goods exchanged internally, but only two-thirds of it. There are several possibilities to logically reconstruct the adjustments that must be made. Below are two examples of the reasoning that can be carried out; clearly, the end result is always the same.

PARENT

BALANCE SHEET	
Inventory	
→ Dr 12,000	
Cr 12,000	→
nil	
Account Receivables.	Dr 9,000

INCOME STATEMENT	
Cost of Goods Sold	Sales Revenue
12,000	9,000

SUBSIDIARY

BALANCE SHEET	
Inventory	
→ Dr 9,000	
Cr 6,000	→
Dr 3,000	
	Cr 9,000
	Account Payables

INCOME STATEMENT	
Cost of Goods Sold	Sales Revenue
6,000	8,500

Dr Sales Revenue	\$ 9,000	
Dr Merchandise Inventory	\$ 3,000	
Cr Cost of Goods Sold		\$ 12,000
Dr Cost of Goods Sold	\$ 2,000	
Cr Merchandise Inventory		\$ 2,000
Dr Accounts Payable	\$ 9,000	
Cr Accounts Receivables		\$ 9,000

PARENT

BALANCE SHEET	
Inventory	
→ Dr 12,000	
Cr 12,000	→
nil	
Account Receivables.	Dr 9,000

INCOME STATEMENT	
Cost of Goods Sold	Sales Revenue
8,000	9,000
4,000	

SUBSIDIARY

BALANCE SHEET	
Inventory	
→ Dr 9,000	
Cr 6,000	→
Dr 3,000	
	Cr 9,000
	Account Payables

INCOME STATEMENT	
Cost of Goods Sold	Sales Revenue
6,000	8,500

Dr Sales Revenue	\$ 9,000	
Dr Merchandise Inventory	\$ 1,000	
Cr Cost of Goods Sold		\$ 10,000