**JAIPURIA INSTITUTE OF MANAGEMENT, INDORE**

**PGDM**

**FIFTH TRIMESTER (Batch 2019-21)**

**END TERM EXAMINATION, JAN-2021**

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| --- | --- | --- | --- |
| Course Name | **International Finance** | Course Code | **FIN 504** |
| Max. Time | **2 hours** | Max. Marks | **40** |

**INSTRUCTIONS:**

Please Answer all the Questions

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**Questions.1 (10 Marks)**

Assume that the USA invests heavily in government and corporate securities of X republic. In addition residents of invests heavily in the USA. About $10 billion of investment transactions occur between 2 countries each year. The total USD value of transactions between them is only $8 million (that is less than one tenth of investment transactions).

You are treasury manager of the USA based firm that mainly exports goods to Czech. One of your jobs is to forecast X’s currency (called ‘CX’) movement against $. Explain how each of the following situations will affect the value of CX **holding other things equal**. Then, **aggregate all these impacts** to develop an overall forecast of CX’s movement against $.

1. US inflation rises sharply whereas X’s inflation remains very low.

 2. US interest rates have increased sharply compared to low increase of interest in X.

3. US income level rises sharply but X’s income level remains same.

4. US is expected to impose a small tariff on goods imported from X

5. Combine all expected impact to develop a general forecast.

(Give brief bullet point answers in clear handwriting, word limit 200 words maximum, marks will be deducted for illegible hand writing and exceeding word limits)

**Questions.2**

**(a)** Following information is given to you **(4 Marks)**

|  |  |
| --- | --- |
| Currency  |  Quotation |
| Canadian Dollar/USD |  $0.90 |
| NZ Dollar/USD  |  $0.30 |
| Canadian Dollar/ NZ Dollar |  NZ$3.02 |

 a) Given the information - is triangular arbitrage possible?

 b) If so explain the steps to earn that would reflect triangular arbitrage,

 c) Compute profit from the strategy if you have $1 million

 d) How market forces will organize to eliminate arbitrage profit. Analyze.

**(b)** Interest rate in the USA is 5% and in UK 8%. Spot rate GBP/ USD = $1.80 and 1 ( one year) forward rate (GBP/USD) = $1.78. Given the situation -

1) how an US investor with $1 million can make arbitrage profit?

2) What will be the arbitrage profit?

3) Show that in equilibrium forward rate premium = interest rate differential approximately.

 **(3 Marks)**

**(c)** Japan has typically lower inflation than the USA. If inflation in Japan is 1% and that in the USA is 4%. How the value of Yen will be impacted agai.st USD ? Describe the mechanism. Why does this expected relation doesn’t occur? Analyze. **(3 Marks)**

**Questions.3**

**a)** Infosys has large off shore operation in the USA. You believe that today’s forward rate of USD substantially underestimates the future spot rate. Company policy requires Infosys to hedge USD receivable in some ways. Would a forward hedge or a put option hedge be more appropriate? Analyze.

**(3 Marks)**

**b)** Assume the following information.

|  |  |
| --- | --- |
|  Particulars |  Rate / exchange |
| 90 day US interest rate |  4% |
| 90 day Malaysian interest rate |  3% |
| 90 day forward rate of Malaysian Ringgit |  $0.400 |
| Spot rate of Malaysian ringgit |  $0.404 |

Assume X Co. Ltd needs 300,000 ringgit in 90 days to pay for imports from Malaysia. It wishes to hedge this payable position. Would it be better off using a forward hedge or money market hedge? Explain your answer with estimated cost of each type of hedge. **(7 Marks)**

**Questions.4**

**a)** A project in South Korea requires an initial investment of 2 billion south Korean won. The project is expected to generate net cash flow of 3 billion and 4 billion won in the next 2 years operation, respectively. The project has no salvage value. The current value of won is 1100 won per USD ($1 = Won 1100). The value of won is expected to remain constant over the next 2 years.

a. What is the NPV of the project if the required rate of return is 13%?

b. Assume that the fund will remain blocked for 2 years in South Korea. After 2 years $1= won1200. What will be the NPV in this scenario? Answer with appropriate analysis.

 **(6 Marks)**

**b)** A project in India by an US company costs $4 million. Over the next 3 years the total operating cash flow of the project will be $3.5 million measured in today’s dollars using a required rate of return of 14%. What is the break even salvage value of the project? **(4 Marks)**