How would you hedge a business where natural gas is bought at a floating price and sold at a fixed price with long contracts?

Your company buys components in dollars and sells cars in pounds.
What is the currency risk?
How would you model the exchange rate as a stochastic process?

Which interest rate should you choose for your mortgage, 3-month Euribor, 6-month Euribor or 12-month Euribor?

TU-E2210 Financial Engineering I

Fall 2023, periods I and II
3, 5 or 6 credits
lectures on Wednesdays at 12-14
exercises on Fridays at 12-14, Maarintie 8

Financial Engineering is a multidisciplinary field involving financial theory, engineering methods, applied mathematics and programming.

Aims of the course:

- Intuition on financial risk management and the mathematics behind it.
- Working knowledge in option pricing, hedging, and volatility estimation.