

# IB Business Management: Finance Practice Worksheet

1. Under what circumstances are firms liquidated?

(Total 4 marks)

Pan Bam Ltd is a medium-sized bread-making firm. It has a manufacturing plant in the outskirts of the capital, and from there it distributes to all the supermarkets within a 400 mile radius (640 km). The distribution is in the hands of an independent transport firm. Currently Pan Bam is undergoing changes and its Board of Directors is considering different investment proposals. The three proposals are:

1. To buy 5 trucks (lorries) and therefore become independent of the distributing firm.
2. To open up a second branch in the second most important city of the country, located 1000km away from the capital and where people speak a different dialect.
3. To buy a new machine to make different (yet bread related) products.

The proposals are to be financed in the following manner:

1. leasing the vehicles;
2. issuing more shares;
3. a medium-term loan from a bank.

2. Assess the advantages and disadvantages of financing each proposal in the manner described above.

(Total 6 marks)

Peter Storm has conducted a financial analysis of the *Warm Breezes*' expansion projects. At this stage it would only be possible to fund one of the two proposed projects. Inflation in the Caribbean is a problem and the costs of capital comparatively high at 14%. Peter presents the following figures to Joseph and Manjit for their consideration. Details of cash inflows have only been presented for 6 years as Peter considers that financial information after this date is likely to be highly inaccurate, especially as the Caribbean economies had been unstable in recent times. Predictions are based on an average occupancy rate of 75% for the cottages for the first year, rising to 85% in years 4, 5 and 6.

Peter has decided that the investments will only be considered if they meet the following criteria:

Payback	3.5 Years
Average Rate of Return	35%
Net Present Value	\$2m

	<b>OPTION 1</b>	<b>OPTION 2</b>
	Commercial centre	New cottages
	\$m	\$m
Initial Cost	8.4	4.4
Cash inflows at end of:		
Year 1	1.6	0.8
Year 2	2.8	1.4
Year 3	3.4	2.0
Year 4	3.6	2.4
Year 5	4.0	2.3
Year 6	4.2	2.6

Present value (PV) of \$1 receivable at an annual rate of 14% at the end of:					
1 Year	2 Years	3 Years	4 Years	5 Years	6 Years
\$0.877	\$0.769	\$0.675	\$0.592	\$0.519	\$0.456

5. From the information presented in the case study, identify **two** reasons why Peter has chosen such a short Payback period and high Average Rate of Return.

6. (a) Using the information provided, calculate the Payback, Average Rate of Return and Net Present Value, for both Option 1 and Option 2, and state whether the options satisfy Peter's criteria for investment. (8)
- (b) Using the investment appraisal information you have just calculated and additional financial and non-financial information provided in the case study, select an expansion option and justify your choice. (5)
- (c) Using relevant examples, consider to what extent external factors may affect the accuracy of the figures presented by Peter Storm. (5)

(5)  
(Total 18 marks)

### CU Ltd

CU Ltd started up in business seven years ago producing web cameras for computers. It has developed a reputation amongst its customers for high quality and reliability. At first the company grew rapidly. As a result of an initial injection of venture capital CU Ltd was valued at \$75 million at the height of the technology boom. Unlike many other firms, it survived the technology crash at the start of the century. However, despite slow but consistent sales growth it has faced significant financial problems since. In recent months CU Ltd has even had to negotiate with staff to delay salary payments by up to two weeks to help with cash flow. The financial director has been looking at a range of solutions and is suggesting the flotation of the company on the Stock Exchange to inject new capital.

The profit and loss account and balance sheet for 2003 and 2004 are given below:

#### Balance sheet as at 31 December

\$000	2003	2004
Fixed assets	1500	1400
<b>Current assets</b>		
Stock	910	1220
Debtors	550	650
Cash	<u>10</u>	<u>5</u>
Total current assets	1470	1875
<b>Current liabilities</b>		
Creditors	300	250
Overdraft	<u>350</u>	<u>475</u>
Total current liabilities	650	725
Net assets	<u>2320</u>	<u>2550</u>
Share capital	250	250
Profit and loss account	320	350
Loan capital	<u>1750</u>	<u>1950</u>
Capital employed	<u>2320</u>	<u>2550</u>

#### Profit and loss account for the year ended 31 December

\$000	2003	2004
Turnover	5750	6100
Cost of goods sold	<u>4175</u>	<u>4750</u>
Gross profit	1575	1350
Marketing and admin expenses	<u>1250</u>	<u>1300</u>

Net profit before interest and tax	<u>325</u>	<u>50</u>
Interest	175	225
Taxation	<u>100</u>	<u>10</u>
Profit after interest and tax	50	(185)
Dividends	20	0
Retained profits	30	(185)

7. (a) Calculate the level of working capital for 2003 and 2004. (2)
- (b) Assess the likely impact on *CU Ltd* of increasing worldwide Internet access. (4)
- (Total 6 marks)**

### Clare Clothes plc

*Clare Clothes plc* was set up thirty years ago as a relatively small business whose key objective was growth. The company grew steadily and is now a public limited company established as the market leader for children's clothes.

Latest annual accounts of *Clare Clothes plc*:

#### Balance sheet (as at 31 December 2002)

	<i>Clare Clothes plc</i>	
	2002	2001
	\$m	\$m
Fixed assets	335	285
Stock	130	120
Debtors	200	220
Cash	10	20
<hr/>		
Creditors	130	100
Overdraft	40	0
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Assets employed	505	545
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Share capital	350	350
Reserves	155	195
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Capital employed	505	545

8. (i) Calculate the level of working capital of *Clare Clothes plc* for 2001 and 2002. (2)
- (ii) Discuss how the changes in working capital identified in (i) will affect *Clare Clothes plc*. (6)
- (Total 8 marks)**

9. Annette Manning has been given approval by the board of directors to automate the process of building the hulls for the yachts. This will mean investing in new computer-controlled production equipment. She has researched extensively the equipment available and has narrowed her choice of machines down to two options. The purchase cost and expected additional net cash flows from the machines are given in the tables below.

Machine	Investment cost (\$)
A	65 000
B	85 000

Year	Expected net cash flows (\$)	
	Machine A	Machine B
1	45 000	25 000
2	35 000	35 000
3	25 000	55 000
4	25 000	55 000
5	25 000	35 000

Assuming an interest rate of 10%, the discount factors for five years would be:

Year	Discount factor
1	0.909
2	0.826
3	0.751
4	0.683
5	0.621

- (a) Using this information calculate the payback period, ARR (accounting rate of return) and NPV (net present value) (assuming a discount rate of 10%) for each of the machines. (6)
- (b) Using the values you have calculated in part (a) assess the financial advantages **and** disadvantages to *Riveau Yachts* of investing in each of the machines. (6)
- (c) Discuss other factors that *Riveau Yachts* would need to take into account before making their decision about this investment. (8)

(8)  
(Total 20 marks)

### The Colourful Hat Company

The *Colourful Hat Company* sells fashionable hats throughout the European Union. The hats are available in a range of colours and all contain the prestigious *Colourful Hat Company* logo.

The hats are sold to retailers for \$15 each. They cost \$5 per hat to manufacture and the salesperson receives \$0.60 commission for each item sold to retailers. The distribution cost for each hat is \$0.40. The fixed costs of production are \$10 000 per month.

The company would like to expand production and has drafted plans to invest in new machinery costing \$900 000.

Details of the investment are given in the table below:

	Cash in	Cash out
Now		900 000
Year 1	+360 000	
Year 2	+360 000	
Year 3	+360 000	
Year 4	+360 000	

The director of finance believes that the new machinery will reduce variable costs and thus maximize the contribution per hat. He is, however, concerned that increased competition may cause cash flow difficulties since retailers are able to demand longer credit terms. He is also considering whether he should accept a new order from a retailer offering \$17 a hat.

10. Explain **two** advantages and **two** disadvantages of using the payback method of investment appraisal.

**(Total 4 marks)**