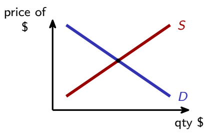
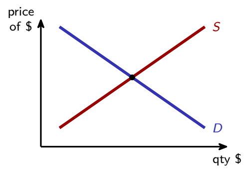
Open Economy: Trade & Finance

AP Macroeconomics ▪ Unit 6

AP Macroeconomics



What we will cover



1 Balance of payments

Balance of payments

Every cross-border transaction is recorded in the **balance of payments** 国际收支, split in two:

- **current account** 经常账户 – trade in goods, services, income
- **financial account** 金融账户 – buying and selling of assets

> A current-account deficit is offset by a financial-account surplus – dollars that leave for imports return as foreign asset purchases.

Trade flows show up in the current account

The two accounts, and why they mirror

Current account	Trade in goods and services, plus income and transfers – everyday transactions with the rest of the world.
Capital (financial) account	The **capital (financial) account** 资本（金融）账户 records purchases of assets: foreign direct investment, bonds, bank deposits.
Why they mirror	Every dollar paid for imports comes back either as payment for exports or as a purchase of domestic assets – so a current-account deficit is a financial-account surplus.
What that implies	A country running a trade deficit is selling assets or borrowing to fund it. That is a description, not yet a verdict.

> The two accounts sum to zero by construction. An exam answer that changes one must change the other.

2 Exchange rates

Exchange rates

An **exchange rate** 汇率 is the price of one currency in another (e.g. yuan per dollar). Most float freely.

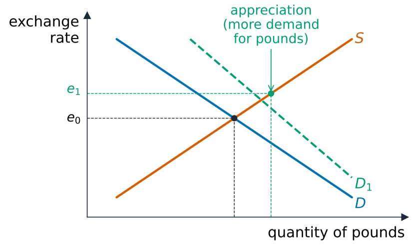
- **Appreciation** 升值: worth more
- **Depreciation** 贬值: worth less

Worked example

$\$1 = 7$ yuan. If $\$1 = 8$ yuan, the dollar appreciates (buys more yuan) and the yuan depreciates.

Currencies trade in the foreign-exchange market

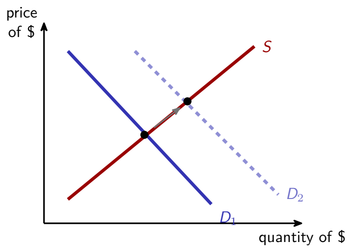
A floating exchange rate set by the



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

3 Forex market

The foreign exchange market



In the **foreign exchange market** 外汇市场:

- demand for \$ – foreigners buying exports or assets
- supply of \$ – residents buying foreign goods

More demand ($D_1 \to D_2$) $\Rightarrow$ the currency appreciates.

Changes in Policies and Economic Conditions

- **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.

What moves the exchange rate

Anything that changes demand for (or supply of) a currency moves its rate:

Interest rates 利率	Inflation 通货膨胀	Income 收入
higher rates draw investors $\Rightarrow$ appreciate	higher inflation $\Rightarrow$ dearer goods $\Rightarrow$ depreciate	higher income $\Rightarrow$ more imports $\Rightarrow$ depreciate

Contractionary monetary policy raises rates – and tends to strengthen the currency.

Drawing the foreign exchange graph

the rule	always draw the graph for the currency named in the question
the axes	label the vertical axis with that currency's price in terms of the other
demand for the currency	comes from foreigners buying its exports or investing in it
supply of it	comes from its own residents buying imports or investing abroad
appreciation	the currency becomes more valuable – exports dearer, imports cheaper
the driver	a higher real interest rate attracts financial inflows, raising demand and appreciating the currency

Half the errors in this unit are graphing the wrong currency. Write the currency's name on the axis before drawing either curve.

4 Net exports

Exchange rates and net exports

An exchange-rate move feeds into **net exports** 净出口 ($NX = X - M$) and so into **aggregate demand** 总需求:

Stronger currency ⇒ $X \downarrow$, $M \uparrow$ ⇒ $NX \downarrow$ ⇒ AD left

Weaker currency ⇒ $X \uparrow$, $M \downarrow$ ⇒ $NX \uparrow$ ⇒ AD right

A very strong currency can slow an economy – its exports get too dear.

A $-priced machine at 900 euros becomes 1000 euros when the dollar appreciates – Europe buys fewer.

5 Capital flows

Real rates and international capital flows

Money chases the best return, so **real interest rates** 实际利率 drive **capital flows** 资本流动:

real rate ↑ above the world

↓

capital inflow 资本流入 – foreigners buy assets

↓

buy the currency ⇒ it appreciates

The stronger currency then makes exports dearer, pushing the current account toward deficit.

So a financial-account surplus (capital in) offsets a current-account deficit – the two accounts tie together.

Balance of Payments Accounts

the current account →
- trade in **goods** (physical exports & imports)
- trade in **services** (tourism, banking)
- **primary income** (wages, profit, interest)
- **secondary income** (transfers, aid)

The four parts of the current account

Exchange Rates and Net Exports, continued

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

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).

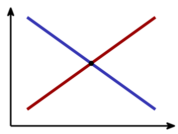
6 Recap

Unit 6 – key takeaways

1. **Balance of payments**
   current and financial accounts offset each other
2. **Exchange rates**
   appreciation = worth more; one rises as another falls
3. **Forex market**
   more demand for a currency makes it appreciate
4. **Net exports**
   a stronger currency lowers *NX* and shifts AD left

Check yourself

1. A current account deficit is offset by what?
2. The dollar buys more yuan. Did it appreciate or depreciate?
3. A country raises interest rates. What happens to its currency?
4. A stronger currency shifts AD which way?



> **Answers** **1.** a financial account surplus **2.** appreciate **3.** it appreciates **4.** left