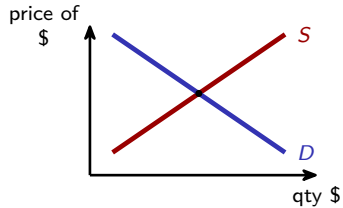


Open Economy: Trade & Finance

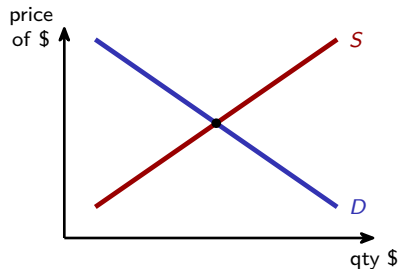
AP Macroeconomics ■ Unit 6

AP Macroeconomics



What we will cover

- 1 Balance of payments accounts
- 2 Exchange rates
- 3 The foreign exchange market
- 4 What moves the exchange rate
- 5 Exchange rates and net exports
- 6 Real rates and capital flows



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**

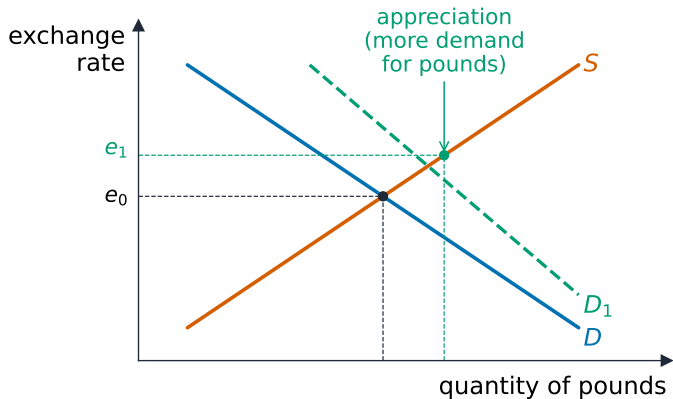
Worked example

\$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

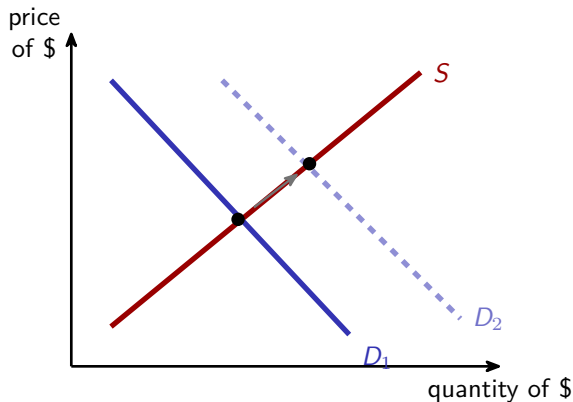


A floating exchange rate set by the demand for and supply of a currency

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 ($D_1 \rightarrow D_2$) $\Rightarrow$ 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

higher rates draw
investors $\Rightarrow$ appreciate

Inflation

通货膨胀

higher inflation
 $\Rightarrow$ dearer goods
 $\Rightarrow$ depreciate

Income

收入

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 $\Rightarrow X \downarrow, M \uparrow$
 $\Rightarrow NX \downarrow \Rightarrow$ AD left

Weaker currency $\Rightarrow X \uparrow, M \downarrow$
 $\Rightarrow NX \uparrow \Rightarrow$ 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 $\uparrow$ above the world

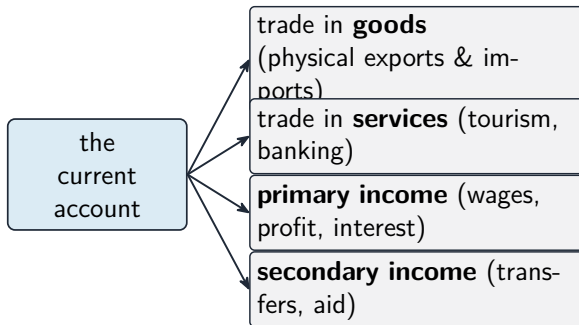
capital inflow 资本流入 – foreigners buy assets

buy the currency $\Rightarrow$ 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 four parts of the current account

Exchange Rates and Net Exports, continued

Appreciation

(currency rises in value)

exports dearer,
imports cheaper →
exports fall, imports rise

Depreciation

(currency falls in value)

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

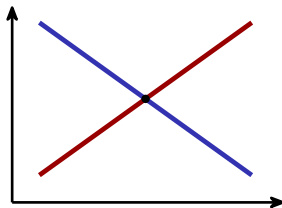
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Net exports

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