

## EXAMPLE SERIES NO. 2

PROMPT FOREIGN EXCHANGE TRANSACTIONS

1. Arcelor Mittal Tubular Products Karviná needs to buy 1 mil. What exchange rate will the bank's dealer offer the company and what will be the kroner cost of buying pounds?

CZK/EUR 25.53225 .694
EUR/GBP $1.1606 \quad 1.1619$
2. A dealer at a bank received a limit order to buy 10 million. SEK, but not for more than 0.11 EUR/SEK. The current exchange rates are as follows:

| EUR/USD | 0.7833 | 0.7838 |
| :--- | :--- | :--- |
| SEK/USD | 7.2275 | 7.2365 |

(a) Calculate the rate at which the order can be executed under the given market conditions and determine whether the limit order can be executed.
b) If the order cannot be executed and there is no change in the SEK/USD exchange rate, find out what the EUR/USD exchange rate must change to in order to execute the order. Determine whether the euro must appreciate or depreciate.
c) If the order cannot be executed and there is no change in the EUR/USD exchange rate, find out what the SEK/USD exchange rate must change to in order to execute the order. Determine whether the Swedish krona must appreciate or depreciate.
3. The following buying and selling rates for the euro are given. Calculate the transaction costs for the purchase and subsequent sale with an amount of EUR 5 million. USD.

$$
\begin{array}{lll}
\text { USD/EUR } & 1.2758 & 1.2766
\end{array}
$$

4. The Dealer sees the following foreign exchange rates quoted in the three foreign exchange market centres on his terminal. Determine whether there is an option for triangular arbitrage and, if so, calculate the result for both possible arbitrage strategies. The default currency is the EUR.

| Frankfurt | USD/EUR | 1.2758 | 1.2766 |
| :--- | :--- | :--- | :--- |
| London | EUR/GBP | 1.2606 | 1.2620 |
| New York | USD/GBP | 1.6239 | 1.6247 |

5. See if there is an option for triangular arbitration. If so, calculate its result for both possible directions of arbitration. Assume that the trader knows the following exchange rate quotes:

|  | Currency pair | bid | ask |
| :--- | :--- | :--- | :--- |
| New York | USD/EUR | 1.33 | 1.34 |
| Frankfurt | JPY/EUR | 108.9 | 109.1 |
| Tokyo | JPY/USD | 82.4 | 82.5 |

