

INDIAN INSTITUTE OF TECHNOLOGY KHARAGPUR

Department of Humanities and Social Sciences

Mid-Autumn Semester Examination - 2022-23

Date: September 26, 2022

Time: 9.00 - 11.00 am

Full Marks: 30

Sub. Code: HS50025

International Finance

Answer all the questions

Please refer values given in table 1-3 for questions 1-5 as applicable

Assume values in case required

No queries during the examination

1. Examine the cross-spot rates. Are there any triangular arbitrage opportunities among these currencies (assume deviation from theoretical cross rates of 5 points or less are attributable to transaction cost)? How much profit could be made on a \$5 million transaction? [4 marks]
2. What would be the \$/SDR bid if the SDR appreciates 15% against the dollar? What would be the SDR/\$ offer rate if the SDR appreciates 15%. [3 marks]
3. Which currency are at a dollar discount and which are at a dollar premium? What are the outright forward rates for the pound? For the French franc? Using the midpoints of the bid-ask spreads, what are the forward premia or discounts on an annualised percentage basis for both these currencies? [4 marks]
4. A private speculator expects the yen to depreciate 7% against the dollar over the next three months. How can the speculator try to profit on these expectations through a) spot market transaction only, and b) forward market transaction only (assume no margin requirements or restrictions on transaction in credit market)? What will be the expected dollar profit on a \$1 million position in each case? What other consideration should factor into the speculator's choice between the spot and forward markets for purpose of profiting on future movement of the yen? [6 marks]
5. Compare the one year forward premium or discount on the French franc to the one year Eurodollar and Eurofranc interest rates. How can this situation be arbitrated? [3 marks]
6. Discuss how money supply and interest rate influence the exchange rate in the short run? Explain the reasons for the same. [5 marks]

7. Explain the link between current and capital account using the S-I framework. Show how the interaction of these accounts determine the real exchange rate. [5 marks]

Table 1: Spot and Forward Exchange Rates

Currency	Spot	1 Month	3 Months	6 Months	12 Months
Sterling	1.4890/00	55/52	160/156	302/289	560/523
Deutsche mark	2.0310/20	22/18	64/54	128/105	277/228
French Franc	6.6575/625	73/86	263/296	505/590	1194/1351
Yen	154.20/30	8/6	33/27	75/56	164/137
SDR*	1.2141/43	5/3	12/8	18/11	24/12
U.S. dollars per unit of currency					

Table 2: Cross-spot Exchange Rates *

	1 DM	1 FF	100 Yen
DM	-	3050/51	1.3169/71
FF	3.2715/88	-	4.3365/81
Yen	75.925/350	23.1595/618	-

* Quotes should be interpreted as units of the currency represented in the left-hand column per unit of currency shown in the top row. Quotes for the DM/yen and FF/yen are expressed in units per 100 yen.

Table 3: Eurocurrency Interest Rates

Currency	1 Month	3 Month	6 Month	12 Month
U.S. Dollar	5.6875-5.8125	5.5000-5.6250	5.5000-5.6250	5.6250-5.7500
Sterling	10.0625-10.1875	9.8750-9.9375	9.6875-9.7500	9.6250-9.7500
Deutsche mark	4.4375-4.5625	4.3125-4.4375	4.3125-4.4375	4.3125-4.4375
French Franc	7.1250-7.2500	7.1875-7.3125	7.1875-7.3125	7.2500-7.3750
Yen	5.1250-5.1875	4.7500-4.8125	4.6250-4.6875	4.6250-4.6875
SDR	5.9375-6.0625	5.8125-5.9375	5.7500-5.8750	5.8125-5.9375

can spot rate

100 Yen = 1.3169 DM

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1 DM = 75.9359 Yen

100 Yen → 4.33