Why is your trip abroad cheaper this year?

Exchange rates as prices, the market for euros, what moves it, who wins and loses, and the balance of payments.

1 Exchange rate

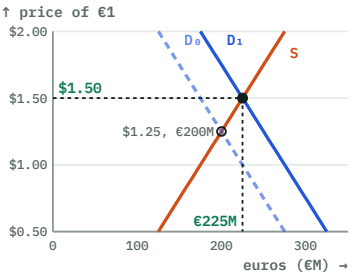
a price of money

- **Exchange rate** = price of one currency in another · €1 = $1.25
- Dollars = euros × rate · €100 hotel = 100 × $1.25 = **$125** · euros = dollars ÷ rate · $150 dive ÷ $1.25 = **€120**
- **Appreciation** = a currency buys more of another · **depreciation** = buys less · one appreciates ⇔ the other depreciates
- €1 = $1.25 → **$1.00**: $1 buys €0.80 → €1.00 ⇒ **dollar appreciates**, euro depreciates

2 Market for euros

D and S again

- **D for €** = Coralians buying European goods, trips, assets · slopes down (cheaper €, more wanted)
- **S of €** = Europeans buying Coralian goods, dives, bonds ⇒ they sell € for $ · slopes up
- Price = **dollars per €1** · start **$1.25, €200M**
- D +€50M ⇒ **$1.50**, €225M ⇒ dollar depreciates · S +€50M ⇒ **$1.00**, €225M ⇒ dollar appreciates
- D −50 ⇒ $1.00, €175M · S −50 ⇒ $1.50, €175M



3 What shifts them

four big reasons

SHOCK	CURVE	DOLLAR
Coralians love European goods (tastes)	D right	↓ depreciates
Europe's incomes boom (incomes)	S right	↑ appreciates
Coralian prices rise faster (prices)	S left, D right	↓ depreciates
Coralian rate up 5% → 6% (interest)	S right	↑ appreciates
Coralian rate cut / Europe's rate up	S left / D right	↓ depreciates

- Rule: more € **offered** ⇒ euro cheaper · more € **wanted** ⇒ euro dearer

4 Winners and losers

NX and AD

STRONGER DOLLAR	WEAKER DOLLAR
Gain: importers, travelers (hotel $125 → $100)	Gain: exporters (board $75: €60 → €50)
Lose: exporters, dive schools ($100 dive €80 → €100)	Lose: importers, travelers (jacket €40: $50 → $60)

- **NX = exports − imports** · stronger dollar ⇒ exports ↓, imports ↑ ⇒ NX ↓ ⇒ **AD** (aggregate demand) **left** · weaker ⇒ NX ↑ ⇒ AD right
- Chain: rate ↑ ⇒ capital inflow (foreign savings come in) ⇒ dollar appreciates ⇒ NX ↓ ⇒ AD −$40M ⇒ GDP **$980M**, price level 95 (Lessons 4, 7)
- Trade-off: lower rate ⇒ weaker dollar helps exporters, but pushes prices up

5 Balance of payments

always zero

- **Current account** = exports − imports of goods and services + income from abroad
- **Financial account** = buying and selling assets (bonds, shares = pieces of firms, whole firms)
- `current + financial = 0` · surplus in one ⇔ deficit in the other
- $250M − $200M = **+$50M** ⇒ financial **−$50M** (Coralians buy foreign assets)
- $260M − $290M + $10M = **−$20M** ⇒ financial **+$20M** (foreigners lend Coralia the gap)

6 Real case

Switzerland 2015

- 15 Jan 2015: Swiss central bank drops its floor (lowest price allowed) of **1.20 francs per €1** ⇒ flexible rate ⇒ €1 ≈ **1.03** francs that afternoon ⇒ franc **appreciates** ~16%
- 1,200-franc watch: €1,000 → about **€1,170** (1,200 ÷ 1.03) ⇒ exporters sell less
- Watch out: a **stronger** currency is not simply "better" · it helps importers, hurts exporters · rate is dollars **per €1**, not euros per $1 · appreciation of one = depreciation of the other