Introductory Macroeconomics

Lecture 22: balance of payments, part two

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This Lecture

- Balance of Payments
  - determinants of net capital inflows
  - relationship among net capital inflows, national saving, and domestic investment
  - relationship among national saving, domestic investment, and net exports
- BOFAH chapter 18

Determinants of Net Capital Inflows

= capital inflow - capital outflow.

- Why does the net capital inflow change?
  - why would foreigners want to buy Australian assets?
  - why would Australians want to buy foreign assets?

- An important factor that determines the attractiveness of any asset is its return ①.
  - all else being equal, high r on Australian assets promotes capital inflow by making Austrian assets more attractive to foreigners
  - by the same token, high r on Australia assets reduces capital outflow by making Austrian assets more attractive to Australian resident
  - a positive relation between r and net capital inflows

$r \uparrow \rightarrow$ net capital inflow $\uparrow$

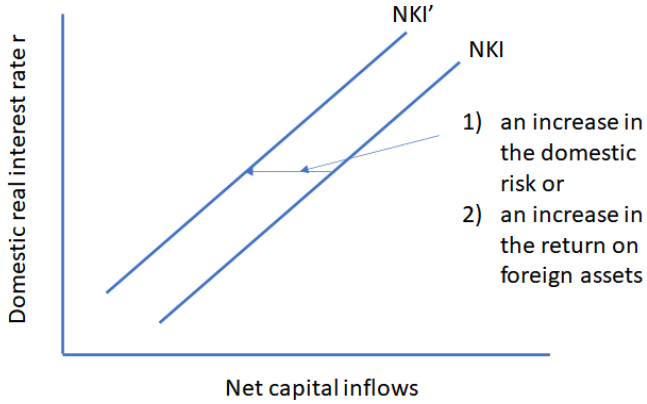
Determinants of Net Capital Inflows

- Another important factor that determines the attractiveness of a domestic asset is its risk
  - all else being equal, an increase in the risk of holding Australian assets reduces capital inflow by making them less attractive to foreign investors
  - by the same token, an increase in the risk of holding Australian assets induces capital outflow by making Austrian assets less attractive to Australian resident
  - an increase in the risk of holding domestic assets reduces net capital inflows

Determinants of Net Capital Inflows

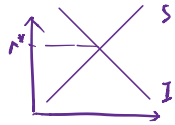
- Return on foreign assets also affects the the domestic net capital inflow
  - all else being equal, an increase in the return on foreign assets reduces capital inflow by making Austrian assets less attractive to foreigners
  - by the same token, an increase in the return on foreign assets promotes capital outflow by making foreign assets more attractive to Australian resident
  - an increase in the return on foreign assets reduces net capital inflows

Determinants of Net Capital Inflows



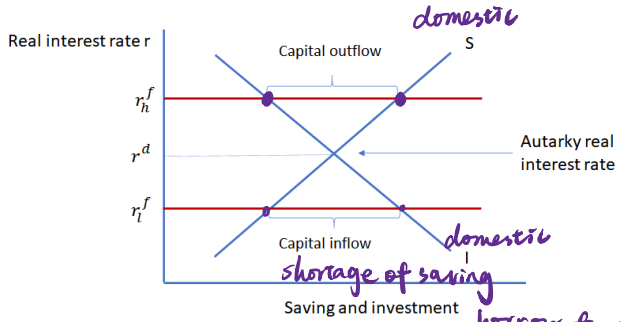
- An increase in the domestic risk shifts in the net capital inflows
- An increase in the return on foreign assets shifts in the net capital inflows

Net Capital Inflows, Saving, and Investment



- In a closed economy, the equilibrium real interest rate is determined by national saving and domestic investment
- However, in a small open economy, real interest rate is determined by the world interest rate, which is exogenous
  - *a small open economy* is an economy that participates in international trade, but is small enough that its policies do not alter world prices and world interest rates
  - if the domestic interest rate deviates from the world interest rate, it quickly converges to the the world interest rate
  - therefore, the domestic economy takes the world interest rate as given, at which national saving may not equate domestic investment

Net Capital Inflows, Saving, and Investment



- If the world interest is above the autarky interest rate, then excessive national saving flows out
- If the world interest is below the autarky interest rate, then the shortage of national saving is made up by capital inflows

Saving, Investment, and Net Exports

- Previous analysis tells how savings, investment, net capital inflows are related

$$S + \textit{net capital inflows} = I$$

- Using the fact that net exports equal to *negative* capital inflow,

$$\begin{aligned} S - I &= -\textit{net capital inflows} \\ &= \textit{net exports} \end{aligned}$$

by assumption CAB only include net export

KAB only includes net capital inflow

← CAB + KAB = 0

- Low national saving relative to domestic investment (S < I) leads to a trade deficit (negative net exports)
  - intuitively, a country with a low national saving rate is one in which households, firms, and government have high spending rates relative to domestic production
  - to support the excess spending, a country needs to import

spending > production

fall in net export

Saving, Investment, and Net Exports

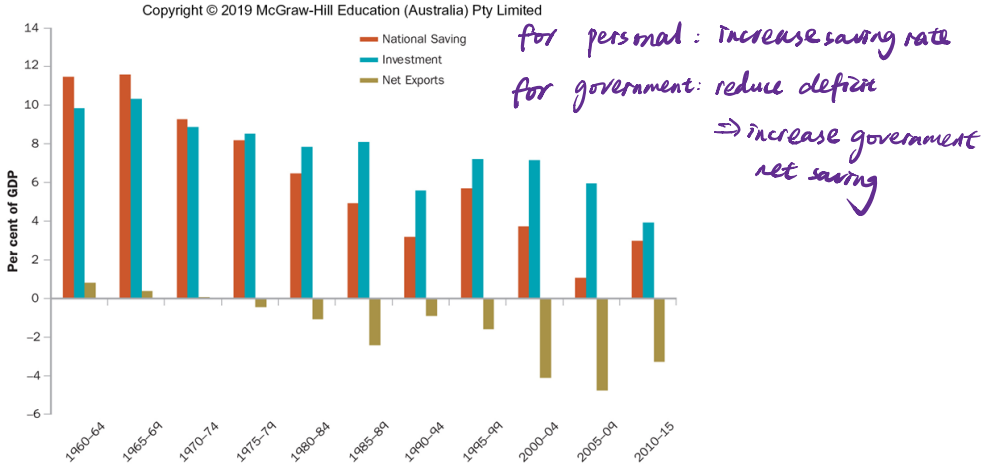


Figure: National saving, domestic investment, and net exports in the US

National Income Accounting Identity Approach

- Alternative approach to derive the relationship among net exports, national saving, and investment is using the national income accounting identity

- Recall that the national income account identity in an open economy is

$$Y = C + I + G + (X - M)$$

$S = Y - T - C + T - G$
$= Y - C - G$

- Rearranging the national identity

$$\underbrace{Y - C - G}_{\textit{national saving } (S)} = I + (X - M)$$

$$\rightarrow S - I = X - M$$

Next Lecture

- Summary of the first part of the course