

Seminar 4

1. Go to Refinitive website and read the FX forward rates. Explore the FX Forwards Calculator APP in Refinitiv.

2. Read the specification of the FX forward contract on the website:
<https://www.kdbbank.eu/forward-rate-quotation>

3. 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 the 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?

4. Intel is scheduled to receive a payment of ¥100,000,000 in 90 days from Sony regarding a shipment of computer chips that Sony is purchasing from Intel. Suppose that the current exchange rate is ¥103/\$, that analysts are forecasting that the yen will weaken by 1% over the next 90 days and that the standard deviation of 90-day forecasts of the percentage rate of depreciation of the dollar relative to the yen is 4%.

- a. Provide a qualitative description of Intel's transaction exchange risk.
- b. If Intel chooses not to hedge its transaction exchange risk, what is Intel's expected dollar revenue?
- c. If Intel does not hedge, what is the range of possible dollar revenues that incorporates 95.45% of the possibilities?

5. Consider the following spot and forward rates for the yen–euro exchange rates:

Spot	30 days	60 days	90 days	180 days	360 days
146.30	145.75	145.15	144.75	143.37	137.85

Is the euro at a forward premium or discount? What are the magnitudes of the forward premiums or discounts when quoted in percentage per annum for a 360-day year?