



ICPAR
Unlimited possibilities

CERTIFIED PUBLIC ACCOUNTANT
ADVANCED LEVEL 2 EXAMINATIONS
A2.1: STRATEGIC CORPORATE FINANCE
DATE: WEDNESDAY 26, APRIL 2023
MARKING GUDE AND MODEL ANSWERS

SECTION A

QUESTION ONE

MARKING GUIDE	Marks
a) Computation of Adjusted Present Value	
Computation of asset base beta	0.5
Computation of discount rate using CAPM	0.5
Computation of taxes (0.5 marks each, max 1.5)	1.5
Computation of tax relief (0.5 marks each, max 1.5)	1.5
Computation of net cash flows (0.5 marks each, max 1.5)	1.5
Computation of present values (0.5 marks each, max 1.5)	1.5
Calculation of WDAs (0.5 marks each, max 1.5)	1.5
Calculation of equity and debt proportions (0.5 marks each, max 1)	1
Calculation of equity issue cost	0.5
Calculation of debt issue cost	1
Calculation of tax shield on debt	1.5
Calculation of adjusted present value	1.5
Decision on project investment	1
Maximum	15
(b) (i) Calculation of Z scores (Award 0.5 marks for each calculation maximum 5 marks)	5
Calculation of ratios (Award 0.5 marks for each of formula, calculations and ratio, maximum 7.5 marks)	7.5
Assessment of Z scores	1.5
Assessment of ratios	2
(ii) Performance indicators (Award 2 marks to each well explained performance indicator, max 4)	4
Maximum	20
(c) Portfolio one	
Computation of expected portfolio return and portfolio returns	
Award 0.5 marks each of well calculated expected portfolio return and Portfolio beta, max 4 marks	4
Required rate of return	1
Portfolio two	
Computation of expected portfolio return and portfolio returns	
Award 0.5 marks each of well calculated expected portfolio return and Portfolio beta, max 4 marks	4
Required rate of return	1
Calculation of alpha values (0.5 marks each, max 1)	2
Decision on the portfolio to choose	1
Maximum	15

(d) Computation of APT	2
Total Maximum Marks	50

Model Answers

(a) Terimbere Ltd (TL)

$$\beta_a = \beta_e \left(\frac{V_e}{V_e + V_d(1-T)} \right) = 1.24 \left(\frac{2.3}{2.3 + 1(1-0.3)} \right) = 0.95$$

Where:

β_a = Unlevered beta (asset beta)

β_e

Levered beta (equity beta)

Ve: Value of equity

Vd: Value of debt

T: Tax

Case discount rate

$$E(R_i) = R_f + \beta_a [E(R_m) - R_f]$$

Where:

E(R_i) = is expected return

R_f = Risk free rate

β_a = Unlevered beta (asset beta)

E(R_m) = Market return

$$E(R_i) = 5\% + 0.95(9\% - 5\%) = 8.8\%$$

The rate to be used is 9%

Base case NPV calculation (FRW 000)

Period	Period 0	Period 1	Period 2	Period 3
Cash flows-FRW'000		55,000	55,000	55,000
Corporation tax @ 30%-FRW'000		-16,500	-16,500	-16,500
Tax relief on capital allowance W1-FRW'000		7,500	5,625	16,875
Initial outlay-FRW'000	-100,000			
Net cash flow-FRW'000	-100,000	46,000	44,125	55,375
Discount rate @ 9%	1	0.917	0.842	0.772
Present value-FRW'000	-100,000	42,182	37,153	42,750
Base case NPV-FRW'000		22,085		

Capital allowance computation

	Written Down Allowance (WDA) (FRW 000)	Tax relief @ 30% (FRW 000)	Period
Investment	100,000		
Year 1 WDA (25%)	(25,000)	7,500	1
	75,000		
Year 2 WDA (25%)	(18,750)	5,625	2

	56,250		
Year 3 proceeds	<u>0</u>		
Balancing allowance	56,250	16,875	3

(1) The financing decision :

	FRW	Issue costs
Equity: 100,000,000 * 70%	70,000,000	4%
Debt: 100,000,000 * 30%	<u>30,000,000</u>	2%
	<u>100,000,000</u>	

The investment of FRW 100,000,000 is net of issue costs. There is a need therefore to gross it up

Issue costs on equity :

Equity issue cost: FRW 70,000,000 * 4/96 = (FRW 2,916,667)

Issue costs on debt

Debt issue cost; FRW 30,000,000 * 2/98 = (FRW 612,245)

Issue costs on debt at T₀ (FRW 612,245)

Tax relief at 30% FRW 183,673

Issue costs on debt (FRW 428,571)

Tax shield

Total amount raised by the debt = FRW 30,000,000 + FRW 612,245 = FRW 30,612,245

Annual tax relief = 30,612,245 * 0.05 * 0.3 = FRW 459,183

×
Annuity factor for 3 years@5% 2.723

Present value of the tax shield FRW 1,250,357

(2) Adjusted present value calculation

	FRW
Base cost NPV	22,085,000

Less: Present Value of issue cost

Equity	2,916,667
Debt	428,571

Add tax shield	<u>1,250,357</u>
----------------	------------------

Therefore, Adjusted Present Value is **19,990,119**

Based on these estimates the project is worthwhile

(b) (i)

	2019 (FRW 000)	2020 (FRW 000)
Z score	Weighted score	Weighted score
6.56X ₁	$6.56*(92,000/3,843,350) = 0.16$	$6.56*(35,000/4,224,200) = 0.054$
3.26X ₂	$3.26*(415,000/3,843,350) = 0.35$	$3.26*(505,000/4,224,200) = 0.39$
6.72X ₃	$6.72*(2,738,800/3,843,350) = 4.79$	$6.72*(3,683,300/4,224,200) = 5.84$
1.05X ₄	$1.05*(2,200,000/1,428,350) = 1.62$	$1.05*(2,500,000/1,719,200) = 1.53$
Total Z score	6.92	7.81

Workings

	2019 (FRW 000)	2020 (FRW 000)
Total assets	3,843,350	4,224,200
Working capital = CA – CL (W2)	739,350	804,200
	<u>647,350</u>	<u>769,200</u>
	<u>92,000</u>	<u>35,000</u>
Retained earnings	415,000	505,000
Earnings Before Interest and Tax	2,738,800	3,683,300
Total liabilities (W1)	781,000	950,000
	<u>647,350</u>	<u>769,200</u>
	<u>1,428,350</u>	<u>1,719,200</u>
Market value of equity (FRW 000)		
Number of shares = 2,000,000/100 = 20,000 shares		
Market value of equity for 2019 is FRW 110 * 20,000 shares = FRW 2,200,000		
Market value of equity for 2020 is FRW 125 * 20,000 shares = FRW 2,500,000		

Ratios

Ratios		2019 (FRW 000)	2020 (FRW 000)
Current ratio (C.R)	Current assets/current liabilities	$739,350/647,350=1.14$ 1:1.14	$804,200/769,200=1.04$ 1:1.04
Debt ratio	Total Debt/ Total Asset	$781,000+647,350/3,843,350$ =37.16%	$950,000+769,200/4,224,200$ =40.7%
Inventory turnover	Cost of sales/Average inventory	$586,755/492,000$ = 1.20 times	$680,670/550,000$ = 1.24 times
Net profit margin	Net profit/net sales	$1,819,370/5,633,295$ =32.30%	$2,516,660/7,374,620$ =34.13%
Dividend yield	Dividend per share/market price of the share	$34.71/110 = 31.55\%$	$46.10/125 = 36.88\%$

Workings

	2019 (FRW 000)	2020 (FRW 000)
Dividend per share	$694,155/20,000 = 34.71$	$922,005/20,000 = 46.10$

Comments and analysis of above calculated Altman Z score and ratios

1. Altman Z scores

The Altman Z score is a financial measure of health status of a company. Companies with a Z score of below 1.81 are in danger and possibly heading towards bankruptcy. Companies with scores between 1.81 and 2.99 need further investigation, companies with a Z score of 3 and above are financially sound.

The z scores for both years are above 3 therefore the business is financially sound. The z score of the year 2019 is 6.92 and it increased to 7.81 in 2020. This means the plan starting new branches should continue since the company is doing well currently.

2. Ratios Analysis

There has been a considerable investment in non-current assets over the years as now branches have been opened. There has a small growth in turnover which suggests that as people get used to NL products the sales will increase in future. NL should make awareness of the products through promoting them.

There has been an increase in profitability which will help in opening up other more branches in future as the profit increases more.

The increase in the dividend yield will attract more shareholders to invest in the company.

The current ratio is also good since it is within the conventional limits and the debt ratio has also increased from 24% to 27 %.

(ii) Two financial performance indicators

Profitability performance indicator

Emphasis should be put on starting up branches on strategic locations for more profit. Branches that are not profitable should be closed and focus on the profitable ones which would form a better strategy to compete with other rivals in the industry.

Inventory performance indicator

Inventory management must be improved. It is good to maintain an optimal level of inventory in the company. Once the company grows, there will be demand for the products. Loyal customers should therefore be able to find those products available. Excess may also be unnecessary.

(c)

Portfolio one

Investment	Investment weightings (1)	Expected return (%) (2)	Expected portfolio return (%) (3)=(1)*(2)	Beta (4)	Portfolio beta (5)=(1)*(4)
W	0.2	26	5.2	1.3	0.26
X	0.3	24	7.2	1.2	0.36
Y	0.4	22	8.8	1.1	0.44
Z	0.1	20	2.0	0.6	0.30
			23.2		1.36

The required rate of return = $5\% + (12\% - 5\%) * 1.36 = 14.52\%$

Portfolio two

Investment	Investment weightings (1)	Expected return (%) (2)	Expected portfolio return (%) (3)=(1)*(2)	Beta (4)	Portfolio (5)=(1)*(4)
w	0.2	17	3.4	0.8	0.16
x	0.4	19	7.6	1.1	0.44
y	0.2	21	4.2	1.2	0.24
z	0.2	15	3.0	1.4	0.28
			18.2		1.12

The required rate of return = $5\% + (12\% - 5\%) * 1.12 = 12.84\%$

Alpha table

	Expected return (%) (1)	Required returns (%) (2)	Alpha values (3)=(1)-(2)
Portfolio 1	23.2	14.52	8.68
Portfolio 2	18.2	12.84	5.36

Portfolio 1 is to be chosen as it has a bigger positive alpha than portfolio 2

(d)

Computation of required rate of return using APT

$$E(R_i) = R_f + \beta_1(R_1 - R_f) + \beta_2(R_2 - R_f) + \beta_3(R_3 - R_f)$$

Where,

$E(R_i)$ is the expected return on the security

R_f is the risk-free rate

$B_{1,2,3}$ is the sensitivity to changes in factor 1,2,3

R_1 is required rate for GDP, R_2 is required rate for inflation and R_3 is required rate for interest rate

$$\beta_1=0.6, \beta_2=0.3 \beta_3=0.8. R_1=14\%, R_2=12\%, R_3=9\%$$

$$E(R_i) = 5\% + 0.6(14\% - 5\%) + 0.3(12 - 5\%) + 0.8(9\% - 5\%) = 15.7\%$$

QUESTION TWO

Marking Guide	Marks
(a) Computation of weighted average cost of capital (WACC)	
Using book value	
Computation of growth rate	0.5
Computation of cost of equity	1
Computation of cost of preference shares	1
Computation of cost of debt	1
Using book value	
Computation of cost of weights (0.5 marks, max 1.5)	1.5
Computation of average cost of capitals	1
Weighted average cost of capital	1
Using market value	
Computation of number of shares (0.5 marks, max 1)	1
Computation of amount in market values (0.5 marks, max 1)	1
Computation of weights (0.5 marks, max 1.5)	1.5
Computation of average cost of capital (0.5 marks, max 1.5)	1.5
Weighted average cost of capital	1
	13
(b) Difficulties and Uncertainties (limitations) of WACC	
Award 2 marks to each well explained limitation, max 8 marks	8
(c) Reasons for yield curve upward sloping, award 1 mark for each well explained point, max 4 marks	4
Total maximum marks	25

Model Answers

(a)

Cost of equity

Formula: $P_0 = \frac{D_n(1+g)}{K_e - g}$ Where;

D_0 is current dividend paid out,

g is the constant growth rate for dividends,

K_e is the cost of equity,

P_0 is the current share price.

Rearrangement gives $K_e = \frac{D_n(1+g)}{P_0} + g$ where

$P_0 = \text{FRW } 3.5$

$D_n = \text{FRW } 0.42$

$$K_e = ? \quad g = ?$$

First find g .

$$D_0(1 + g)^n = D_n$$

Where; D_n is dividend paid out this year/period, D_0 is dividend paid out in the last year/period.

n is the period and g is the growth rate. $D_0 = 0.36$, $D_n = 0.42$, $n=3$

$$0.36(1 + g)^3 = 0.42$$

$$g = 5.3\%$$

$$K_e = \frac{D_n(1+g)}{P_0} + g$$

$$K_e = \frac{0.42(1+0.053)}{3.5} + 0.053$$

$$K_e = 0.1264 + 0.053 = 0.179 \quad K_e = 17.9\%$$

Cost of preference shares

$$K_p = \frac{D}{\text{CMP}} * 100$$

D is the current dividend per share,

CMP is the current market price per share,

K_p is the cost of preference share.

$$D = 5\% * 3.2 = 0.16$$

$$\text{CMP} = 2.8$$

$$K_p = \frac{0.16}{2.8} * 100 = 5.7\%$$

Cost of debt

$$K_d = \frac{I(1-t)}{T_d} * 100$$

I is interest, T_d is total debt, t is tax rate. $I = 15$, $T_d = 100$, $t = 30\%$

$$K_d = \frac{I(1-t)}{T_d} * 100$$

$$K_d = \frac{15(1-0.30)}{100} * 100 = 10.5\%$$

Weighted Cost of capital based on book value

Source of Finance	Amount (FRW)	Weights	Specific costs %	Average cost of capital %
Equity Share	280,000,000	0.62	17.9	10.54
Preference Share	70,000,000	0.16	5.7	0.912
Debt	100,000,000	0.22	10.5	2.310
Total	450,000,000	1.00		13.762

Weighted average cost of capital is 13.762%

Weighted Cost of capital based on market value

Source of Finance	Amount in book value (FRW)	Nominal values	Number of Shares	Average cost of capital %
Equity Share	280,000,000	4.0	70,000,000	10.54
Preference Share	70,000,000	3.2	21,875,000	0.912
Debt	100,000,000	100	1,000,000	2.310
Total	450,000,000	1.00		11.12

Source of Finance	Amount in book value (FRW)	Nominal values	Number of Shares	Market values of shares	Amount in market value (FRW)	Weights
Equity Share	280,000,000	4	70,000,000	3.5	245,000,000	0.60
Preference Share	70,000,000	3.2	21,875,000	2.8	61,250,000	0.15
Debt	100,000,000	100			100,000,000	0.25
	450,000,000				406,250,000	

Source of Finance	Amount in market value (FRW)	Weights	Specific costs of capital	Average cost of capital
Equity Share	245,000,000	0.60	17.9	10.20
Preference Share	61,250,000	0.15	5.7	0.91
Debt	100,000,000	0.25	10.5	2.31
Total	406,250,000			13.42

Weighted average cost of capital using the market values is 13.42%

b) Difficulties and Uncertainties (Limitations) of WACC as a discounting rate

- **The cost of Equity:** The above calculations assumes that all shareholders have the same marginal cost of capital and the same dividend expectations, which is unrealistic. In addition, it is assumed that dividend growth has been and will be at a constant rate.
- **The use of WACC:** The WACC as a discount rate is only justified where the company in question has achieved what it believes to be the optimal capital structure (the mix of debt and equity) and where it intends to maintain this structure in the long run.
- **Projects themselves:** WACC makes no allowance for the business risk of individual projects. In practice, some companies, having calculated the WACC, then add a premium for risk. This risk premium should vary from project to project, since not all projects are equally risky. In general, the riskier the project the higher the discount rate which should be used.
- It is based on past information especially when determining the cost of each component for instance in determining the cost of equity (Ke) the past year's DPS is used while the growth rate is estimated from the past stream of dividends.
- It is based on market values of capital which keep on changing thus WACC will change over time but is assumed to remain constant throughout the economic life of the project.
- It assumes that capital structure is optimal which is not achievable in real world. As the amount of debt increases a higher risk premium is required. It becomes more difficult to estimate the company's WACC depending on the company's capital structure complexities.

c) A yield curve may be upward sloping because of the following reasons:

1. **Future Expectations:** If future short term interest rate are expected to increase then the yield curve will be upward sloping.
The greater the expected future rise in interest rates, the steeper the upward slope of the yield curve will be.
2. **Liquidity preference:** It is argued that, investors seek extra return for giving up a degree of liquidity with longer term investments.
Other things remain constant, the longer the maturity of the investment, the higher the required return, leading to an upward sloping yield curve
3. **Preferred habitant/market segmentation:** Different investors are more active in different segments of yield curve. For example, banks would tend to focus on the short-term end of the yield curve, whilst pension funds are likely to be more concerned with medium- and long-term segments.
4. An upward yield curve could in part be the result of a fall in demand in the longer-term segment of the yield curve leading to lower bond prices and higher yields.

QUESTION THREE

Marking Guide	Marks
a) Acquisition	
Calculation of net income (0.5 marks each, max 2.5)	2.5
Calculation of cash flows (0.5 marks each, max 2.5)	2.5
Allocation of retention (0.5 marks each, max 2.5)	2.5
Calculation of terminal value	1
Calculation of net cash flow (0.5 marks each, max 2.5)	2.5
Calculation of firm value	2
Calculation of economic gain	1
Advice for acquisition	2
Maximum	16
b) Benefits of financial market integration	
Benefits (1 mark each, max 2)	2
Challenge of financial market integration	1
Maximum	3
c) Forms of information efficiency	
Forms (2 marks each, max 6)	6
Total maximum marks	25

Model Answers

(a)

Projected post-merger cash flows as of 31st December

	2016	2017	2018	2019	2020
	FRW'000'	FRW'000'	FRW'000'	FRW'000'	FRW'000'
Net sales	110,000	131,000	156,000	179,000	196,000
Cost of goods sold	65,000	79,000	96,000	112,000	122,000
Selling and administration expenses	12,000	14,000	15,000	17,000	18,000
Depreciation	10,000	10,000	10,000	10,000	10,000
EBIT	23,000	28,000	35,000	40,000	46,000
Interest	8,000	9,000	10,000	11,000	11,000
EBT	15,000	19,000	25,000	29,000	35,000
Taxes (30%)	4500	5700	7500	8700	10500
Net income	10,500	13,300	17,500	20,300	24,500
Add: Back depreciation	10,000	10,000	10,000	10,000	10,000
Cash flow from operations	20,500	23,300	27,500	30,300	34,500
Less: Retentions Need for growth	15,000	15,000	15,000	15,000	15,000
Add: Terminal Value					390,000
Net cash flow	5,500	8,300	12,500	15,300	409,500

Finding the cost of capital using CAPM

$r = r_f + \beta (r_m - r_f)$ where; r_f is risk-free rate = 5%, r_m is market rate = 10%, β is beta = 2.0

$$r = 5\% + 2.0(10\% - 5\%) = 15\%$$

Computing the terminal value at the terminal growth rate (g) of 10%

$$\text{Terminal Value} = \frac{\text{Cash Flow}_{\text{final year}(1+g)}}{r-g} = \frac{(34,500-15,000)}{(0.15-0.10)} = \text{FRW } 390,000$$

Firm value = $CF_1 * PVIF_{(15\%,1)} + CF_2 * PVIF_{(15\%,2)} + CF_3 * PVIF_{(15\%,3)} + CF_4 * PVIF_{(15\%,4)} + CF_5 * PVIF_{(15\%,5)}$. Where: CF is the cash flow for a given period, PVIF is Present value interest factor.

Years	Net Cash Flow FRW	DF@15%	PV-FRW
2016	5,500,000	0.870	4,785,000
2017	8,300,000	0.756	6,274,800
2018	12,500,000	0.658	8,225,000
2019	15,300,000	0.572	8,751,600
2020	409,500,000	0.497	203,521,500
			231,457,900

$$\begin{aligned} \text{Possible economic gain/loss} &= \text{Merger value} - \text{Pre-merger value} \\ &= \text{FRW } 241,249,400 - (\text{FRW } 15,000,000 * \text{FRW } 72.5) \\ &= (\text{FRW } 846,250,600) \end{aligned}$$

Advice: Do not acquire the company as there is no economic gain

(b) Benefits of financial market integration

Efficient capital allocation

Financial integration helps strengthen domestic financial sector allowing for more efficient capital allocation and greater investment and growth opportunities. It facilitates flows of capital from developed countries with rich capital to developing countries with limited capital.

Better corporate governance

As a result of financial integration, efficiency gains can also be generated among domestic firms because they have to compete directly with foreign rivals; this competition can lead to better corporate governance.

Diversification of the economy

Financial integration can help capital-poor countries diversify away from their production bases that mostly depend on agricultural activities or extractions of natural resources; this diversification should reduce macroeconomic volatility.

Consumption volatility

Financial integration can also help predict consumption volatility because consumers are risk averse who have a desire to use financial markets as the insurance for their income risk, so the impact of temporary idiosyncratic shocks to income growth on consumption growth can be softened.

Challenges

Lack of mechanism to handle systematic risks

Currently there are no mechanisms in place to handle systematic risks. Banks should undertake the function of preventing and reconciling systematic risks and maintaining national financial stability at their end.

(c) Forms of information efficiency

Weak form level of efficiency

This level states that share prices fully reflect information in historic share price movement and patterns (past information/historic information). If this hypothesis is correct, then, it should be possible to predict future share price movement from historical patterns. For example, If the company's shares have increased steadily over the past few months to the current price of FRW .30, then this price will already fully reflect the information about the company's growth and therefore the next change in share prices could either be upward, downward or constant with equal probability. It therefore follows that technical analysis or Chartism will not enable investors to make arbitrage profits. In markets that have achieved this level then security prices follow a random walk.

Semi-strong form level of efficiency

This level states that share prices reflect all available public information. (Past and present information). If the market has achieved this level, then fundamental analysis will not enable investors to earn consistently higher than average returns. Fundamental analysis involves the study of company's accounts to determine its theoretical value and thereby find any undervalued share. Fundamental theory states that every share in the market has an intrinsic value, which is equal to the present value of cash flows expected from the security.

Strong form level of Efficiency

This level states that price reflects all the available public and private information (past, present and future information). If the hypothesis is correct, then, the mere publication of information that was previously confidential should not have impact on share prices. This implies that insider trading is impossible. It follows therefore, that in order to maximize shareholders' wealth, managers should concentrate on maximizing the NPV of each investment.

QUESTION FOUR

Marking Guide

Requirements	Allocated Marks
(a) Advice on the method to use	
Forward exchange contract	2
Money market contract	2
Lead payment	1
Advice	2
(ii) Advantages of forward contracts	
Advantages (1 mark each, max 2)	2
Maximum	9
(b) Exchange rate systems	
Type exchange rate systems (2 marks each, max 6)	6
(c) Risks associated with foreign exchange	
Risks (2 marks each, max 6)	6
(d) Benefits of investing in capital markets (award 1 mark for each well explained benefit, 4 marks maximum)	4
Total maximum Marks	25

Model answers

(a)(i) Advise the company on the best method to use.

1. Forward exchange contract

Amount required in three months' time = $\text{FRW } 4,000,000 / (1.8625 - 0.018) = \text{FRW } 2,168,609.38$.

Effective Rate = $14.25\% / 4\% = 3.56\%$

Present value of the amount = $\text{FRW } 2,168,609.38 / (1 + 0.0356) = \text{FRW } 2,090,060.81$

2. Money market hedge

Effective Rate = $7\% / 4\% = 1.75\%$

Amount required to deposit in HUF = $\text{HUF } 4,000,000 / (1 + 0.0175) = \text{HUF } 3,931,203.93$.

Amount in Rwandan Francs = $\text{HUF } 3,931,203.93 / 1.8625 = \text{FRW } 2,110,713.52$

3. Lead payment

Amount in Rwandan Francs = $4,000,000 / (1.8625) = \text{FRW } 2,147,651.00$

The best option is therefore to use lead payment.

(ii) Advantages of forward contracts

Facilitates perfect hedging of foreign currency payables/receivables

Can be tailor-made to suit a customer's requirements (amount, currency, and timing)

Simple implementation and standardized documentation

(b) Exchange rate systems

Fixed exchange rates, where governments which are members of the international monetary system use their official reserves (which comprise foreign currency and gold) to maintain a fixed exchange rate. By adding to, or using, the official reserves the government ensures that the demand for, and the supply of, their currency are balanced (thus maintaining its price). The exchange rate of each member currency is generally set against a standard - which could be gold, a major currency (e.g. the US \$) or a basket of currencies. It is also possible for each currency in the system to be set against each other. Fixed exchange rate systems encourage international trade by removing uncertainty. However, they restrict member states' independence in setting domestic economic policies by requiring them to take appropriate action to maintain their exchange rate.

Floating exchange rate systems are systems whereby the exchange rate is determined by market forces, there being no use of the official reserves in maintaining the exchange rate level. Floating exchange rate systems may be either **free floating** or, more commonly, **managed floating**. Wide fluctuations of exchange rate values can occur under floating exchange rate systems creating problems of uncertainty for international trade. However, it is likely that the underlying economic conditions creating these fluctuations would have created severe problems for the working of a fixed exchange rate system - even creating instability.

Adjustable or pegged system is a fixed exchange rate system which has provisions for the devaluation and revaluation of currencies for countries with persistent balance of payments' deficits or surpluses. Adjustable peg systems allow more flexibility than a fixed exchange rate system but still limit the choice of government action to either maintaining the exchange rate or devaluing/revaluing the currency.

c) Foreign exchange risks exposure

Transaction exposure: Transaction exposure measures changes in the value of outstanding financial obligations incurred prior to a change in exchange rates but not due to be settled until after the exchange rates change. Thus, it deals with changes in cash flows that result from existing contractual obligations.

Operating Exposure: also called economic exposure, measures the change in the present value of the firm resulting from any change in expected future operating cash flows caused by an expected change in exchange rates.

The difference between the transaction exposure and the operating exposure is that transaction exposure is concerned with future cash flows already contracted for, while operating exposure focuses on expected (not yet contracted for) future cash flows that might change because a change in exchange rates has altered international competitiveness.

Translation exposure: Translation exposure, also called accounting exposure, is the potential for accounting-derived changes in owner's equity to occur because of the need to "translate" foreign currency financial statements of foreign subsidiaries in to a single reporting currency to prepare worldwide consolidated financial statements.

(d) Benefits of investing with capital markets

From: CPA student

To: SL's Finance Director

26 April 2023

Kigali

Re: Explanation of four benefits of investing in the capital market

Dear Sir,

I would like to submit this report that explaining four benefits of investing in the capital market.

Please find more details below;

Savings

Investing in securities that are listed in the Capital or Stock market encourages investors to accumulate their savings in small amounts over time

Income

Investment in the stock market provides a source of income. Shares pay dividends when companies declared profits and decide to distribute part of the profits to shareholders. Bonds pay an interest income to the bondholders. Sometimes the income earned from listed securities is higher than interest earned from the money or banking sector.

Wealth or Capital gain

Whenever the prices of securities listed in the market go up, the value of the investment of the holders of those securities increases. This is called capital gain and is an important way of growing wealth through the stock market. It is important to note that a one –off investment in

the Capital market does not make sense. It is therefore the accumulative investment over time that creates opportunities for growth in wealth through the Capital Market.

Securities as Collateral

Listed securities are easily acceptable as collateral against loans from financial institutions. The shares at the stock exchange market act as the collateral which facilitates acquisition of the loan.

Liquidity

Liquidity is the ability to convert shares or bonds into cash by selling within the shortest time possible without losing much value. When one needs funds urgently, listed securities could be very useful because they are more liquid than most other forms of assets.

For more clarification, don't hesitate to reach me.

Yours sincerely,

CPA Student

END OF MARKING GUIDE AND MODEL ANSWERS