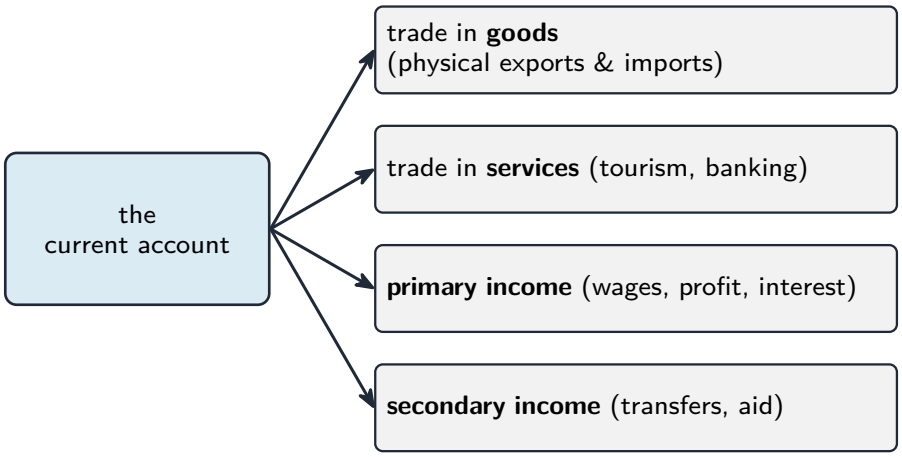
Open Economy—International Trade and Finance

AP Macroeconomics

Balance of Payments Accounts

The **balance of payments** 国际收支 records all transactions between a country and the rest of the world, in two main accounts:



The four parts of the current account

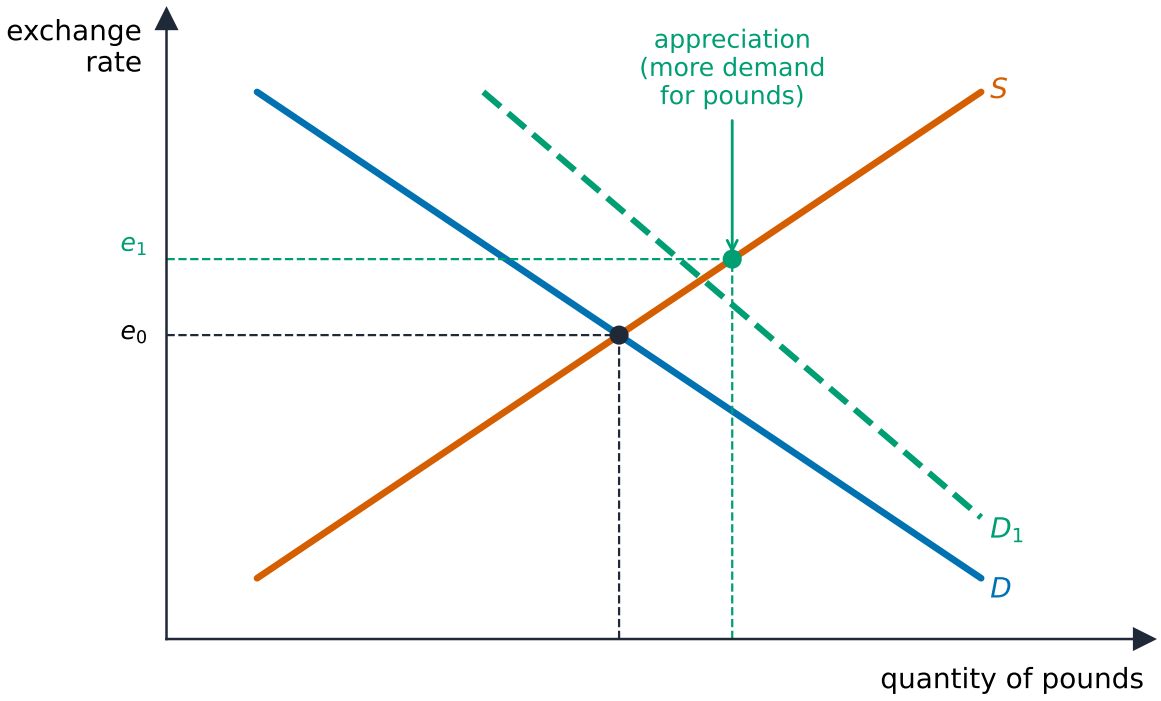
- The **current account** 经常账户 tracks trade in **goods and services** (exports minus imports), plus income and transfers. A trade deficit makes it negative.
- The **capital (financial) account** 资本账户 tracks flows of **financial assets** –foreigners buying domestic assets, and residents buying foreign assets.

The two are **mirror images**: a current-account deficit is matched by a capital-account surplus (a country that imports more than it exports pays with assets, so foreign investment flows in). They sum to zero.

Exchange Rates

An **exchange rate** 汇率 is the price of one currency in terms of another. A currency **appreciates** 升值 when it gains value (buys more foreign currency) and **depreciates** 贬值 when it loses value. Always track *which* currency: if the US dollar appreciates against the euro, the euro depreciates against the dollar –the same event from two sides.

Worked example. Suppose \$1 = €0.90, so €1 = $\dfrac{1}{0.90} \approx$ \$1.11. If the dollar then appreciates to \$1 = €1.00, each dollar now buys more euros, while the euro has *depreciated* –it now buys only \$1.00 instead of \$1.11. The single event is an appreciation of the dollar **and** a depreciation of the euro.



A floating exchange rate set by the demand for and supply of a currency

Most currencies today are **floating** 浮动, set by supply and demand in the foreign-exchange market.

The Foreign Exchange Market

Each currency has its own supply-and-demand graph (price = the exchange rate, quantity = amount of that currency).

- **Demand** for a currency comes from foreigners wanting its goods, services, or assets.
- **Supply** of a currency comes from its own residents wanting foreign goods, services, or assets.

The equilibrium exchange rate is where they cross. A rightward shift in **demand** for a currency causes it to **appreciate**; a rightward shift in **supply** causes it to **depreciate**.

Exam skill: always draw the graph for the **currency named in the question**, label the axis with that currency's price, and shift the correct curve –mixing up the two currencies' graphs is the most common error.

Changes in Policies and Economic Conditions

Exchange rates respond to:

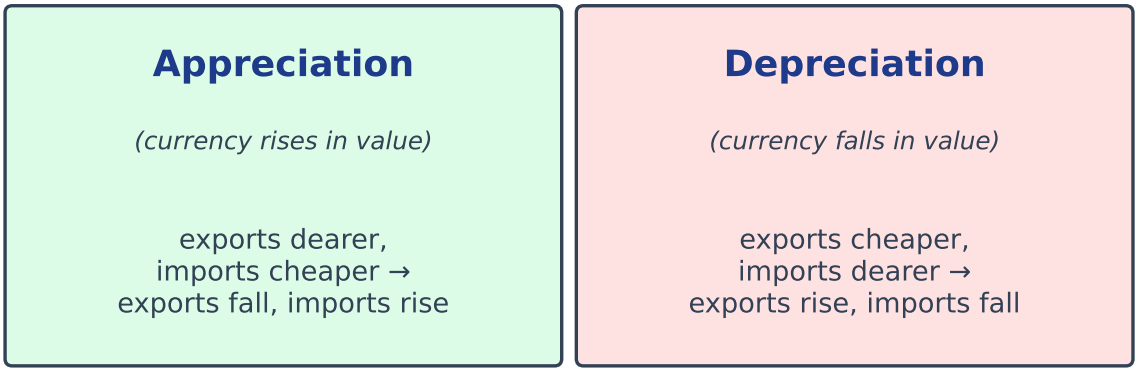
- **Relative interest rates:** a higher domestic real interest rate attracts foreign financial investment, raising **demand** for the currency and causing **appreciation**.
- **Relative price levels/inflation:** higher domestic inflation makes goods less competitive, lowering demand for the currency (**depreciation**).

- **Relative incomes:** higher domestic income raises imports, increasing the **supply** of domestic currency (depreciation).
- **Tastes** and expectations about future value.

Monetary policy has a strong link: **expansionary** monetary policy lowers interest rates, reduces demand for the currency, and causes **depreciation** (which then boosts net exports).

Exchange Rates and Net Exports

Exchange rates feed back into AD through **net exports**:



Appreciation makes exports dearer and imports cheaper; depreciation does the reverse

- A **depreciation** makes exports cheaper for foreigners and imports dearer, so **net exports rise** and AD shifts right.
- An **appreciation** makes exports dearer and imports cheaper, so **net exports fall** and AD shifts left.

Worked example. A US car priced at \$30,000 costs a European buyer €27,000 when \$1 = €0.90. If the dollar **depreciates** to \$1 = €0.80, the same car now costs only €24,000 –cheaper for foreigners, so US exports rise while imports (now dearer in dollars) fall, lifting net exports and shifting AD right.

This is how the foreign-exchange market and the AD-AS model connect –a currency change is a channel through which policy reaches output.

Real Interest Rates and International Capital Flows

Money chases the highest **real** return, so **capital flows** 资本流动 respond to real interest rates:

- A **higher** domestic real interest rate attracts **inflows** of foreign financial capital – foreigners buy domestic bonds, raising currency demand and causing appreciation.
- A **lower** real rate causes **outflows** and depreciation.

This ties the whole course together: government borrowing raises the real interest rate (loanable funds), which attracts foreign capital, appreciates the currency, and reduces net exports –so a budget deficit can widen a trade deficit (the "twin deficits"). Tracing these linked effects across the loanable-funds, forex, and AD-AS graphs is the capstone skill of AP Macroeconomics.

Exam tips

- The current account and financial account are **mirror images** and sum to zero.
- Always draw the forex graph for the **currency named**, and label its price with that currency; one currency appreciating is the other depreciating.
- A **depreciation** raises net exports (exports cheaper); an appreciation lowers them.
- Higher domestic real interest rates attract capital inflows → currency appreciates → net exports fall.
- Link it all: a budget deficit raises the real rate, appreciates the currency, and can widen the trade deficit (twin deficits).