Introductory Macroeconomics

Lecture 21: balance of payments, part one

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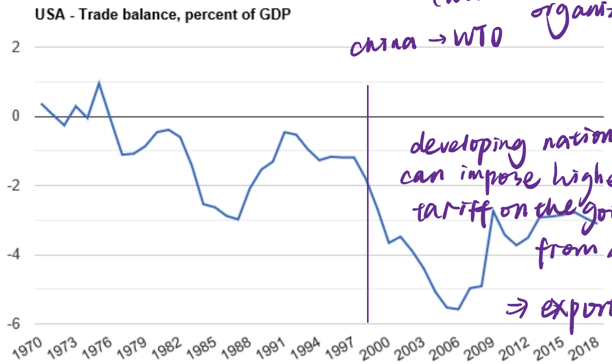
This Lecture

- Balance of Payments
  - current account
  - capital account
  - relationship between current account and capital account
- BOFAH chapter 18

US Trade Deficits

net export = exports − imports
↓
physical goods

china → WTO (world trade organization)



developing nations can impose higher tariff on the goods from advanced nation

⇒ exports from US ↓

size of trade deficits ↑

Source: TheGlobalEconomy.com, The World Bank

Causes of Trade Deficits

- Trump's view
  - trade deficits arise from unfair trade practices by other countries, notably China
  - Trump administration's approach was to impose tariffs on a wide range of imports from China
- Economist's view
  - trade deficits arise from macroeconomic policies that make national savings less than domestic investment
- Understanding how trade deficits relate to the difference between national savings and domestic investment requires two steps

  1) – relationship among the trade balance and net capital inflows

  2) – relationship among net capital inflows and the difference between national savings and domestic investment

Balance of Payments

- To understand the relationship among the trade balance and net capital inflows, we need to understand how transactions of goods, services, and assets between countries are recorded

- A nation's *Balance of Payments* is a record of all transactions between a domestic economy and the rest of the world
  - ① – imports and exports of goods and services   net exports of physical goods.
  - ② – monetary gifts sent to international students by families living overseas
  - ③ – Australian firms borrowing money from foreign investors

- Balance of payments consists of the current account and the capital account

Current Account

- *Current account* is a part of the balance of payments that records transactions of goods and services or a transfer of income

  – *Balance of merchandise trade*: value of exports less value of imports (same as net exports, or trade balance)

  physical goods

  – *Net services*: value of domestic services purchased by foreigners less spending on foreign services by domestic residents

  eg. Netflix

  – *Net income*: income payments from interest, dividends, royalties, labour and property income received by domestic residents from abroad less corresponding income received by foreign residents from domestic sources

  eg. US stock dividend

  – *Net current transfers*: foreign aid received and funds brought in via migrants less aid sent overseas and funds taken out by emigrants

Current Account

- Sum of the values recorded in all components of the current account is the *balance of the current account*
  - if the balance of the current account is greater than zero, we say a *current account surplus*
  - if the balance of the current account is less than zero, we say a *current account deficit*
- A transaction that decreases the current account balance is recorded as a debit item
- A transaction that increases the current account balance is recorded as a credit item

How Transactions Are Recorded in the Current Account

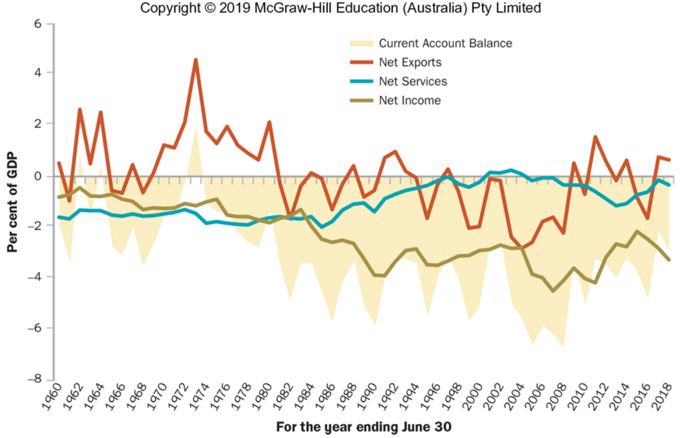
reduce AUD money flow to Japan

money from Russia flow to AU

Components	Debit	Credit	Debit + Credit
Merchandise trade	Domestic purchase of a Japanese car	Sale of wheat to Russia	Balance of merchandise trade
Service	Domestic buyer pays freight costs on imports	Overseas buyer pays freight costs on exports	Net services
Income	Domestic company pays a foreign employee	Foreign company pays a domestic employee	Net income
Transfers	Domestic relative sends a cash gift to overseas resident	Overseas relative sends a cash gift to domestic resident	Net current transfers

Table: Debit and credit items in the current account

Australia's Current Account Balance



- Australia's persistent current account deficits arise from a persistent fall in $\boxed{\text{net income}}$
- Persistent fall in net income implies an increase in domestic indebtedness to the rest of the world

AU has been more open to the rest of world.
Foreign investors invest in AU firms and thus AU companies have to pay interest and divident

Capital Account

- *Capital account* is a part of the balance of payments that records transactions involving the purchase and sale of financial or real assets

  bond stock

  - Net capital inflow: capital inflow less capital outflow
    - *Capital inflow* is the purchase of domestic assets by foreigners
    - *Capital outflow* is the purchase of foreign assets by domestic households and firms
  - Changes in the central bank's holding of international reserves

- Sum of the ①values recorded in net capital inflows and ②changes in the central bank's holding of international reserves is the (*balance of capital account*)

How Transactions Are Recorded in the Capital Account

- The way transactions are recorded in the capital account is similar to that in the current account
  - a transaction that decreases (increases) the capital account balance is recorded as a debit (credit) item
- Examples
  - loan to foreign company made by Australian banks is recorded as a debit item of the net capital inflow
  - acquisition of US bonds by Australian investors is recorded as a debit item of the net capital inflow

money flow out to oversea

  - purchase of shares of Australian firms by overseas firms is recorded as a credit item of the net capital inflow
  - depletion of the RBA's international reserves is recorded as a credit item of the changes in the RBA's holding of international reserves

increase AUD

Relationship between the Capital and Current Account

- In every period, the current account balance (CAB) and the capital account balance (KAB) sum to zero

$$CAB + KAB = 0 \tag{1}$$

- Example: Chris buys a Japanese car priced at \$40000 through a bank transfer
  - this transaction (import) is recorded as a debit in merchandise trade of the current account
  - after the transaction, the current account balance is -\$40000
- The Japanese car manufacturer holds \$40000 in her account in an Australian bank, which can be used in three ways

Relationship between the Capital and Current Account

- First, she buys Australian-made goods and services, such as honey
  - this transaction is recorded as a credit in merchandise trade of the current account +40000 current account
  - after the transaction, the current account balance is 0
  - there are no trades in assets, the capital account balance is 0
  - $CAB = 0$ and $KAB = 0$, so equation (1) is satisfied

Relationship between the Capital and Current Account

- Second, she buys Australian assets, such as the Australian government bond or land in Adeleide
  - this transaction is recorded as a credit in net capital inflow of the capital account
  - after the transaction, the capital account balance is $40000
  - there are no purchases of goods and services by the manufacturer, so the current account balance remains to be -$40000
  - $CAB = -40000$ and $KAB = 40000$, so equation (1) is satisfied

Relationship between the Capital and Current Account

- Third, she swaps $40000 with other currencies such as Yen and goes back to Japan
  - the acquirer of $40000 has two options:
    * buys Australian-made goods and services CAB +40000
    * buys Australian assets KAB +40000
  - for both options, equation (1) is satisfied

chris purchase car
−40000 = 0.

Relationship between the Net Exports and Net Capital Inflows

- We have seen that the following must hold, in every period

$$CAB + KAB = 0$$

assume only net export

assume only net capital inflow

- Assume that the balance of all components, except for net exports, of the current account and changes in international reserves are zero

⇒ net export + net capital inflow = 0

- Rewriting the equation above

$$net\ capital\ inflows = -net\ exports$$

  - a country with a trade deficit is likely to be receiving net capital inflows

Next Lecture

- More on the balance of payments
  - determinants of net capital flows
  - relationship among net capital inflows, national saving, and domestic investment
  - relationship among national saving, domestic investment, and net exports