

# THE PUBLIC ACCOUNTANTS EXAMINATIONS BOARD

*A Committee of the Council of ICPAU*

## CPA(U) MODEL EXAMINATIONS

### LEVEL TWO

### CORPORATE FINANCIAL MANAGEMENT – PAPER 12

**APRIL 2008**

#### INSTRUCTIONS TO CANDIDATES:

1. Attempt **all** questions in Section **A** and any **three** questions from Section **B**.
2. Section **A** has one compulsory case study question carrying 40 marks.
3. Section **B** has **four** questions and only **three** are to be attempted. Each question carries 20 marks.
4. Please, read further instructions on the answer

## SECTION A

### Question 1

#### Uganda Air Ltd

Uganda Air Ltd (UAL) operates a small fleet of aeroplanes ply the East African region. Uganda Air Ltd currently owns 5 planes, mainly Boeing 737s. It bought all of them second- hand from some major airlines abroad.

The company's total net assets are currently, and realistically valued at Shs 113.75 billion. UAL is an all equity financed. The turnover in the last full financial year was Shs 74.375 billion. The forecast turnover for the current year is Shs 85.75 billion. Profits after tax are forecast at Shs 15.75 billion.

The company's directors are examining a proposal for a strategic move into the long-haul market. The initial investment involves the purchase of a six -year old Boeing 757, which will be used to fly to and from the United Arab Emirates specifically Dubai. Negotiations to buy this plane are already underway. UAL plans to operate the plane for three years and replace it at the end of this time with a newer model.

When fully loaded, this type of plane will carry 220 passengers. The company estimates an average return journey fare of Shs 350, 000 per passenger on this route. All income will be in Uganda Shillings. The company's estimates of average passenger loading are as follows:

Load	Probability of load being achieved	
	Year 1	Year 2-3
100% (all seats taken)	10%	15%
80% full	50%	60%
50% full	30%	20%
40% full	10%	5%

The plane is expected to make 6 return trips every week and be operational 48 weeks of the year.

The capital costs of the purchase of the plane are US \$ 15 million. To date, Uganda Air Ltd has spent Shs 438 million on market research and purchase negotiations. Other financial data associated with the venture are:

- Capital allowances are available at 25% on reducing balance of the total capital cost.
- The estimated resale value of the plane 3 years after purchase, in nominal terms, is \$4 million.

**Cash operating costs (per annum)**

Maintenance, insurance, crew wages, salaries and training	Shs 2.538 billion
---	-------------------

Fuel costs	US \$ 1.05 million
------------	--------------------

Overheads and other costs (per annum)	
---------------------------------------	--

Administration and office space	Shs 263 million
---------------------------------	-----------------

These costs include a Shs 44 million for re-allocation of current head office.

Advertising and promotion	Shs 306 million
---------------------------	-----------------

**Estimates of increases in incomes and income costs**

The figures given above are all in nominal terms as of today. Because this is an increasingly competitive market, the company is unlikely to be able to increase fares in line with inflation. The best estimate is an annual increase of 2%. Operating costs (excluding fuel) are expected to increase by the annual Uganda rate of inflation (3%). Forecasting fuel costs is very difficult but best estimates are that they will rise by 5% each year over the next 3 years. Assume these inflationary increases commence in the first year of operations. Overheads and other costs are expected to remain constant in nominal terms.

**Currency and inflation rates**

- Current spot exchange rate is US \$0.00059/Shs 1
- Estimated per annum inflation rates are as follows:

Uganda	3%
USA	4%

Inflation rates in Uganda and USA are expected to remain at these levels.

**Allowance for risks**

The company evaluates investments by discounting cash flows at 9% per annum nominal and applying certainty equivalents to net after-tax cash flows. The estimates for the proposed investment are shown below:

**Year Certainty Equivalent**

1	0.90
2	0.85
3	0.80

The company's new Finance Director would prefer to use a risk-adjusted discount rate. A competitor company to UAL has quoted an equity beta of 1.3 and a debt: equity ratio (based on market values) of 1:4. This is unlikely to change in the foreseeable future. The post-tax return on the market is expected to be 12% and the risk free rate 5%. Assume a debt beta of 0.15.

Assume also that:

- capital costs are paid immediately but all other cash flows occur at the year end.
- taxation is at 30% and is paid or repaid at the end of the year in which the liability/repayment arises (that is, no time lag).
- the plane is acquired and becomes operational immediately.

**Required:**

- (a) Calculate the discount rate to be used in the investment decision using the Capital Asset Pricing Model (CAPM) and comment, briefly, on the limitations of using the CAPM in the circumstances of this scenario.

**(5 marks)**

- (b) Calculate the NPV, in Uganda shillings, of the proposed investment in the new plane using:

- (i) the discount rate calculated in (a) above, rounded to the nearest 1%; and
- (ii) a discount rate of 9% per annum nominal and adjusting for the company's estimated certainty equivalents, and recommend, briefly, whether to proceed with the investment, based solely on your calculations above.

NPV should be calculated in Uganda Shillings, converting US \$ cash flows to Uganda Shillings. Assume the theory of *purchasing power parity* applies when calculating exchange rates.

**(15 marks)**

- (c) Assume you are the assistant to the Finance Director, Jackson Mambo. On his behalf, draft a report to the board that critically evaluates the following:

- (i) The major economic forces that might impact on, or influence, the success of the investment,
- (ii) Commercial aspects of the investment that involves the greatest uncertainty and risk,
- (iii) Strategies for managing the risks in parts (c) (i) and (c) (ii)

The report should conclude with a recommendation of a course of action.

**(20 marks)**

**(Total 40 marks)**

## SECTION B

### Question 2

Kampala Grain Milling, a division of Uganda Grains Ltd has recently experienced severe financial difficulties. The management of the division is considering to undertake a buy-out, but in order for the buy-out to succeed it needs to attract substantial finance from a venture capital organisation. Uganda Grains Ltd is willing to sell the division for Shs 2.5 billion, and the managers believe that an additional Shs 1 billion of capital would need to be invested in the division to create a viable going concern.

Possible financing sources:

1. Equity from management of Shs 700 million of Shs 500 ordinary shares.
2. Funds from the venture capital organisation:
  - Equity Shs 400 million of Shs 500 ordinary shares
  - Debt: 8.5% fixed rate loan Shs 2 billion.
  - 9% subordinated loan with warrants attached Shs 400 million.

The warrants are exercisable any time after four years from now at the rate of 1,000 ordinary shares at the price of Shs 1,500 per share for every Shs 1 million of subordinated loan.

The principal on the 8.5% fixed rate loan is repayable as a one off payment at the end of eight years. The subordinated loan is repayable by equal annual payments, comprising both interest and principal, over a period of six years.

The division's managers propose to keep dividends to no more than 15% of profits for the first four years. Independently produced forecasts of earnings before interest and tax after the buy-out are shown below:

	<b>Shs million</b>			
<b>Year</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
Earnings before interest and tax	410	500	590	630

Corporate tax is at the rate of 30% per year.

The managers involved in the buy-out believe that the book value of equity is likely to increase by about 20% per year during the first four years, making the investment very attractive to the venture capital organisation. The venture capital organisation has stated that it is interested in investing, but has doubts about the forecast growth rate of equity value, and would require warrants for 1,600 shares per Shs 1 million of subordinated loan stock rather than 1,000 shares.

**Required:**

- (a) Briefly discuss the potential advantages of management buy-outs. **(5 marks)**
- (b) On the basis of the above data, estimate whether or not the book value of equity is likely to grow by 20% per year. **(10 marks)**
- (c) Evaluate the possible implication of the managers agreeing to offer warrants for 1,500 ordinary shares per Shs 1 million of loan stock. **(5 marks)**
- (Total 20 marks)**

**Question 3**

LUBA Bank Ltd, a new foreign owned Bank in Uganda is considering a takeover bid for Maali Bank Ltd a locally established Bank. While briefing the board of directors of the LUBA bank, the Managing Director Mr. Samuel Chineke stressed the following:

‘Our superior PE ratio and synergistic effects of the acquisition will lead to a post-acquisition increase in earnings per share and in the combined market value of the companies’.

Summarised financial data for the companies:

	<b>LUBA Bank Shs billion</b>	<b>Maali Bank Shs billion</b>
Turnover	96.00	70.60
Profit before tax	12.60	8.20
Tax (30%)	<u>(3.78)</u>	<u>(2.46)</u>
Profit after tax	8.82	5.74
Dividends	<u>(3.969)</u>	<u>(2.18)</u>
Retained earnings	<u>4.85</u>	<u>3.56</u>
Fixed assets (net)	56.80	53.00
Current assets	45.28	34.60
Current liabilities	<u>(34.64)</u>	<u>(20.40)</u>
	<b><u>67.44</u></b>	<b><u>67.20</u></b>
Financed by:		
Medium and long term borrowing	17.20	22.80
Ordinary shares (Shs 100 par value)	8.00	6.00
Reserves	<u>42.24</u>	<u>38.40</u>
	<b><u>67.44</u></b>	<b><u>67.20</u></b>

**Additional information:**

- (i) After tax saving in cash operating costs of Shs 1.5 billion per year indefinitely are expected as a result of the acquisition.
- (ii) Initial redundancy costs will be Shs 2 billion before tax.
- (iii) LUBA Bank's cost of capital is 12%.
- (iv) Current shares prices are: LUBA Bank Shs 5,800, Maali Bank Shs 3,600.
- (v) The proposed terms of the takeover are payment of 2 LUBA Bank shares for every 3 Maali Bank shares.

**Required:**

- (a) Define PE ratio.  
(2 marks)
  - (b) Calculate the current PE ratios of LUBA Bank and Maali Bank.  
(3 marks)
  - (c) Estimate the expected post acquisition earnings per share and comment upon the importance of increasing the earnings per share.  
(5 marks)
  - (d) Estimate the effect on the combined market value as a result of the takeover using:
    - (i) PE based valuation;
    - (ii) Cash flow based valuation.State clearly any assumptions that you make.  
(6 marks)
  - (e) Discuss the limitations of your estimates in (d) above  
(4 marks)
- (Total 20 marks)**

**Question 4**

Small- and medium-sized enterprises (SMEs) play a crucial role in stimulating broad-based, equitable and sustainable economic development through employment and income generation. The main constraints affecting the development of a globally competitive SME sector in Uganda include high cost of financing. The failure rate among small businesses is very high compared to that of larger businesses. Studies have shown that inadequate long-term financing is a major cause of this high failure rate.

**Required:**

- (a) Identify and discuss the problems that small businesses face when seeking to obtain long-term finance. (8 marks)
- (b) Describe **three** sources of long-term finance and/or assistance in obtaining long-term finance that are available specifically for small businesses. (12 marks)

**(Total 20 marks)**

**Question 5**

The Minister of Ethics and Integrity was quoted as saying in his speech while opening a workshop organized by the Uganda Securities Exchange; "Companies should not only concentrate on making profits but also ensuring that the methods used to make profits are ethical and do not adversely affect the natural environment in which the companies operate" .

**Required:**

Discuss, and provide examples of, the types of non-financial, ethical and environmental issues that might influence the objectives of companies. Consider the impact of these non-financial ethical and environmental issues on the achievement of primary financial objectives such as the maximisation of shareholder wealth.

**(20 marks)**

**END**