

## **1. Problem**

In a context of global connectivity, where travel has become more accessible and more frequent, financial tools have also evolved to facilitate international transactions. The shift from cash payments to digital accounts has simplified exchanges, but it has also introduced new challenges related to exchange rates.

As international students, we are directly confronted with these issues. Payments in euros require frequent currency conversions, which are exposed to sometimes significant exchange rate fluctuations.

These variations can lead to non-negligible financial losses over the course of a year. Therefore, a central question is: how can we determine the best time to exchange our money into euros?

The real challenge lies in identifying the optimal moment to convert a currency in order to minimize exchange-related costs and optimize purchasing power.