

HOMWORK 1

5 points, deadline 15.10.2023

1. Find the current spot price of USD/JPY, make the printscreen and state the source.
Find 5 related cross rates related to USD/JPY. Calculate direct and indirect quotes of your cross rates
(1 point)
2. Find on the web site how large are the bid–ask spreads in the interbank spot market? What is their purpose? Which currencies tend to have larger and which smaller spreads? What affects the size of the spread? Make the prinscreen of 3 FX bid-ask spreads and state the source.
(1 point)

3. Please calculate if the profitable triangular arbitrage is possible.

$$\text{EUR/CAD} = 1.60$$

$$\text{EUR/USD} = 1.05$$

$$\text{USD/CAD} = 1.37$$

If the triangular arbitrage is possible, how could you make a profit on this trade, please specify the transactions need to be done. Calculate profit/loss in %. (1 point)

4. As a currency trader, you see the following quotes on your computer screen:

Exch. Rate	Spot	1-month	3-month	6-month
USD/EUR	1.0435/45	20/25	75/90	97/115
JPY/USD	98.75/85	12/10	25/19	45/35
USD/GBP	1.6623/33	30/35	95/110	120/130

- a. What are the outright forward bid and ask quotes for the USD/EUR, JPY/USD and USD/GBP at the 1-month, 3-month and 6-month maturity?
- b. Calculate the bid-ask spread in the forward market and compare it to bid-ask spread in the spot market.
- c. Suppose you want to swap out of \$10,000,000 and into yen for 3 months. What are the cash flows associated with the swap?

(2 points)