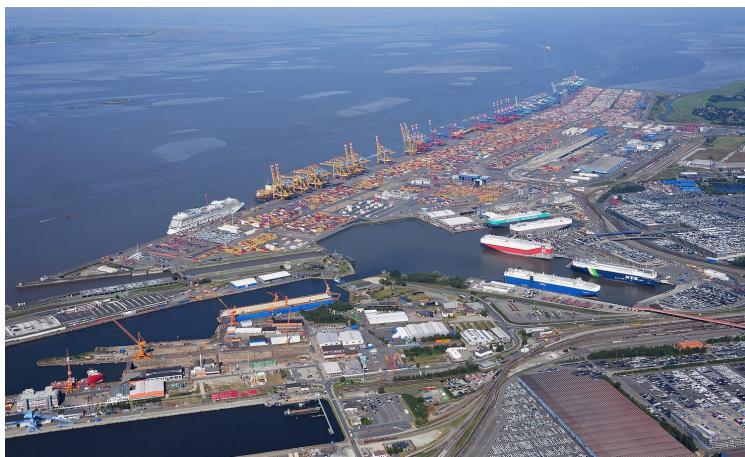


Open Economy—International Trade and Finance

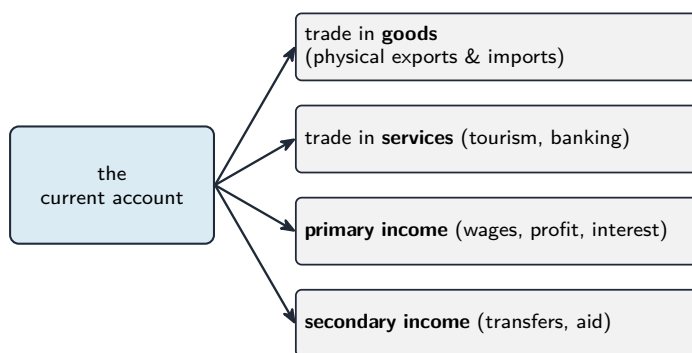
AP Macroeconomics

Balance of Payments Accounts



A container terminal: exports and imports appear in the balance of payments

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

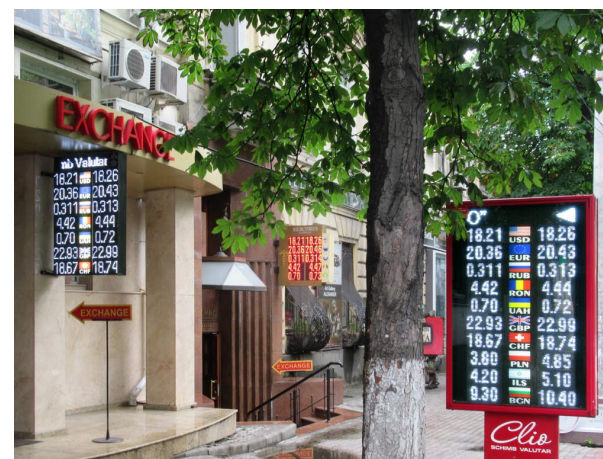


The four parts of the current account

- 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.

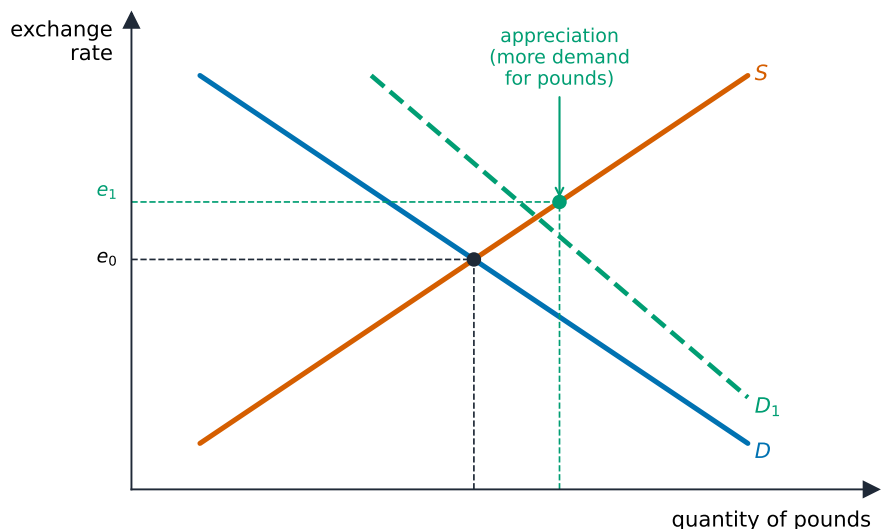
Exchange Rates



A currency exchange board: exchange rates are the price of one currency in terms of another

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 $\$1 = \text{€}0.90$, so $\text{€}1 = \frac{1}{0.90} \approx \1.11 . If the dollar then appreciates to $\$1 = \text{€}1.00$, 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	Depreciation
(currency rises in value)	(currency falls in value)
exports dearer, imports cheaper → exports fall, imports rise	exports cheaper, imports dearer → exports rise, imports fall

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).