ISCTE IUL
Instituto Universitário de Lisboa
Lisbon University Institute

Financial Accounting I

2014/2015

GAi

Chapter 2

Solutions

Solutions (*)

Case 2.01 Portucel Soporcel

Case 2.02 Sumol-Compal

Case 2.03 Delta Cafés

(*)These cases were prepared based on the consultation of the sources mentioned in each. They were built exclusively for educational purposes, in an academic perspective. Some of the qualitative and quantitative information and the issues presented are purely hypothetical. The names, trademarks and logos are property of the entity (ies) mentioned to which we appreciate the understanding, collaboration and courtesy.

Solution

Portucel Soporcel: The leading European manufacturer of uWF printing and writing paper

Questions:

1. **Elements of the statement of financial position**

   a. **Identify and define the 3 main elements of the dtatement of financial position of Portucel Soporcel.**

The three main elements of the statement of financial position of Portucel Soporcel are the assets, liabilities and equity of this entity.

The assets are controlled by the Portucel Soporcel as a result of past events and from which it is expected that future economic benefits flow to the company in the future. An example of an asset is industrial equipment acquired and held by the entity in order to obtain cash flows in the future, because products are manufactured using this equipment and then they are sold.

Liabilities are present obligations of the Portucel Soporcel resulting from past events, the settlement of which is expected to result in an outflow of resources embodying economic benefits. An example of a liability is a debt payable to a supplier, whose settlement is expected to result in outflow of funds, usually a sum of money.

Equity is the residual value of the assets of Portucel Soporcel after deducting all of its liabilities. In other words, equity represents the investment made by the shareholders and the profits generated and reinvested in the entity.

   b. **What is the proportion of assets financed by "Investors in the company" and financed by "creditors of the company"?**

At the end of 2011, about 52% of the assets of Portucel Soporcel was financed by equity, that are the investor in the company, and the remaining 48% financed by liabilities, that are creditors of the company. Thus seems to be some balance in the funding structure of this company.

[1] This case is just for pedagogical usage. Some informations are hypothetical. The names, trademarks and logos are property of the entity (ies) mentioned, to which we appreciate the understanding, collaboration and courtesy.

c. **Make the link between uppercase (A, B, C) and lowercase (a, b, c, d,…) letters.**

A → c,g
B → a,d,e,h
C → b,i,e,f,

2. **Classification of assets and liabilities**

a. **The assets and liabilities of Portucel Soporcel are presented in the statement of financial position classified as current and non-current. What is the difference between this two categories of assets?**

Current assets are those that the entity expects to be realized in the normal course of its operating cycle (eg customers), which are held for sale or consumption in the ordinary course of its operating cycle (eg raw materials) which are held with the primary purpose of selling in the short term (eg shares held for sale), or are cash or cash equivalents. The remaining assets will be classified as non-current (eg tangible fixed assets or intangible assets).

Current liabilities are those that the entity expects to be settled in the normal course of the operating cycle (eg suppliers) or to be settled within twelve months after the end of the reporting period (eg funding obtained to settle within twelve months from the balance sheet date). The remaining liabilities are classified as non-current (eg funding obtained to be settle whose term exceeding twelve months).

b. I**dentify the most important current and non-corrents assets, as weel as current and non-current liabilties, at the end of 2011.**

Non-current assets: plant, property and equipment; goodwill; biological assets

Current assets: cash and cash equivalents; receivable and other current assets; inventories

Non-current liabilities: interest-bearing liabilities; deferred tax liabilities

Current liabilities: payables and other current liabilities; interest-bearing liabilities

c. **What is at the end of 2011, the proportion of non-current assets relative to total assets?**

At the end of 2011, non-current assets of Portucel Soporcel accounted for 73% of total assets. This proportion is usual in industrial companies that require significant investments in tangible fixed assets.

In companies that engage in areas of little fixed capital intensive business, including service providers, the proportion of non-current assets is usually lower.

d. **Assume, hypothetically, that the statement of financial position of Portucel Soporcel includes, among others, the following assets. Rank them in tangible fixed assets, intangible assets, inventories and biological assets, with the definition of each of these elements.**

Assets	Classification	Definition
Factory in figueira da foz Office building Watchdogs Paper warehouse	Fixed Tangible assets	Tangible items held for use in the production or supply of goods or services, for rental to others or for administrative purposes and that are expected to be used during more than one period.
Accounting software Brand navigator	Intangible assets	Identifiable non-monetary assets without physical substance.
Eucalyptus plantation Vines	Biological assets	Live animals or plants related to agricultural activity.
Eucalyptus pulp Reels of paper Trunks of eucalyptus Reams of paper	Inventories	Assets held for sale in the ordinary course of business, assets in the production process for future sale and materials to be applied in the production process or in the rendering of services.

e. **Make the link between uppercase (A, B, C) and lowercase (a, b, c, d,…) letters.**

A→ b,c,
B → b,d
C → e
D → g
E → i
F → i,j

3. **Effect of transactions on the elements of the statement of financial position**

…three scenarios…:

a. **Capital increase in the amount of EUR 500 million, paid in cash.**

This scenario leads to an increase in the total equity of this entity. Shareholders realize capital in cash which, in turn, will be used to pay for the construction of the new plant. The net effect of this transaction on the statement of financial position is as follows:

Assets	Liabilities and S.Equity	
Non current assets	*Liabilities*	*S.Equity*
FTA +500	-	Capital +500

This scenario is one that will exert less pressure on the liquidity of this entity, since the payment of the costs of construction of the new plant is performed using direct financing from its shareholders.

b. **Obtaining a bank loan of EUR 500 million, to be repaid in twenty annual installments, the first path in the amount of EUR 25 million.**

This scenario leads to an increase in non-current liabilities and current liabilities of this entity. The bank delivers money to the entity that, in turn, that money will be used to pay for the construction of the new plant. The net effect of this transaction on the statement of financial position is as follows:

Assets	Liabilities and S.Equity	
Non current assets	*Non-current Liabilities:*	*S.Equity*
	Bearing Liabilities +475	
	Current liabilities:	-
FTA +500	*Bearing liabilities +25*	

C. Obtaining a bank loan of EUR 500 million, to be repaid within one year.

This scenario leads to an increase in current liabilities of this entity. The bank delivers money to the entity that, in turn, will be used to pay for the construction of the new plant. The net effect of this transaction on the statement of financial position is as follows:

Assets	Liabilities and S.Equity	
Non current assets	*Non-current Liabilities:*	*S.Equity*
	Current liabilities:	-
FTA +500	*Bearing liabilities +25*	

Solution:

Sumol+Compal: Trades with history

1. **Elements of the statement of financial position**
   a) Identify the major current and non-current assets, as well as current and non-current liabilities and give some examples of elements that could be included in each one of those classifications.

Major Non-current assets: Intangible, Goodwill, Tangible.

Major Current Assets: Short term trade debt receivables, Stocks.

Examples:

Short-term trade debt receivables mainly include receivables from customers, including wholesalers of drinks, retailers, hypermarkets, supermarkets, cafes, and bakeries.

The stocks (inventories) include materials (such as fresh fruit) and finished products, for example, fruit juices or soft drinks.

Intangible assets acquired include brands such as, for example, Compal, Um Bongo Frize, and contractual rights of representation in Portugal of Pepsi, 7 Up and Guarana Antarctica.

Tangible fixed assets include, for example, land, buildings, warehouses, production lines, vehicles transporting products, computer equipment and office furniture.

b) What was the proportion of intangible assets, including goodwill, relative to the total of non-current assets, at the end of 2011? Comment.

At the end of 2011, intangible assets, including goodwill, had a weight of about 83% of total non-current assets. This entity is assumed, as well as a company managing of a wide range of beverage brands and vegetables.

c) What was the proportion of assets financed by Bank Loans at the end of 2011? Comment.

At the end of 2011, about 38% of the assets of SUMOL + COMPAL were financed by bank loans, long-term and short-term.

d) Suppose that Sumol+Compal's Balance sheet includes, among others, the following elements. Classify those elements as current or non-current assets and current or non-current liabilities.

	Assets		Liabilities	
	Current	Non Current	Current	Non Current
Factories		x		
Lands		x		
Office’s furniture		x		
Juice´s equipment of production		x		
Forklifts		x		
Bank loans – to be settled within one year			x	
Warehouse of materials and products		x		
Guavas harvested from a plantation in Brazil	x			
License to (entitled to) operate a tea estate in Sri Lanka		x		
Dividends to be paid to shareholders			x	
Royalty to represent the brand Pepsi in the Portuguese market		x		
Computers		x		
Software to manage accounts from clients		x		
Juices in the warehouse available to sell	x			
Juices that are work-in-progress	x			
Oranges and pomegranates in the warehouse	x			
Trade marks acquired		x		
Accounts payable to suppliers of fruit			x	
Income taxes to be paid to State			x	
Accounts from costumers	x			
Money in bank deposits	x			
Bank loans – to be settled after 1 year of the balance sheet date				x

2. Effect of transactions on the elements of the statement of financial position

Increase of the share capital of the entity in the amount of 50.000. This capital was fully paid in cash.

Assets	Liabilities and S.Equity	
Current	*Liabilities*	*Shareholders Equity*
Cash +50.000	-	Capital +50.000

Obtaining a bank loan totaling 60.000, to be repaid in five equal annual installments, beginning in 2013.

Assets	Liabilities and S.Equity	
Non-current	*Non-current liabilities*	*Shareholders Equity*
Cash +60.000	Long term Bank loans +48.000	-
	Current liabilities	
	Short term Bank loans +12.000	-

Acquisition of new production equipment that allows to fully maintaining the nutritional value of fresh fruit. This equipment cost 15.000 and will be paid during 2013.

Assets	Liabilities and S.Equity	
Non-current	*Current Liabilities*	*Shareholders Equity*
Cash +15.000	Other current liabilities +15.000	-

Acquisition of a brand juices highly regarded in the European market, worth 20.000. This mark was paid immediately.

Assets	Liabilities and S.Equity	
	Liabilities	*Shareholders Equity*
	-	
Intangible +20.000		-
Cash -20.000		

b) … Statement of Financial Position of Fresh Fruit:

Statement of Financial Position - Fresh Fruit

ASSETS	SFP before op.1	Op 1	SFP after Op 1	Op 2	SFP after Op 2	Op 3	SFP after Op 3	Op 4	SFP after Op 4	Op5	SFP after Op5	Op6	SFP after Op6
Non-current Assets													
Inatngible								3000	3000		3000		3000
Tangible				12000	12000	5000	17000		17000		17000		17000
Financial Investments												4500	4500
Other non-current assets													
Total non-current assets	0	0	0	12000	12000	5000	17000	3000	20000	0	20000	4500	24500
Current assets													
Inventories													
Tax deferred assets													
Other current assets													
Cash and bank deposits		15000	15000	-12000	3000		3000	-3000		8000	8000	-4500	3500
Total current assets	0	15000	15000	-12000	3000	0	3000	-3000	0	8000	8000	-4500	3500
Total assets	0	15000	15000	0	15000	5000	20000	0	20000	8000	28000	0	28000
S. EQUITY AND LIABILITIES													
Shareholders´equity													
Contributed capital		15000	15000		15000		15000		15000		15000		15000
Retain.earnings													
Net income													
Total SE	0	15000	15000	0	15000	0	15000	0	15000	0	15000	0	15000
Liabilities													
Non-current Liabilities													
Long term loans										6000	6000		6000
Other non-curr. liabilities	0					5000	5000		50000		5000		5000
Total non-current liabilities		0	0	0	0	5000	5000	0	50000	6000	11000	0	11000
Current Liabilities													
Short-term loans										2000	2000		2000
Suppliers													
Other current liabilities													
Total current liabilities	0	0	0	0	0	0	0	0	0	2000	2000	0	2000
Total Liabilities	0	0	0	0	0	5000	5000	0	50000	8000	13000	0	13000
Total SE and liabilities	0	15000	15000	0	15000	5000	20000	0	65000	8000	28000	0	28000

After the 4th transaction the share capital of Fresh-fruit is 15.000 but cash and equivalents to cash is zero. Why? What happened to the money that shareholders invested in this company at the constitution date?

The amount reported in equity (as capital) is not synonymous of money in cash or cash equivalents. The money that shareholders have contributed to the formation of the entity was used to acquire resources, eg, tangible fixed assets and intangible assets.

The Fresh-fruit already done several transactions but had no impact on profits or losses. Why?

None of the activities undertaken so far by Fresh Fruit had an impact on profit or loss because this entity has not yet begun to develop revenue generating activities. The organization has developed a set of financing and investing activities, but not yet started operating activities and therefore not supported expenses or generated revenues.

CASE 2.03 Delta Cafés

Solution

Delta Cafés: A company with Human Face

1. The accounts and the analysis of transactions

a) What is an account?

An account is an organized way of accumulating the monetary effect of the transactions in each of the elements of financial statements.

b) Give examples of accounts that could be included in the Balance sheet of Delta cafés. What those accounts represent?

The Balance Sheet of Delta Cafés can include accounts such as, Tangible Assets, Raw Materials, Finished Products, Customers, Cash, Cash deposits, Suppliers, Borrowings, Capital, Retained earnings and net income.

c) **What are the main principles to be aware when someone is analyzing the transactions od Delta cafés?**

In the analysis of the transactions of Delta Cafés, or any other company, it is necessary to take into account that every transaction affects at least two accounts and that the fundamental accounting equation remain balanced after registration of every transaction.

d) Suppose that you decide to start a business of roasting and sale of coffee in the same business area of Delta Cafés. You chose the firm name: Telda Coffee & Tea, SA. Before beginning the operations that will able you to obtain a profit (*operational activities*), first you need to obtain *financing*, to "design your business", e.g., *to invest*. Assume that occured, among others, the following transactions:

1. Constitution of **Telda Coffee & Tea, SA:** share capital is 350.000 u.m. This capital was fully paid in cash in the bank Narta.

Assets	Liabilities and S.Equity	
Current	*Liabilities*	*Shareholders Equity*
Cash deposits +50.000	-	Capital +50.000

2. Purschase of factories by the amount of 150.000 u.m. for cash.

Assets		Liabilities and S.Equity	
Non-Current		*Liabilities*	*Shareholders Equity*
Fixed tang. Asset	+150.000	-	-
current			
Cash deposits	-50.000	-	-

3. Purchase of a line production for roasting and packaging of coffee by the amount of 120.000. Buying on credit, payable two years later.

Assets		Liabilities and S.Equity	
Non-Current		*Liabilities*	*Shareholders Equity*
Fixed tang. Asset	+150.000	Non-current	
		Other accounts payables: +150.000	
		-	

4. Acquisition of a license to operate a coffee farm in East Timor for a period of 20 years. The acquisition cost was 100.000 and was paid cash.

Assets		Liabilities and S.Equity	
Non-Current		*Liabilities*	*Shareholders Equity*
Intangible assets	+100.000	-	-
current			
Cash deposits	-100.000	-	-

5. Acquisition of a patent to produce gourmet coffee with rice flavor. Paid by cash, 50.000 u.m.

Assets		Liabilities and S.Equity	
Non-Current		*Liabilities*	*Shareholders Equity*
Intangible assets	+50.000	-	-
current			
Cash deposits	-50.000	-	-

6. Borrow from banks, amounting 80.000 u.m., to be payable in annual installments. The first installment will be paid just at the end of the second year of activity of this company.

Assets		Liabilities and S.Equity	
Current		*Liabilities*	*Shareholders Equity*
Cash deposits	+80.000	Non-current	
		Bank loans +80.000	

7. Acquisition of a financial investment in another company that distributes coffee products. With this company will be celebrated an arrangement to exclusively distribute coffees from **Telda, SA** in the Spanish market. This acquisition was made at prompt payment by 60.000 u.m.

Assets		Liabilities and S.Equity	
Non-Current		*Liabilities*	*Shareholders Equity*
Financial invest.	+60.000	-	-
current			
Cash deposits	-60.000	-	-

2. Record the effect of each transaction: journal entries and T-account

a) What is a journal entry?

The journal entey is a book where is made the chronological record of the effect of each transaction on each of the accounts of a company.

b) Record the transaction of Telda Coffee in the Journal entry.

N.	Description	Debit account	Credit account	Amount
1	Constituition of the company	Cash deposits	Capital	350.000
2	Acquisition of factories	Fixed Tangible Assets	Cash deposits	150.000
3	Acquisition of a line of prod.	Fixed Tangible Assets	Other accounts payable	120.000
4	Acquisition of a licence	Intangible assets	Cash deposits	100.000
5	Aquisition of a patent	Intangible assets	Cash deposits	50.000
6	Obtaining a bank loan	Cash deposits	Bank Loans	80.000
7	Acquisition of a part of capital another company	Financial Investments	Cash deposits	60.000

c) What is the difference between journal entries and general ledger (T-account)?

While the journal entries allow to know the effect of each transaction that occurred at each moment in the company, the general ledger allows to know the effect of each transaction in the accounts of the company, identifying at any time the balance of each.

d) Record each transaction in general ledger and compute the balance of each account.

Cash deposits

1)	350.000	2)	150.000
		4)	100.000
		5)	50.000
6)	80.000	7)	60.000
Total Db	*430.000*	*Total Cr*	*360.000*
Debit balance = 70.000			

Capital

		1)	350.000
Total Db	*0*	*Total Cr*	*350.000*
Credit balance = 350.000			

Fixed Tangible Assets

2)	150.000		
3)	120.000		
Total Db	*270.000*	*Total Cr*	*0*
Debit balance = 270.000			

Intangible Assets

4)	100.000		
5)	50.000		
Total Db	*150.000*	*Total Cr*	*0*
Debit balance = 150.000			

Other accounts payable

		3	120.000
Total Db	*0*	*Total Cr*	*120.000*
Credit balance = 120.000			

Bank Loans

		6	80.000
Total Db	*0*	*Total Cr*	*80.000*
Credit balance = 80.000			

Financial Investments

7)	60.000		
Total Db	*60.000*	*Total Cr*	*0*
Debit balance = 60.000			

...

e) Prepare the Balance sheet of Telda Coffee after all the transactions recorded.

u.m.

ASSETS		SE and Liability	
Fixed Tangible assets	270.000	Capital	350.000
Intangible assets	150.000	*Total Shareholders equity….*	*350.000*
Financial Investments	60.000	**Liabilities**	
Cash deposits	70.000	**Non-current**	
		Financiamentos obtidos	80.000
		Outras contas a pagar	120.000
		Current	
		-	
		Total do Passivo……………	*200.000*
Total do Activo……….	***550.000***	***Total Shareholders equity and liabilities***	***550.000***

Solution

Soares da Soares da Costa: tradition in construction

1. Classification of Statement of Financial Position elements

a. Assume, hypothetically, that the statement of financial position of Soares da Costa at the end of 2013 includes, among others, the following elements. Rank them in current assets, non-current assets, current liabilities and non-current liabilities.

	Current assets	Non-Current assets	Non-Current liabilities	Non- Current liabilities
"Construction site" for construction of a school		X		
Tools for use in building		X		
Materials for use in the works	X			
Concession of car parks		X		
Concession of roads		X		
Office building		X		
Machinery for use in the construction		X		
Office furniture		X		
Loans payable in 2015 or later				X
Loans payable in 2014			X	
Building leased to a consultant		X		
Hotel leased to a catering company		X		
Accounts payable to suppliers			X	
Receivables from customers	X			
Receivables from income tax	X			

b. From the list, indicate which are tangible assets, intangible assets and investment properties for the company Soares da Costa.

"Construction site" for construction of a school	Fixed tangible assets
Tools for use in building	Fixed tangible assets
Concession of car parks	Ativos intangíveis
Concession of roads	Ativos intangíveis
Office building	Fixed tangible assets
Machinery for use in the construction	Fixed tangible assets
Office furniture	Fixed tangible assets
Building leased to a consultant	Investment Properties
Hotel leased to a catering company	Investment roperties

2. Effect of investment transactions and financing

Journal entries:

N.	Description	Debit account	Credit account	Amount
1	Borrow	Cash deposits	Bank Loans	5 800
2	Construction site	Fixed tangible assets		1 000
			Other accounts payables	100
			Cash deposits	900
3	Increase of capital	Cash deposits	Capital	5 000
4	Acquisition of equipment	Fixed tangible assets		10 000
			Other accounts payables	5 000
			Cash deposits	5 000
5	Concession agreement	Intangible assets	Cash deposits	200
6	Appropiation of profits	Retained earnings	Cash deposits	50

General ledger:

Cash deposits

1)	5.800	2)	900
3)	5.000	4)	5.000
		5)	200
		6)	50

Capital

		3)	5.000

Fixed tangible assets

2)	1.000		
4)	10.000		

Intangible assets

5)	200		

Other accounts payables

		2)	100
		4)	5.000

Bank Loans

		1)	5.800

Retained earnings

6)	50		

…