



CIFA PART III SECTION 6
INTERNATIONAL FINANCE

FRIDAY: 24 May 2019.

Time Allowed: 3 hours.

Answer ALL questions. Marks allocated to each question are shown at the end of the question. Show ALL your workings.

QUESTION ONE

- (a) Your country has organised a stakeholders' forum to discuss the "debt crisis" following sharp criticism from the industry players who have accused the government of an insatiable appetite for borrowing.

As a young CIFA graduate, you have been selected on behalf of the National Youth Forum to make a presentation on "the effects of a debt crisis on an economy".

Required:

With reference to the above statement:

- (i) Propose five measures that the government of your country could put in place to mitigate against a possible debt crisis on an economy. (5 marks)
- (ii) Analyse three risk exposures that your country is likely to face from external borrowing. (3 marks)
- (b) Over the past five years, the exchange rate between the United States dollar, USD, and the Euro, EUR, has been fluctuating in a relatively wide range. The EUR was quoted as high as 1.39 and as low as 1.05 against the USD. One currency forecaster was recently quoted saying "I expect the currency pair to return to parity soon" while other experts expect a significant weakening of the USD.

Recently, the exchange rate between the EUR and USD was quoted as follows:

Spot rate: 1 EUR = 1.160 USD

1-year forward rate: 1 EUR = 1.199 USD

Required:

- (i) Comment on the nominal one-year interest rates in the US and the Eurozone based on the above statement. (2 marks)
- (ii) Assuming an inflation rate of 3% in the US and 1.8% in the Eurozone over the next 12 months, determine the theoretical value of the exchange rate between the USD and the EUR in one year based on the relative purchasing power parity (PPP) theory. (3 marks)
- (iii) An analyst claims that based on the theory of absolute purchasing power parity the "USD is undervalued" at the current level.

Explain the law of "absolute purchasing power" and based on this law, explain the analyst's statement that the "USD is undervalued". (4 marks)
- (iv) Describe three factors that could determine the exchange rate using the monetary approach model. (3 marks)
- (Total: 20 marks)**

QUESTION TWO

- (a) Explain three strategies that a multinational corporation (MNC) could apply to hedge against each of the following exposures:
- (i) Long-term transaction exposure. (3 marks)
- (ii) Economic exposures. (3 marks)
- (b) HZ Limited uses probability distribution to forecast exchange rates.

The company is considering borrowing in Euros for one year. HZ Limited finds that the quoted interest rates for the Euros is 8% and the quoted interest rates for the United States Dollars (USD) is 15%.

The company then develops a probability distribution for the Euros possible percentage change in value over the life of the loan as provided below:

Changes in value of Euros over the life of the loan (%)	Probability (%)
-6	5
-4	10
-1	15
1	20
4	20
6	15
8	10
10	5

Required:

The effective interest rate for HZ Limited's loan. (4 marks)

- (c) Sumeka Limited, a Kenyan based company intends to invest in a capital project to be based in Jinja, Uganda.

Additional information:

- The project will commence on 1 January 2020 and Ush.40 million will be incurred to buy the machine. The machine will be depreciated on a straight line basis over the project's useful life estimated to be 4 years.
- An additional Ush.24 million will be required for working capital on commencement of the project. This amount will however be recovered in full at the end of the project's useful life.
- Annual revenue from the project are estimated as follows:

Year	Sales (Ush.million)
2020	30
2021	60
2022	90
2023	60

- Variable operating costs are expected to be 20% of the annual revenue.
- Annual fixed costs are estimated at Ush.2 million.
- The corporation tax rate in Uganda is 30% (Assume no taxation of cash flow in Kenya).
- The exchange rates between the Kenyan shilling (Ksh.) and the Uganda shilling (Ush.) over 4-year period is as follows:

	Ush./Ksh.
1 January 2020	18
31 December 2020	20
31 December 2021	22
31 December 2022	24
31 December 2023	26

- All cash flows are expected to accrue at year end.
- The cost of capital for the project is 10%.

Required:

- (i) The net present (NPV) of the project. (8 marks)
- (ii) Advise Sumeka Limited on whether to undertake the capital investment based on your results in (c) (i) above. (2 marks)

(Total: 20 marks)

QUESTION THREE

- (a) Tax avoidance is part of tax management strategy employed by financial managers in the world.

In light of the above statement, assess three organisational structures that multinational companies (MNCs) could employ to reduce their tax liabilities. (6 marks)

- (b) Paroma Ltd. is a company incorporated in Kenya to manufacture and distribute body sprays. Currently, the company has 3 wholly owned subsidiaries in three African countries.

For the year ended 31 December 2018, Paroma Ltd. is expected to receive the following dividends from each of the three subsidiaries (net of tax in the respective foreign country):

Subsidiary	Country	Dividends received Sh. "000"	Income tax rate (%)
1	X	900	40
2	Y	1,200	35
3	Z	2,250	25

Additional information:

- The dividends received from the subsidiaries are taxable in Kenya at the rate of 30%. The taxable amount of the dividends is the gross figure before deducting foreign tax.
- Kenya has a double taxation agreement with countries X, Y and Z. Tax relief is therefore offered in Kenya for the foreign tax though the relief does not exceed the amount of tax in Kenya.
- The double taxation relief on the foreign tax is provided even where Paroma Ltd. channels the dividends through another subsidiary located in a tax haven country.

Required:

The tax payable in Kenya assuming Paroma Ltd. receive dividends:

- (i) Directly from the respective subsidiaries. (5 marks)
- (ii) Through the subsidiary located in a tax haven country. (5 marks)
- (c) Consider the following bank quotation as provided by Mac Bank Limited of South Africa:

1£ = ZAR18.125

1\$ = ZAR12.750

1£ = \$ 1.475

Where: ZAR = South Africa Rand

£ = British pound

\$ = United States Dollar (USD)

Suppose one of your client, Mr Tembo holds ZAR 900,000.

Required:

Using the triangular arbitrage, determine whether an arbitrage opportunity exists and advise Mr. Tembo: (4 marks)
(Total: 20 marks)

QUESTION FOUR

- (a) Discuss three techniques of assessing political risks in the context of international business. (3 marks)
- (b) Many governments across the world have been accused of giving incentives to Foreign Direct Investments (FDIs) at the detriment of their home enterprises.
Critique the above statement by outlining the incentives that are provided by your government to FDIs. (3 marks)
- (c) Summarise four ethical dilemmas associated with e-commerce in a global business arena. (4 marks)
- (d) Argue five cases against free trade policy in your country. (5 marks)
- (e) (i) Explain the term "official reserves" as used in international trade. (1 mark)
(ii) Outline four components of official reserves. (4 marks)

(Total: 20 marks)

QUESTION FIVE

- (a) Suggest six benefits that could accrue to a country that uses a flexible exchange rate regime. (6 marks)
- (b) In the modern financial market, some African countries are issuing Eurobonds to fund long-term development as most of their annual budgets are always in deficit positions. Contrary to the perception that these countries have high political risks, the uptake of these debt instruments have surpassed expectations.

Required:

With reference to the above statement:

- (i) Explain three reasons why Eurobonds are usually oversubscribed by African countries. (3 marks)
- (ii) Discuss two demerits of Eurobonds to issuing countries. (2 marks)
- (c) Madi International Limited is a multinational company with its headquarters based in London, United Kingdom. The company has invested heavily in Asia, America and some parts of Europe. Madi Limited is considering expanding its operation in some 3 selected countries in Africa and a research analysis of factors affecting political risks in these countries has been obtained.

The table below shows the relevant variables on a scale of -10 to +10, with -10 being the most adverse score and +10 being the best possible score:

Variable	Scores		
	Country (X)	Country (Y)	Country (Z)
Economic growth	6	8	4
Political stability	4	-3	6
Cultural compatibility	3	0	4
Interest rates volatility	-7	-3	-5
Inflation	8	-5	6
Currency convertability	-3	6	-3
Investment incentives	-2	8	4
Natural resources	3	7	-2
Labour supply	3	8	2

Required:

- (i) Interpret the above analysis in relation to investment potential in Africa. (5 marks)
- (ii) Highlight four other variables not covered in the above analysis that would have a potential of influencing the decision on whether to invest in Africa. (4 marks)

(Total: 20 marks)

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Present Value of 1 Received at the End of n Periods:

$$PVIF_{r,n} = 1/(1+r)^n = (1+r)^{-n}$$

Period	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	12%	14%	15%	16%	18%	20%	24%	28%	32%	36%
1	.9901	.9804	.9709	.9615	.9524	.9434	.9346	.9259	.9174	.9091	.8929	.8772	.8696	.8621	.8475	.8333	.8065	.7813	.7576	.7353
2	.9803	.9612	.9426	.9246	.9070	.8900	.8734	.8573	.8417	.8264	.7972	.7695	.7561	.7432	.7182	.6944	.6504	.6104	.5739	.5407
3	.9706	.9423	.9151	.8890	.8638	.8396	.8163	.7938	.7722	.7513	.7118	.6750	.6575	.6407	.6086	.5787	.5245	.4768	.4348	.3975
4	.9610	.9238	.8885	.8548	.8227	.7921	.7629	.7350	.7084	.6830	.6355	.5921	.5718	.5523	.5158	.4823	.4230	.3725	.3294	.2923
5	.9515	.9057	.8626	.8219	.7835	.7473	.7130	.6806	.6499	.6209	.5674	.5194	.4972	.4761	.4371	.4019	.3411	.2910	.2495	.2149
6	.9420	.8880	.8375	.7903	.7462	.7050	.6663	.6302	.5963	.5645	.5066	.4556	.4323	.4104	.3704	.3349	.2751	.2274	.1890	.1580
7	.9327	.8706	.8131	.7599	.7107	.6651	.6227	.5835	.5470	.5132	.4523	.3996	.3759	.3538	.3139	.2791	.2218	.1776	.1432	.1162
8	.9235	.8535	.7894	.7307	.6768	.6274	.5820	.5403	.5019	.4665	.4039	.3506	.3269	.3050	.2660	.2326	.1789	.1388	.1085	.0854
9	.9143	.8368	.7664	.7026	.6446	.5919	.5439	.5002	.4604	.4241	.3606	.3075	.2843	.2630	.2255	.1938	.1443	.1084	.0822	.0628
10	.9053	.8203	.7441	.6756	.6139	.5584	.5083	.4632	.4224	.3855	.3220	.2697	.2472	.2267	.1911	.1615	.1164	.0847	.0623	.0462
11	.8963	.8043	.7224	.6496	.5847	.5268	.4751	.4289	.3875	.3505	.2875	.2366	.2149	.1954	.1619	.1346	.0938	.0662	.0472	.0340
12	.8874	.7885	.7014	.6246	.5568	.4970	.4440	.3971	.3555	.3186	.2567	.2076	.1869	.1685	.1372	.1122	.0757	.0517	.0357	.0250
13	.8787	.7730	.6810	.6006	.5303	.4688	.4150	.3677	.3262	.2897	.2292	.1821	.1625	.1452	.1163	.0935	.0610	.0404	.0271	.0184
14	.8700	.7579	.6611	.5775	.5051	.4423	.3878	.3405	.2992	.2633	.2046	.1597	.1413	.1252	.0985	.0779	.0492	.0316	.0205	.0135
15	.8613	.7430	.6419	.5553	.4810	.4173	.3624	.3152	.2745	.2394	.1827	.1401	.1229	.1079	.0835	.0649	.0397	.0247	.0155	.0099
16	.8528	.7284	.6232	.5339	.4581	.3936	.3387	.2919	.2519	.2176	.1631	.1229	.1069	.0930	.0708	.0541	.0320	.0193	.0118	.0073
17	.8444	.7142	.6050	.5134	.4363	.3714	.3166	.2703	.2311	.1978	.1456	.1078	.0929	.0802	.0600	.0451	.0258	.0150	.0089	.0054
18	.8360	.7002	.5874	.4936	.4155	.3503	.2959	.2502	.2120	.1799	.1300	.0946	.0808	.0691	.0508	.0376	.0208	.0118	.0068	.0039
19	.8277	.6864	.5703	.4746	.3957	.3305	.2765	.2317	.1945	.1635	.1161	.0829	.0703	.0596	.0431	.0313	.0168	.0092	.0051	.0029
20	.8195	.6730	.5537	.4564	.3769	.3118	.2584	.2145	.1784	.1486	.1037	.0728	.0611	.0514	.0365	.0261	.0135	.0072	.0039	.0021
25	.7798	.6095	.4776	.3751	.2953	.2330	.1842	.1460	.1160	.0923	.0588	.0378	.0304	.0245	.0160	.0105	.0046	.0021	.0010	.0005
30	.7419	.5521	.4120	.3083	.2314	.1741	.1314	.0994	.0754	.0573	.0334	.0196	.0151	.0116	.0070	.0042	.0016	.0006	.0002	.0001
40	.6717	.4529	.3066	.2083	.1420	.0972	.0668	.0460	.0318	.0221	.0107	.0053	.0037	.0026	.0013	.0007	.0002	.0001		
50	.6080	.3715	.2281	.1407	.0872	.0543	.0339	.0213	.0134	.0085	.0035	.0014	.0009	.0006	.0003	.0001				
60	.5504	.3048	.1697	.0951	.0535	.0303	.0173	.0099	.0057	.0033	.0011	.0004	.0002	.0001						

* The factor is zero to four decimal places

Present Value of an Annuity of 1 Per Period for n Periods:

$$PVIF_{r,n} = \sum_{t=1}^n \frac{1}{(1+r)^t} = \frac{1 - \frac{1}{(1+r)^n}}{r}$$

Number of Payments	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	12%	14%	15%	16%	18%	20%	24%	28%	32%
1	0.9901	0.9804	0.9709	0.9615	0.9524	0.9434	0.9346	0.9259	0.9174	0.9091	0.8929	0.8772	0.8696	0.8621	0.8475	0.8333	0.8065	0.7813	0.7576
2	1.9704	1.9416	1.9135	1.8861	1.8594	1.8334	1.8080	1.7833	1.7591	1.7355	1.6901	1.6467	1.6257	1.6052	1.5656	1.5278	1.4568	1.3916	1.3315
3	2.9410	2.8839	2.8286	2.7751	2.7232	2.6730	2.6243	2.5771	2.5313	2.4869	2.4018	2.3216	2.2832	2.2459	2.1743	2.1065	1.9813	1.8684	1.7663
4	3.9020	3.8077	3.7171	3.6299	3.5460	3.4651	3.3872	3.3121	3.2397	3.1699	3.0373	2.9137	2.8550	2.7982	2.6901	2.5887	2.4043	2.2410	2.0957
5	4.8534	4.7135	4.5797	4.4518	4.3295	4.2124	4.1002	3.9927	3.8897	3.7908	3.6048	3.4331	3.3522	3.2743	3.1272	2.9906	2.7454	2.5320	2.3452
6	5.7955	5.6014	5.4172	5.2421	5.0757	4.9173	4.7665	4.6229	4.4859	4.3553	4.1114	3.8887	3.7845	3.6847	3.4976	3.3255	3.0205	2.7594	2.5342
7	6.7282	6.4720	6.2303	6.0021	5.7864	5.5824	5.3893	5.2064	5.0330	4.8684	4.5638	4.2883	4.1604	4.0386	3.8115	3.6046	3.2423	2.9370	2.6775
8	7.6517	7.3255	7.0197	6.7327	6.4632	6.2098	5.9713	5.7466	5.5348	5.3349	4.9676	4.6389	4.4873	4.3436	4.0776	3.8372	3.4212	3.0758	2.7860
9	8.5660	8.1622	7.7861	7.4353	7.1078	6.8017	6.5152	6.2469	5.9952	5.7590	5.3282	4.9464	4.7716	4.6065	4.3030	4.0310	3.5655	3.1842	2.8681
10	9.4713	8.9826	8.5302	8.1109	7.7217	7.3601	7.0236	6.7101	6.4177	6.1446	5.6502	5.2161	5.0188	4.8332	4.4941	4.1925	3.6819	3.2689	2.9304
11	10.3676	9.7868	9.2526	8.7605	8.3064	7.8869	7.4987	7.1390	6.8052	6.4951	5.9377	5.4527	5.2337	5.0286	4.6560	4.3271	3.7757	3.3351	2.9776
12	11.2551	10.5753	9.9540	9.3851	8.8633	8.3838	7.9427	7.5361	7.1607	6.8137	6.1944	5.6603	5.4206	5.1971	4.7932	4.4392	3.8514	3.3868	3.0133
13	12.1337	11.3484	10.6350	9.9856	9.3936	8.8527	8.3577	7.9038	7.4869	7.1034	6.4235	5.8424	5.5831	5.3423	4.9095	4.5327	3.9124	3.4272	3.0404
14	13.0037	12.1062	11.2961	10.5631	9.8986	9.2950	8.7455	8.2442	7.7862	7.3667	6.6282	6.0021	5.7245	5.4675	5.0081	4.6106	3.9616	3.4587	3.0609
15	13.8651	12.8493	11.9379	11.1184	10.3797	9.7122	9.1079	8.5595	8.0607	7.6061	6.8109	6.1422	5.8474	5.5755	5.0916	4.6755	4.0013	3.4834	3.0764
16	14.7179	13.5777	12.5611	11.6523	10.8378	10.1059	9.4466	8.8514	8.3126	7.8237	6.9740	6.2651	5.9542	5.6685	5.1624	4.7296	4.0333	3.5026	3.0882
17	15.5623	14.2919	13.1661	12.1657	11.2741	10.4773	9.7632	9.1216	8.5436	8.0216	7.1196	6.3729	6.0472	5.7487	5.2223	4.7746	4.0591	3.5177	3.0971
18	16.3983	14.9920	13.7535	12.6593	11.6896	10.8276	10.0591	9.3719	8.7556	8.2014	7.2497	6.4674	6.1280	5.8178	5.2732	4.8122	4.0799	3.5294	3.1039
19	17.2260	15.6785	14.3238	13.1339	12.0853	11.1581	10.3356	9.6036	8.9501	8.3649	7.3658	6.5504	6.1982	5.8775	5.3162	4.8435	4.0967	3.5386	3.1090
20	18.0456	16.3514	14.8775	13.5903	12.4622	11.4699	10.5940	9.8181	9.1285	8.5136	7.4694	6.6231	6.2593	5.9288	5.3527	4.8696	4.1103	3.5458	3.1129
25	22.0232	19.5235	17.4131	15.6221	14.0939	12.7834	11.6536	10.6748	9.8226	9.0770	7.8431	6.8729	6.4641	6.0971	5.4669	4.9476	4.1474	3.5640	3.1220
30	25.8077	22.3965	19.6004	17.2920	15.3725	13.7648	12.4090	11.2578	10.2737	9.4269	8.0552	7.0027	6.5660	6.1772	5.5168	4.9789	4.1601	3.5693	3.1242
40	32.8347	27.3555	23.1148	19.7928	17.1591	15.0463	13.3317	11.9246	10.7574	9.7791	8.2438	7.1050	6.6418	6.2335	5.5482	4.9966	4.1659	3.5712	3.1250
50	39.1961	31.4236	25.7298	21.4822	18.2559	15.7619	13.8007	12.2335	10.9617	9.9148	8.3045	7.1327	6.6605	6.2463	5.5541	4.9995	4.1666	3.5714	3.1250
60	44.9550	34.7609	27.6756	22.6235	18.9293	16.1614	14.0392	12.3766	11.0480	9.9672	8.3240	7.1401	6.6651	6.2402	5.5553	4.9999	4.1667	3.5714	3.1250