



#### **Ch.** 1

#### Financial statement analysis

# 1<sup>st</sup> Definition of Financial Analysis

means using Techniques to analyze Financial Data according to it's relative importance in order to evaluate the financial position of the company.

# 2<sup>nd</sup> Techniques of Financial Analysis:

Financial Ratios are a <u>relation</u> between two related items which gives a meaningful information. They are usually expressed in <u>% or times per period</u>.

#### 1<sup>st</sup> we have to compute Financial Ratios by determining the relation between:

- Item in Balance sheet with Item in Balance sheet.
- Item in Income Statement with Item of Income Statement.
- Item in Balance Sheet with Item in Income Statement.

#### 2<sup>nd</sup> We have to Compare Financial Ratios with:

- Ratios of Previous Recods for the Same Company (Trend Analysis).
- Ratios of Current Period for another company.
- Ratios of Current Period for Industry (Industry Ratios).

#### Problems of Ratio Comparison:

Comparing Ratios with other companies has many problems because of:

- 1) Difference in Equations & Basis used by each company to compute ratios.
- 2) Difference in Fiscal Year Ends used by each company to prepare Financial Statements.
- 3) Difference in Accounting Methods used by each company.

  Comparing between Different Size Companies is more difficult than Comparing between Equal Size Companies especially when using <u>Absolute Numbers</u>.

# **Common Size Analysis**

Under Common Size Analysis; It is better to use **Percentages or Relatives (%)** rather than absolute numbers because using Percentages will help in comparing companies with different sizes.

#### **Income statements for 2018 and 2019 of ABC Inc. are given below:**

a) Express the income statement information in common-size percents for both 2018 and 2019. (20 pts) - Show calculations.

b) Assess whether this company's situation is favourable or unfavourable. (15 pts, 75

words)

	2019	2018
Sales	540,000	317,656
Cost of goods sold	<u>356,400</u>	<u>183,973</u>
Gross profit	183.600	133,683
Operating expenses	<u>113,400</u>	64,869
Net income	70,200	<u>68,814</u>
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#### Req (a)

	<u>2019</u>	<u>2018</u>
sales revenue	100%	100%
COGS	66%	57,9%
Gross profit	34%	42,1%
operating exp.	21%	20,4%
Net Income	13%	21,7%

Common size for 2019	Common size for 2018
Sales = $\frac{540000}{540000} \times = 100\%$	Sales = $\frac{317656}{317656} \times 100 = 100\%$
$COGS = \frac{356400}{540000} \times 100 = 66\%$	$COGS = \frac{183973}{317656} \times 100 = 57,9\%$
Gross profit = $\frac{183600}{540000} \times 100 = 34\%$	Gross profit = $\frac{133683}{317656} \times 100 = 42,1\%$
Operating exp. = $\frac{113400}{540000} \times 100 = 21\%$	Operating exp. = $\frac{64869}{317656} \times 100 = 20,4\%$
Net income = $\frac{70200}{540000} \times 100 = 13\%$	Net income = $\frac{68814}{317656} \times 100 = 21,7\%$

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# **Answer (b) Comment**

As indicated, Net income as percentage of sales. declined: It was 21-7% in 2018 and became 13% in 2019. This is mainly due to the significant increase in both COGS and operating expenses, since the company spent 57-9% of its revenue as COGS in 2018 and this percentage increased to 66% in 2019.

For operating expenses, the company spent 20,4% of sales revenue as operating exp. in 2018 and this ratio also increased to 21% in 2019.

So the overall performance seen as to be unfavorable. Since the company does not manage its costs and expenses well.

# Ratios used to measure Liquidity Analysis

Liquidity can be measured by using Ratios that compare between Current Assets & Current Liabilities:

working Capital = Current Assets - Current liability

Current Ratio = Current Assets

Current Liabilities

=1.5 high better

#### Quick (Acid Test) Ratio:

#### <u>Current Assets - Inventory - Prepaid Expenses</u>

#### Current Liabilities

## =1 high better

#### **Current assets**

Cash, Accounts receivable, inventory, prepaid expense, short term investment, Trading securities, marketable securities.

#### **Current liabilities**

Accounts payable, accrued expense, short term loan, salary payable, tax payable, interest Payable, Unearned revenue.

#### **Exercise**

- a) Compare the liquidity position of this company at the end of 2018 and 2019 by computing the: current ratio and acid-test ratio. (20 pts) Show calculations.
  - b) Comment on the ratios you computed in (a).

2006	2005	2004
\$ 30,800	\$ 35,625	\$ 36,800
88,500	62,500	49,200
111,500	82,500	53,000
9,700	9,375	4,000
	255,000	229,500
\$518,000	\$445,000	\$372,500
\$128,900	\$ 75,250	\$ 49,250
97,500	102,500	82,500
162,500	162,500	162,500
129,100	104,750	78,250
\$518,000	\$445,000	\$372,500
	\$30,800 88,500 111,500 9,700 277,500 \$518,000 \$128,900 97,500 162,500 129,100	\$30,800 \$35,625 88,500 62,500 111,500 82,500 9,700 9,375 277,500 255,000 \$518,000 \$445,000 \$128,900 \$75,250 97,500 102,500 162,500 162,500 129,100 104,750

#### a. Current ratio:

2006: 
$$\frac{\$30,800 + \$88,500 + \$111,500 + \$9,700}{\$128,900} = \underline{1.9}$$

2005: 
$$\frac{\$35,625 + \$62,500 + \$82,500 + \$9,375}{\$75,250} = \underline{2.5}$$

2004: 
$$\frac{$36,800 + $49,200 + $53,000 + $4,000}{$49,250} = \underline{2.9}$$

	2006	2005	2004
<b>Current Ratio</b>	1.87	2.52	2.90
Quick ratio	0.92	1.30	1.74
Current Ratio	Because (R) is above 1.5, Current Rations fine	Because CR is above 1.5, Current Ratio is fine	Because CR is above 1.5, Current Ratio is fine
Quick ratio	QR is less than 1. It would be much better if it was above or around 1. However, it is 0.92 which is very close to 1, so acceptable.	QR is more than 1. Quick ratio is fine.	QR is more than 1. Quick ratio is fine.

We can say that this company's liquidity is fine, and the company has the ability to pay its short-term liabilities in the coming year. But we also need to warn management that the quick ratio has fallen below 1. A quick ratio of 0.90 is still acceptable, but company management needs to be careful.

#### **Note**

In this example liquidity position of the company is fine. One more thing. If the company has a current ratio of more than 1.5 and a quick ratio of more than 1, this means that the company is holding more liquid assets than they need to pay current liabilities. So they are using liquid assets inefficiently

#### Chapter (3)

#### **Analyzing Financing Activities**



- 1) **Financing sources**: There 3 sources of financing
- A- Liabilities.
- B- Capital (stockholder's Equity).
- C- Off balance sheet transactions.

**Note**: More liabilities less equity → the co. is risky Less liabilities more equity → the co. is less risky

# 2) Liabilities

Liabilities can be classified into (type of liab.)

Operating Liabilities
Obligations that arise from operating activities.

#### Ex:

- Accounts payable
- Unearned revenue (Deferred Revenue)
- Payment in advance
- Trade and other payables
- Tax payable
- Salary payable
- Postretirement liabilities
- Postemployment benefits
- Any accrued operating
- Expenses such as accrued utility expense.

# Financing Liabilities Obligations that arise from financing activities.

#### Ex:

- Short term debt or loans
- Long term debt or loans
- Bonds payable
- Notes payable
- Borrowing
- Leases (especially financing lease). [lease liability]
- Current portion of long term debts.
- Bank over draft.
- Murabaha payables.

#### **Classification of liabilities in the financial statements (Balance sheet)**

#### Based on payment time

# Current (Short term) Liabilities

Obligations whose settlement require use of current assets or incurrence of another current liability within one year or operating cycle whichever is longer.

(Liabilities  $\leq$  one year)

#### **Examples**

A/P or trade payable Salary payable Unearned revenue Tax payable Short term bank loan Lease liability

#### Non-current (Long term) liabilities

Obligation of payable within one year or operating cycle whichever is longer

(Liabilities **>**∞ne year)

#### **Examples**

Tax payable
Long term bank ban
Lease liability

#### Some analysis issues

• Most of information related to habilities can be found in the note to financial statements.

#### Such as:

- Payment method (ore payment or installments)
- Payment dates an Unaturity dates.
- If there is interest applied, what is the interest rate.

#### - Interest rate is very important issue related to liabilities:

It is determined by the bank based on the riskness of the company.

<u>In other words</u>, there is positive relationship between interest rate and riskness of the company.

If the co. is more risky, the interest rate is determined to be high.

If the co. is less risky, the interest rate will be low.

• The company has to disclose average interest rate that it pay for its loans (average borrowing rate) because IFRs requires that.

#### **For Example:**

Co. ABC has three bank loans as follows:

5000 at 3% interest

2000 at 5% interest

3000 at 2% interest

10.000

So the average interest rate that should be disclosed in the notes is computed as follows:

$$5000 \times 3\% = 150$$

$$2000 \times 5\% = 100$$

$$3000 \times 2\% = 60$$

So average rate=
$$\frac{310}{10.000} \times 100 = 3.1\%$$



## Questions )The below is the liability part of a Boursa firm in Kuwait.

<b>₹</b>		As at		
29.	Note	2019	2018	
Liabilities				
Non-current liabilities				
Borrowings	12	9,288,487	3,240,649	
Lease liabilities	3	712,905	-	
Employees end of service menefits	13	1,567,228	1,446,693	
		11,568,620	4,687,342	
Current liabilities				
Trade and other payables	14	6,870,800	18,771,838	
Borrowings	12	6,127,421	2,892,324	
Lease liabilities	3	26,134	-	
		13,024,355	21,664,162	
Total liabilities		24,592,975	26,351,504	
Total equity and liabilities		93,189,727	95,865,891	

- a) List the financial liabilities of the company and indicate the change in total financial liabilities from 2018 to 2019 in percentages. (10 pts)
- b) List the operational liabilities of the company and indicate the change in total operating liabilities from 2018 to 2019 in percentages. **(10 pts)**

#### Reg(a) List the financial liabilities

	2019	2018	Change
Non current liab.			
Borrowings	9288487	3240649	
Lease liabilities	712905	-	
Current liab.			
Borrowings	6127421	21892324	
Lease liabilities	26134	-	
Total financial liab.	16,154,947	6132973	163.41%

Change = 
$$\frac{\frac{2019}{new-old}}{\frac{2018}{2018}} \times 100$$
  
=  $\frac{\frac{16.154.947-6132973}{6132973}} \times 100 = 163.41\%$ 

Increase in financial liab.

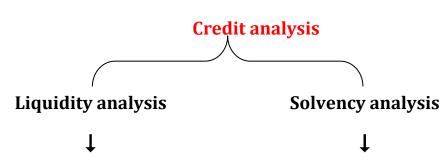
# Req(b) List the operational liabilities

	2019	2018	Change
Non current liab.	10°		
Employees end of service benefits	1,567,228	1,446,693	
Current liab.			
Trade and other payable	6,870,800	18,771,838	
Total operational liab.	8,438,028	20,218,531	- 58.27%

Change = 
$$\frac{new - old}{2018 \ old} \times 100$$
  
=  $\frac{8,438,028 - 20,210,531}{20,210,531} \times 100 = -58.27 \%$ 

Decrease in operational liab.

#### Remember



Short term analysis liquidity ratio

Long term analysis to evaluate the firms long term debt payment ability

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#### **Liquidity analysis**

- Current Ratio =  $\frac{\text{current assets}}{\text{current liab.}}$
- Quick Ratio =  $\frac{\text{curretn assets-inventory-prepaid exp.}}{\text{current liab.}}$

#### **Solvency ratio**

- Liabilities to equity ratio =  $\frac{\text{Total liabilities}}{\text{Total equity}}$
- Debts to equity ratio =  $\frac{\text{Total debts}}{\text{Total equity}}$

## Note:

Debts = loans = financing liabilities, so all debts are liabilities but all liabilities are not debts.

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Debt = Loans = Financing Liabilities

But dont forget that we have some other liabilities and they are not loans. For example AP is a liability but not a loan. Salaries payable is not a loan. But it is a kind of liability

The bigger the ratio, the riskier the company because it means that the co. depends more on debt than equity.

# Consolidated statement of financial position

	Note	31 Dec. 2021 KD	31 Dec. 2020 KD
Assets			
Non-current assets			
Goodwill	6.3	3,603,180	7 160 670
Property, plant and equipment	12	9,771,992 612,883	7,160,670
Right-of-use assets Investment in associates	13	86,168,913	1,103,929
Investment in associates Investments at fair value through other comprehensive income	14	129,097,281	96,671,328
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Current assets	45	25440.042	44 240 695
Inventories	15 16	35,116,042 31,788,814	41,319,685 29,606,122
Trade accounts receivable Other receivables and prepayments	10	1,134,062	657,532
Cash and cash equivalents	17	18,981,488	26,257,513
	25	87,100,406	97,840,852
Total assets	0,0	316,354,655	202,776,779
Equity and liabilities Equity Share capital Share premium Treasury shares Statutory, voluntary and general reserves Other components of equity	20		
Equity			
Share capital	18	20,993,131	20,993,131
Share premium	18	29,160,075	29,160,075
Treasury shares	19	(575,724)	(454,480)
Statutory, voluntary and general reserves	20	70,459,281	68,740,454
Other components of equity	21	82,741,073	47,981,962
Retained earnings		24,227,964	19,437,247
Total equity attributable to the owners of the Parent Company Non-controlling interests		227,005,800 504,642	185,858,389 441,798
Total equity		227,510,442	186,300,187
Non-current liabilities		4 440 027	3,929,186
Provision for employees' end of service benefits	22	4,410,937 26,334,495	3,323,100
Term loans Islamic financing facilities	23	38,000,000	_
Lease liabilities		428,888	-
Edde nabilities		69,174,320	3,929,186
Current liabilities		2,038,235	1,702,884
Trade accounts payable	24	9,662,081	7,179,352
Other payables and accruals Lease liabilities		151,416	-,,
Term loans-current portion	22	5,818,161	3,646,476
Islamic financing facilities-current portion	23	2,000,000	
Due to banks	17		18,694
		19,669,893	12,547,406
Total liabilities		88,844,213	16,476,592
Total equity and liabilities		316,354,655	202,776,779

Bader Naser Al-Kharafi Chairman

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## <u>2020</u>

# TOTAL LIAB / TOTAL EQUITY = 16476592 / 186300187=0.88 **2021**

TOTAL LIAB / TOTAL EQUITY = 88844213 / 227510442=0.391

Debt TO Equity 2020

Del	bt T	O Ec	uity	2021

Tame Lagrage		1		Equity 20	<u>/21</u>
Term Loans	F		Term	F	26 224 425
		-	Loans		26,334,495
Islamic Financing	F		T.1	Г	
		-	Islamic	F	
Lease Liab	F		Financing	Ω.	38,000,000
		-	Lease Liab	F	
Term loans	F		O <sub>2</sub>	D '	428,888
		3,646,476	- 403	_	
Lease Liab	F		Termloans	F	
		_	00		5,818,161
Islamic Financing	F		Lease Liab	F	
		-	<b>D</b> **		151,416
Due to bank	F	30	Islamic	F	
		18,694	Financing		2,000,000
TOTAL			Due to	F	-
FINANCING		3,665,170	bank		
(debt)			TOTAL		
TOTAL DEBT	C//				72 722 060
	(0)	3,665,170	FINANCING		72,732,960
			TOTAL		
<b>DEBT to EQUITY</b>	<b>7.</b>		DEBT		72,732,960
TOTAL DEBT					
/TOTAL EQUITY					TOTAL DEBT /
DEBT to EQUITY			TOTAL EQUI	TY	
=3665170/186300187		0.020	DEBTtoEQUI	TY= 72732	960 / 227510442
DEBT to		0.020	DEBT to		0.320
EQUITY =			EQUITY =		

#### **Comment**

<u>In year 2020</u> BECAUSE BOTH LIAB TO EQUITY AND DEBT TO EQUITY ARE LESS THAN 1, THIS COMPANY IS NOT THAT RISKY.

<u>In year 2021</u> BECAUSE BOTH LIAB TO EQUITY AND DEBT TO EQUITY ARE LESS THAN 1, THIS COMPANY IS NOT THAT RISKY

	2021	2020
Liab to Equity	0.391	0.088
Debt to		
Equity	0.320	0.020



- -When we compare the ratios from 2020 to 2021 we see that company becomes RISKIER because the ratios are increasing.
- However, in both year Compoany is not that risky because thie ratios are less than 1.
- if this company asks long term loan from Burgan Bank, most probably Burgan Bank will provide the loan.

One argues that "The best for the company is to avoid from using debt because debt increases the company's riskiness". Do you agree? Why? (75 words, 10 pts)

I do not agree. Although using debts increases the company's riskiness, especially if the company adopts more aggressive debt financing policy, but it is preferable because it provides opportunity growth as long as the company uses the borrowed money more efficiently to generate profit and pay debts and interest on time. So obtaining more debts is risky only if the company is not able to invest the borrowed money in profitable investing opportunities, so having debt helps company to grow. However, if company is not doing good business company may become riskier and may even collap

#### **Exercise**

LIABILITIES AND EQUITY			
Equity			
Attributable to Parent Company's shareholders			
Share capital	9	22,000,000	22,000,000
Legal reserve	10	2,843,811	740,756
Retained earnings		11,683,441	7,343,773
Total equity		36,527,252	30,084,529
Non-current liabilities			
Post employment benefits	11	2,912,300	2,296,229
Maintenance payables	12	19,433,727	10,652,320
Lease liabilities	13	133,398,702	116,145,351
Murabaha payables	14	4,425,635	5,285,910
	No.	160,170,364	134,379,810
Current liabilities		10	
Maintenance payables	12	7,531,410	11,245,173
Lease liabilities	13	22,485,345	20,674,479
Murabaha payables	14	849,285	840,000
Trade and other payables	15	29,201,588	21,598,732
Deferred revenue	040	14,355,356	6,364,706
Bank overdrafts	8	977,311	
	×	75,400,295	60,723,090
Total liabilities and equity		272,097,911	225,187,429
	A   K /		

# <u>LIABITITIES TO EQUITY</u> = (160170364+75490295)/36527252=6.45 Company is risky. Total Liab is 6.45 times bigger than total Equity

Debt to equit

Term Loans	F	26,334,495
Islamic Financing	F A	38,000,000
Lease Liab	X	428,888
Term loans	F	5,818,161
Lease Liab	F	151,416
Islamic Financing	F	2,000,000
Due to bank	F	-
TOTAL FINANCING		72,732,960
DEBt to EQUITY = 72732960 / 227510442→toal equity=0.320		

JAZEERA IS A RISK FIRM AS BOTH
LIAB TO EQUITY AND DEBT TO
EQUITY RATIOS ARE ABOVE 1.
HOWEVER, IF THE COMPANY
MANAGERS MANAGE DEBT
SMARTLY (CAN GENERATE ENOUGH
CASH FROM BUSINESS AND PAY
THE LIABILIOTIES ON TIME) THIS
HIGH AMOUNT OF LOAN CAN HELP
THE COMPANY TO GROW.