

# Macroeconomics A; EI060

## Quiz

Cédric Tille

Class of March 26, 2025

### 1 Pattern of exchange rate market

**Question:** According to the BIS survey, what are the most used tools and currencies in foreign exchange trading?

**Answer:** Spot transactions, with an immediate exchange, are not the majority of the market. Most transaction takes the form of forward transactions, with settlement at a later date at a price set today, and primarily of swaps. Swaps combine a spot and a forward transaction, and are usually with a short maturity.

The dollar is present in nearly half the transactions in the market. While the euro is present also, its share is about a third of that of the dollar.

### 2 Uncovered interest rate parity

**Question:** What is the intuition for the uncovered interest rate parity?

**Answer:** It is an arbitrage condition stating that the expected returns of investing in a domestic currency bond should be similar to that of investing in a foreign currency bond.

The domestic currency bond simply gives the interest rate. The foreign currency bonds gives a set interest rate in foreign currency, and the investor must first buy the foreign currency, and then resell it, at an uncertain exchange rate (unless she made a forward transaction). The expected return on the foreign bond should be the same as the one on the domestic bond. The foreign return can be from the foreign interest rate, or from the foreign currency gaining value during the investment, i.e. an expected depreciation of the domestic currency.

In general, the arbitrage condition involves a hedging condition. The foreign bond is also a better investment if the foreign currency tends to gain value when the investor's marginal utility is high. This risk premium is only present for a risk averse investor, and beyond a linear approximation of the relation.

### 3 Monetary fundamentals

**Question:** How does the exchange rate connects to the money supply?

How do future expected changes in the money supply matter?

**Answer:** The exchange rate reflects the abundance of the domestic currency supply, relative to the foreign one.

This abundance is not about just the current period, but about all future periods. This is because the demand for the domestic currency (which affects its price, i.e. the exchange rate) is low if the interest rate is high, which reflects an expectation of high money supply in the future.

If the money supply will increase in the future, and this is expected, the exchange rate will react at the time when the news is known, which can be well before the change actually takes place. This is a consequence of the fundamental being the present value of current and future money supply.

### 4 Empirical fit

**Question:** How has the ability to econometrically explain the exchange rate evolve?

**Answer:** Exchange rate used to be very hard, or even impossible, to explain with macroeconomic fundamentals.

This has changed since 2000, as variables reflecting current monetary policy (real interest rate) and expected future policy (inflation surprises) are statistically significant. This can reflect the focus of monetary policy on inflation, with more transparency leading to investors having clearer expectations of future policy. This better anchoring of policy is consistent with exchange rate being less sensitive to self-fulfilling movements.