Mark Scheme

International Financial Management

Mock Examination

June Term 2023

General Marking Guidance

- All student must receive the same treatment.
- Lecturers must mark the first candidate in exactly the same way as they mark the last.
- Mark schemes should be applied positively.
- Students must be rewarded for what they have shown they can do rather than penalised for omissions.
- Lecturers should mark according to the mark scheme not according to their perception of where the grade boundaries may lie.
- There is no ceiling on achievement. All marks on the mark scheme should be used appropriately.
- All the marks on the mark scheme are designed to be awarded. Lecturers should always award full marks if deserved, i.e. if the answer matches the mark scheme.
- Lecturers should also be prepared to award zero marks if the student's response is not worthy of credit according to the mark scheme.
- Where some judgement is required, mark schemes will provide the principles by which marks will be awarded and exemplification may be limited.
- When lecturers are in doubt regarding the application of the mark scheme to a candidate's response, the module leader must be consulted.
- Crossed out work should be marked UNLESS the candidate has replaced it with an alternative response.

Section A

1. **Which of the following is a legitimate reason for international investment?**
   (a) Dividends from a foreign subsidiary are tax exempt in the United States.
   (b) Most governments do not tax foreign corporations.
   (c) There are possible benefits from international diversification.
   (d) International investments have less political risk than domestic investments.

2. **By definition, currency appreciation occurs when:**
   (a) The value of all currencies fall relative to gold.
   (b) The value of all currencies rise relative to gold.
   (c) The value of one currency rises relative to another currency.
   (d) The value of one currency falls relative to another currency.

3. **Theory which considers change in exchange rate with fluctuations in inflation rates is classified as:**
   (a) Liquidated power parity
   (b) Purchasing power parity
   (c) Selling power parity
   (d) Volatile power parity

4. **If purchasing power parity were to hold even in the short run, then:**
   (a) Real exchange rates should tend to decrease over time.
   (b) Quoted nominal exchange rates should be stable over time.
   (c) Real exchange rates should tend to increase over time.
   (d) Real exchange rates should be stable over time.

5. **Given a home country and a foreign country, purchasing power parity suggests that:**
   (a) The home currency will appreciate if the current home inflation rate exceeds the current foreign inflation rate
   (b) The home currency will depreciate if the current home interest rate exceeds the current foreign interest rate
   (c) The home currency will depreciate if the current home inflation rate exceeds the current foreign inflation rate

(d) The home currency will depreciate if the current home inflation rate exceeds the current foreign interest rate

6. **Interest Rate Parity (IRP) implies that:**

(a) Interest rates should change by an equal amount but in the opposite direction to the difference in inflation rates between two countries

(b) The difference in interest rates in different currencies for securities of similar risk and maturity should be consistent with the forward rate discount or premium for the foreign currency

(c) The interest rates between two countries start in equilibrium, any change in the differential rate of inflation between the two countries tends to be offset over the long-term by an equal but opposite change in the spot exchange rate

(d) In the long run real interest rate between two countries will be equal

(e) Nominal interest rates in each country are equal to the required real rate plus compensation for expected inflation

7. **In equilibrium position, spread between foreign and domestic rate of interest must be equal to spread of:**

(a) Domestic rates

(b) Forward and spot exchange rates

(c) Forward rate

(d) Spot rates

8. **Rule which states that similar set of goods and services produced in various countries should have equal price is classified as:**

(a) Law of similar mortgage rate

(b) Law of one type manufacturing

(c) Law of similar labour rules

(d) Law of one price

9. **Example of derivative securities includes**:

(a) Swap contract

(b) Option contract

(c) Futures contract

(d) All of above

10. **Authority which intervenes directly or indirectly in foreign exchange markets by altering interest rates is considered as:**

(a) Central government

(b) Centralised stocks

(c) Central corporations

(d) Centralised instruments

11. **The forward market is especially well-suited to offer hedging protection against:**

(a) Translation risk exposure.

(b) Transactions risk exposure.

(c) Political risk exposure.

(d) Taxation.

12. **Suppose that the Japanese yen is selling at a forward discount in the forward-exchange market. This implies that most likely:**

(a) This currency has low exchange-rate risk.

(b) This currency is gaining strength in relation to the dollar.

(c) Interest rates are higher in Japan than in the United States.

(d) Interest rates are declining in Japan.

13. **Hedging is used by companies to:**

(a) Decrease the variability of tax paid

(b) Decrease the spread between spot and forward market quotes

(c) Increase the variability of expected cash flows

(d) Decrease the variability of expected cash flows

(e) Increase the variability of tax paid

14. **Which of the following is true of foreign exchange markets?**

(a) The futures market is mainly used by hedgers while the forward market is mainly used for speculating.

(b) The futures market and the forward market are mainly used for hedging.

(c) The futures market is mainly used by speculators while the forward market is mainly used for hedging.

(d) The futures market and the forward market are mainly used for speculating.

15. **Exchange rates:**

(a) Are always fixed

(b) Fluctuate to equate the quantity of foreign exchange demanded with the quantity supplied

(c) Fluctuate to equate imports and exports

(d) Fluctuate to equate rates of interest in various countries

Total Mark for Section A (15)

Answer Key

1	**c**
2	**c**
3	**b**
4	**d**
5	**c**
6	**b**
7	**b**
8	**d**
9	**d**
10	**a**
11	**b**
12	**c**
13	**d**
14	**c**
15	**b**

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Section B

1. What is the relation between risk and exposure? (5 marks)

Since the source of foreign exchange risk is changes in the exchange rate, exposure to foreign exchange risk is a measure of the sensitivity of the domestic currency value of foreign currency items (assets, liabilities, and cash flows) to changes in the exchange rate.

2. "Transaction exposure is a cash flow exposure". Explain. (10 Marks)

A cash flow exposure may be associated with trade flows (resulting from exports and imports) and capital flows (e.g. dividends and interest payments). It involves an actual conversion of foreign currency receivables and payables into the domestic currency. This kind of exposure arises, for example, from (i) a foreign currency asset or a liability that is already recorded on the balance sheet, and (ii) a contract or an agreement involving a future foreign currency cash flow.

3. What are the difference between economic exposure and transaction exposure? (5 marks)

Economic exposure pertains to non-contractual or unplanned future cash flows, while transaction exposure refers to a potential gain or loss arising from transactions that are planned, currently in progress or have already been completed. Economic exposures refer to changes in the future earning power as a result of changes in exchange rates.

4. Discuss the factors that cause the demand and supply curves to shift, consequently leading to changes in exchange rates. (5 marks)

According to the partial supply and demand model, the factors that cause the demand and supply curves to shift include relative inflation rates, relative interest rates, relative growth rates, government action (including central bank intervention) and expectations.

5. Exchange rates can not be predicted because they are determined by news. Explain. (5 marks)

News refers to the unpredictable or unanticipated changes in the fundamental variables that determine the exchange rate (e.g. inflation). Since news is unpredictable by definition, it follows that exchange rates are themselves unpredictable.

6. Why are options more appropriate than forwards and futures for hedging a contingent exposure? (5 marks)

An option is preferable to a forward hedge because the latter can cover all possible eventualities.

7. Distinguish between risk sharing and currency collars as hedging techniques. (10 marks)

Risk sharing:

- Risk sharing is a hedging technique whereby both the exporter and the importer bear the risk (e.g. whereby only part of the shipment is invoiced in domestic currency terms).
- Sometimes risk sharing is implemented by using a customized hedge contract embedded in the underlying trade contract. The hedge agreement typically takes the form of a price adjustment clause whereby a base price is adjusted to reflect certain exchange rate changes.

- Under the risk sharing arrangements, the result of appreciation of the domestic currency is shared between the importer and exporter, in the sense that the importer pays less than under the no-hedge decision, whereas the exporter receives less than otherwise.

Currency collar (also called "range forward"):

- A currency collar can be used to hedge receivables (from the perspective of the exporter).
- A currency collar is used to set a minimum value for domestic currency receivables at the expense of setting a maximum value. Thus, it involves trade-off between potential loss and potential gain.
- A currency collar contains a certain range for the exchange rate extending between a lower limit and an upper limit.

10. Under what conditions are foreign-currency-denominated bonds preferred even if they offer a lower rate of return (in foreign currency terms) than domestic bonds? (5 marks)

Foreign currency denominated bonds are preferred if the foreign currency is expected to appreciate by more than the difference between the rate of return on domestic currency denominated bonds and foreign currency-denominated bonds.

11. What is the efficient frontier? What does international diversification do to the efficient frontier? (5 marks)

The efficient frontier is the locus of efficient portfolios. These are portfolios which offer the highest return for a given level of risk, or the lowest risk for a given level of return.

International diversification causes the portfolio to shift outwards, such that a higher level of return can be obtained at the same level of risk.

12. International diversification is beneficial only if markets are segmented. Why, then, do portfolio managers diversify internationally in practice? **(5marks)**

In practice, markets are segmented, making international diversification beneficial.

13. What are the strategic and long-term factors that determine whether or not to indulge in FDI? (10 marks)

The strategic and long-term factors that determine whether or not to indulge in FDI are as follows:

1. The desire on the part of the investor to defend existing foreign markets and foreign investments against competitors;
2. The desire to gain and maintain a foothold in a protected market, or to gain and maintain a source of supply that may prove useful in the long run;
3. The need to develop and sustain a parent-subsidiary relation;
4. The desire to induce the host country into a long commitment to a particular type of technology;
5. The advantage of complementing another type of investment;
6. The economies of new product development;
7. Competition for market shares among oligopolists and the concern for the strengthening of bargaining positions.

14. What are the reasons for market segmentation? (5 marks)

There are several reasons for market segmentation: legal barriers, FX risk, political and country risk, transaction costs, taxation, domestic regulation.

Total Mark for Section B (75 marks)

Section C

Question 1

Calculate the net present value with a required return of 5% an initial investment of £45,000 and cash flows of £12,000, £20,000, £10,000 and £6,000 for years 1, 2, 3, & 4 respectively.

**Note that the net present value calculates the difference between the present value of cash inflows and cash outflows. An investment is economically feasible only if it has a net present value that is greater than zero.*

Answer

Computation of the Net Present Value:

	Year	PVF @ 5%	Amount	Present Value
Cash Outflows				
Initial Investment	0	1.0000	£45,000	£45,000.00
Total Cash Outflows (A)				£45,000.00
Cash Inflows				
Annual Net Cash Inflow	1	0.9524	£12,000	£11,428.80
	2	0.9070	£20,000	£18,140.00
	3	0.8638	£10,000	£8,638.00
	4	0.8227	£6,000	£4,936.20
Total Cash Inflows (B)				£43,143.00
Net Present Value (B-A)				-£1,857.00

*Below is the formula used to compute the present value factor (PVF).

$PVF = 1 / (1+i)^n$

Where,

i = interest rate

n = number of years

The present value of all the cash inflows is less than the present of the cash outflows. Hence, the net present value of the investment is a negative **-£1,857**. In this case, the project should be rejected.

Total Mark for Section C (10 marks)

Note that the texts in blue are the answers to the questions.