Accounting fundamentals

Business – Chapter 30

Overview

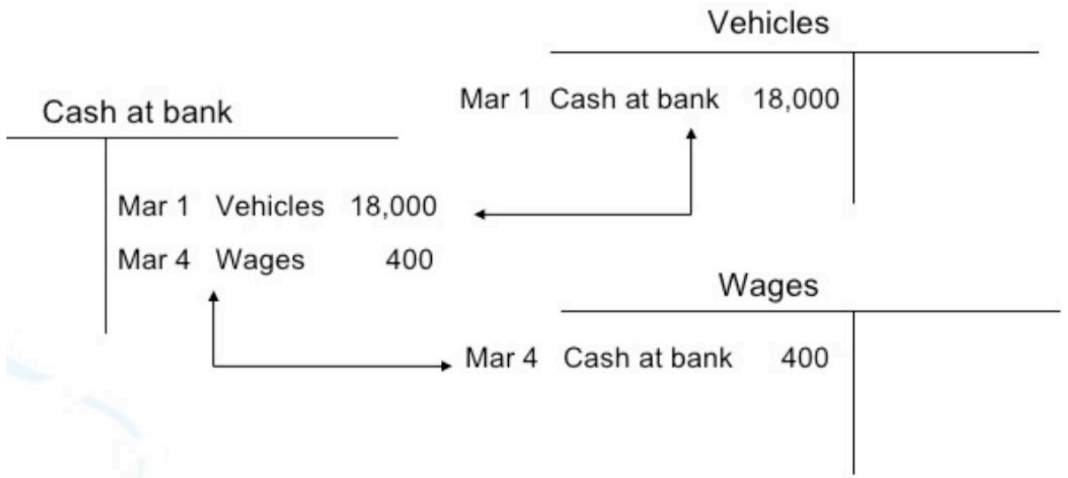
- Keeping business accounts
- Who are the users of business-accounting records
- Components of an income statement
- Components of a Statement of financial position
- Using ratio analysis, liquidity ratios, and profit-margin ratios to analyse business accounts
- Evaluate limitations of *ratio analysis* and *published business accounts*

Introduction

- Monetary records of transactions
- Businesses are required to keep records by law: users include
  - Government
  - Investors
  - Other stakeholders
- Accountants:
  - *Financial accountants*: prepare published accounts (following legal requirements)
  - *Management accountants*: prepare accounting details for internal use (by managers)

Accounting convention

- Use same basic principles world-wide
  - Compare accounts of companies in different countries (e.g., multinational companies)
- Double-entry principle: each transaction (buying or selling of goods) are recorded on two sides in order to balance the accounts



Accruals

- When a service is supplied to a business but it has not been paid yet

Money-measurement principle

- All accounting data are converted into money
- Only items/transactions that can be expressed in monetary terms are recorded

Prudence concept or conservatism

- Accountants must provide or record <u>losses</u> as soon as they are anticipated (not necessarily realised)

- <u>Profits</u> should not be recorded until they have been realised

Realisation concept

- All revenues and profits should be recorded in the accounts when the legal title to the goods is transferred

- Example: Sales are not recorded when an order is taken or when payment is actually made. But when the goods or services have been provided.

Main business accounts

1. Income statement (or *profit and loss account*)

2. Statement of financial position (or *balance sheet*)

3. Cash-flow statement

Income statement (or *profit and loss account*)

- It gives:
  - Gross and operating profit of the company
  - Details on how the operating profit is split up between
    - Dividends to shareholders
    - Retained earnings (profit)

Statement of financial position

- It gives the:

  Net worth or equity of the company

Equity = what company owns - what company owes

or

Equity = assets - liabilities

Cash-flow statement

- It gives:
  - Where cash was received from, and
  - What it was spent on

Income statement

Revenue = selling price x quantity sold

≠ cash received by business

	Revenue	3,060	Trading account
(minus)	Cost of sales	(1,840)	
(equals)	Gross profit	1,220	
(minus)	Overheads/expenses	(580)	Profit and loss section
(equals)	Operating profit (formerly net profit)	640	
(minus)	Interest	(80)	
(equals)	Profit before tax	560	
(minus)	Tax @ 20%	(112)	
(equals)	Profit for the year	448	
(minus)	Dividends to shareholders	200	Appropriation account
(equals)	Retained earnings	248	

Table 30.4 Income statement for Energen plc for the year ended 29 March 2013

Income statement

	Revenue	**3,060**	
(minus)	Cost of sales	(1,840)	Trading account
(equals)	Gross profit	1,220	
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Table 30.4 Income statement for Energen plc for the year ended 29 March 2013

Revenue = selling price x quantity sold

≠ cash received by business

Cost of sales = opening stocks + purchases − closing stocks

only goods used & sold during the year are recorded as cost of sales

Income statement

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only goods used & sold during the year are recorded as cost of sales

gross profit = Revenue − cost of sales

Cost of sales

This can be laid out as:

Opening stocks (at the start of the year)	$500
Purchases during the year	$2,500
Total stock (available for sale)	$3,000
Closing stocks (at the end of the year)	($750)
Cost of goods sold	$2,250

Activity 30.1: Calculating gross profit

- 16 minutes

Income statement

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Table 30.4 Income statement for Energen plc for the year ended 29 March 2013

profit before tax

profit after tax

overheads : expenses that are not directly related to the number of items made or sold.
(e.g., management salaries, lighting costs, ...)

operating profit : profit made before tax and interest are subtracted

Income statement

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Table 30.4 Income statement for Energen plc for the year ended 29 March 2013

shows how profit is distributed between the owners

dividends : shareholders

retained earnings

Activity 30.2

- 25 minutes

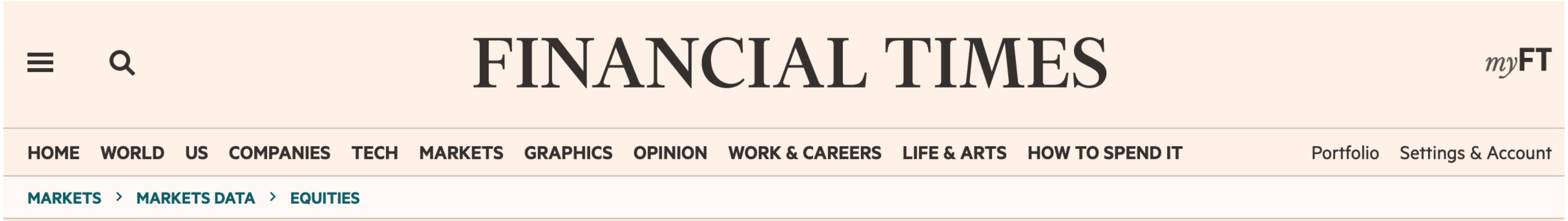
Main business accounts

1. Income statement (or *profit and loss account*)

2. Statement of financial position (or *balance sheet*)

3. Cash-flow statement

Financial Times – Markets Data



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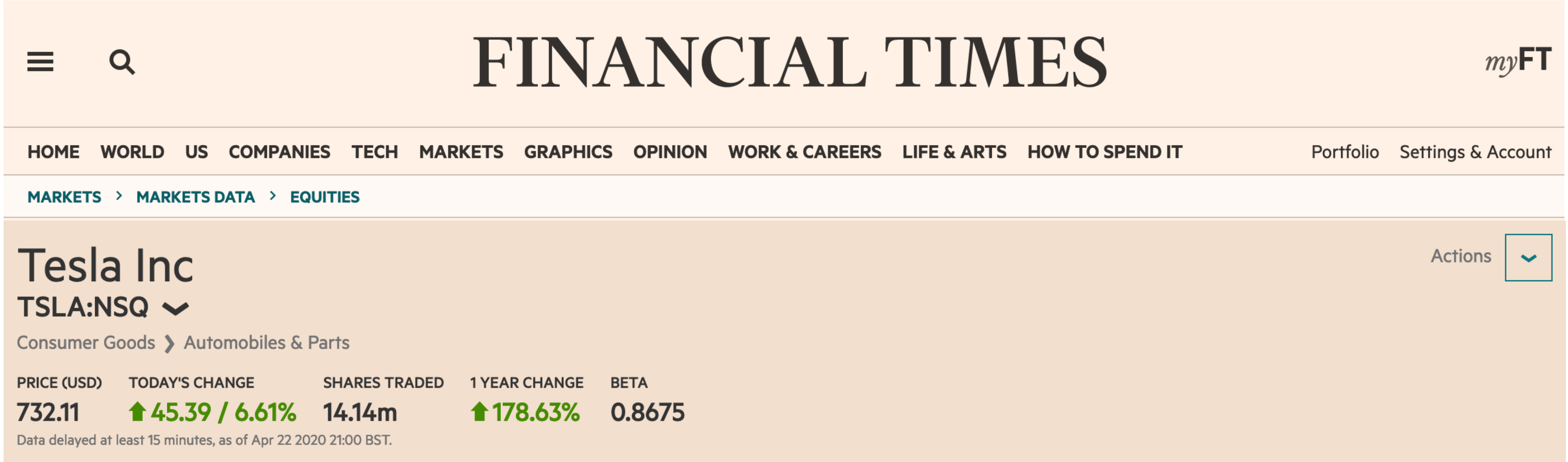

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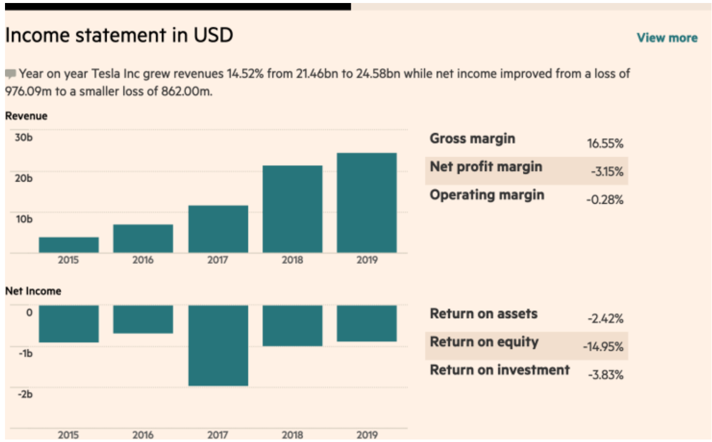

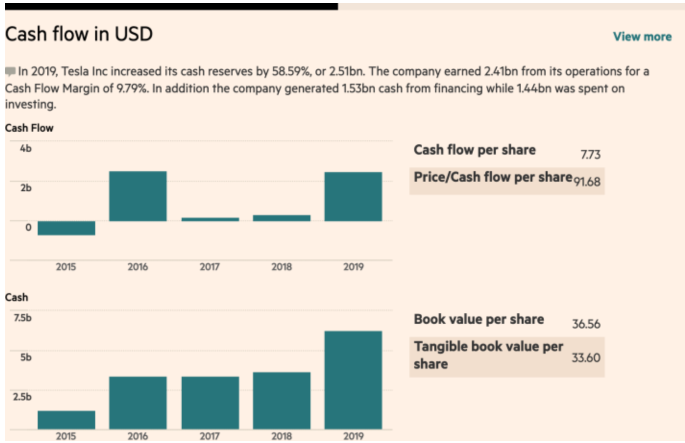

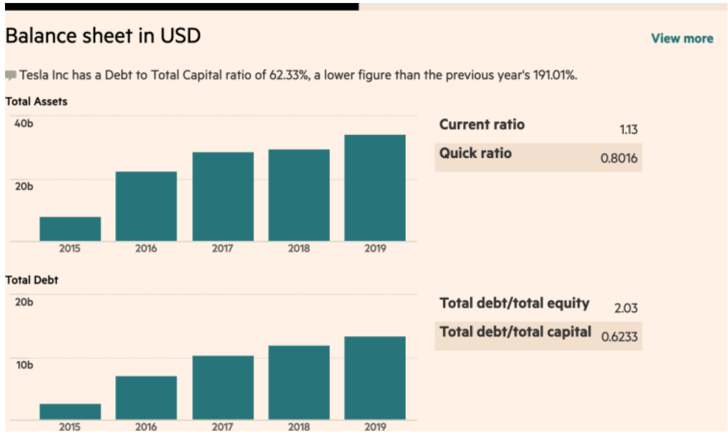

Practice ...

Take 3 minutes, and tray to find this particular page by yourself ...

Statement of financial position

- Also referred to as balance sheet
- Records the net wealth or shareholders's equity
- Goal of *most* businesses:
  - increase shareholder's equity
  - Raise value of businesses assets more that an increase of liabilities
- Where does shareholders' equity come from?

Statement of financial position

- Also referred to as balance sheet
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- Goal of *most* businesses:
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  - Raise value of businesses assets more that an increase of liabilities
- Where does shareholders' equity come from?
  - *Capital originally invested* in the company (e.g. purchase of shares)
  - *Retained earnings*

	$m	$m	Notes
ASSETS			
Non-current (fixed) assets:			
Property	300		
Vehicles	45		
Equipment	67		
Intangible assets	30		
	442		
Current assets:			
Inventories	34		
Trade receivables (formerly debtors)	28		
Cash	4		Also called 'cash and cash equivalents'.
	66		
TOTAL ASSETS		508	This total will balance with equity and liabilities – hence the original term 'balance sheet'.
EQUITY AND LIABILITIES			
Current liabilities:			
Accounts payable (or creditors)	42		
Short-term loans	31		These loans will include the company's overdraft with the bank. Other current liabilities might include provisions to pay tax and dividends.
	73		
Non-current liabilities:			These used to be referred to as 'long-term liabilities'.
Long-term loans	125		Other non-current liabilities might include debentures issued by the company.
	125		
TOTAL LIABILITIES	198		If these actually equalled total assets, there would be no shareholders' equity in the company at all.
Shareholders' equity:			
Share capital	200		
Retained earnings reserve	110		The cumulative value of the company's annual 'retained earnings/ profits'.
	310		
TOTAL EQUITY AND LIABILITIES		508	This does balance with total assets!

Statement of financial position

assets

liabilities

equity

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Statement of financial position – Assets

look at the elements

how is this organised?

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equity

- capital originally paid into the business when the shareholders bought shares
- retained earnings/profit

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Activities 30.3 (page 450) and 30.4 (page 452)

- Do it in pairs
  - Audio in Teams (private chat)
  - Write out individually and submit in Assignments

- I am available to answer any problems

Ratio analysis

24/4/2020

Accounting ratio analysis

- Study company's published accounts
  - Compare one company's *performance* over different years, or
  - Compare one company's *performance* to another company
- *performance* can be measured with different criteria:
  - Successful
  - Efficient
  - Profitable
  - Good investment for shareholders
  - Better than a rival company

Ratios

- Profitability ratios
  - Profit margin ratios
  - Return on capital employed ratio

  Compares profit of business with its revenue

- Liquidity ratios

Measure how easily a business could meet its short-term debts or liabilities

Profit margin ratios

- Is the company able to convert sales revenue into gross profit and operating profit?

Profit margin ratios

Is the company able to convert sales revenue into gross profit and operating profit?

Gross profit = equal to sales revenue less cost of sales

Operating profit (net profit) = gross profit minus overhead expenses

Profit margin ratios

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Profit margin ratios

Gross profit margin

This ratio compares gross profit (profit before deduction of overheads) with revenue.

$$\text{gross profit margin} = \frac{\text{gross profit}}{\text{revenue}} \times 100\%$$

Operating profit margin

This ratio compares operating profit (formerly this ratio was referred to as the net profit margin) revenue

$$\text{operating profit margin} = \frac{\text{operating profit}}{\text{revenue}} \times 100\%$$

Profit margin ratios

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	Gross profit	Revenue	Gross profit margin
Company A	125	250	50%
Company B	800	3200	25%

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	Gross profit	Revenue	Operating profit margin
Company A	50	250	20%
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Liquidity ratios

Is the company able to pay its short-term debts?

or

Is there a risk that the company will become illiquid?

Liquidity ratios

Current ratio

$$\text{current ratio} = \frac{\text{current assets}}{\text{current liabilities}}$$

Acid-test ratio

$$\text{acid-test ratio} = \frac{\text{liquid assets}}{\text{current liabilities}}$$

Liquidity ratios

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What does the current assets/liabilities have to do with liquidity?

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liabilities

equity

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Liquidity ratios

Current ratio

$$\text{current ratio} = \frac{\text{current assets}}{\text{current liabilities}}$$

Acid-test ratio

$$\text{acid-test ratio} = \frac{\text{liquid assets}}{\text{current liabilities}}$$

$$\text{liquid assets} = \text{current assets} - \text{inventories (stocks)}$$

Critical values: *Current ratio*

- Can be expressed as
  - Ratio : e.g. 2:1 , or
  - Number: e.g 2
- Accountant recommend a result around 1.5 - 2
- Low current ratios are not unusual (e.g. food suppliers who can rely on regular inflows of cash)
- Current ratios above 2 is not great: too many funds tied to unprofitable stocks

Critical values: *Acid-test ratio*

- Values below 1: company may have liquidity problems
- Compare also the evolution of the ratio over recent years (e.g. improvement)

Limitations of ratio analysis

- Ratios give incomplete analysis of company's financial position
- One single ratio definitely not enough to interpret financial position
- Only compare ratios of companies in the same sector
- Restricts analysis to quantitative performance, ignoring qualitative elements

Activity 30.5 and 30.6

- In class:
- Activity 30.5.1
- Activity 30.5.2
- Activity 30.5.3
- Activity 30.6.1
- Activity 30.6.4