

## International capital flows

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- **Net capital outflows**
  - =  $S - I$
  - = net outflow of “loanable funds”
  - = net purchases of foreign assets
    - the country’s purchases of foreign assets
    - minus foreign purchases of domestic assets
- When  $S > I$ , country is a net lender
- When  $S < I$ , country is a net borrower

## Another important identity

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$$NX = Y - (C + I + G)$$

*implies*

$$\begin{aligned} NX &= (Y - C - G) - I \\ &= S - I \end{aligned}$$

*trade balance = net capital outflows*

## Saving and Investment in a Small Open Economy

- An open-economy version of the loanable funds model from chapter 3.
- Includes many of the same elements:

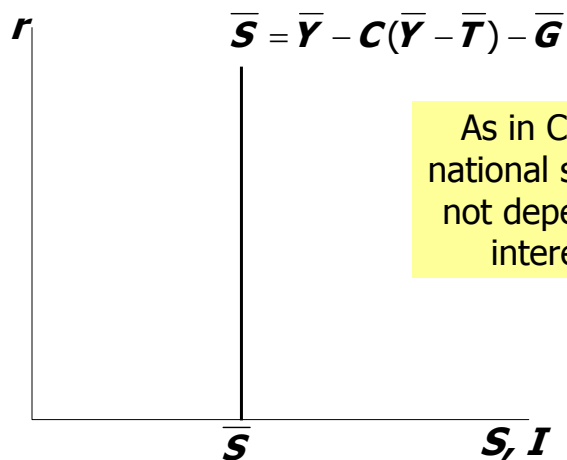
production function:  $Y = \bar{Y} = F(\bar{K}, \bar{L})$

consumption function:  $C = C(Y - T)$

investment function:  $I = I(r)$

exogenous policy variables:  $G = \bar{G}, T = \bar{T}$

## National Saving: The Supply of Loanable Funds

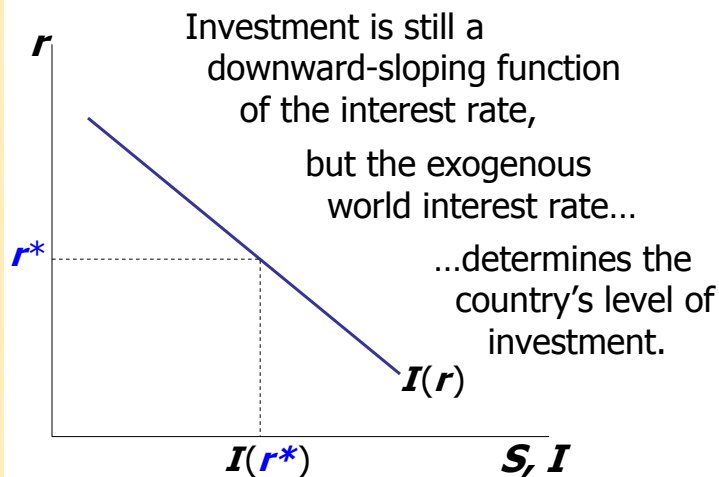


## Assumptions re: capital flows

- domestic & foreign bonds are perfect substitutes (same risk, maturity, etc.)
- perfect capital mobility:**  
no restrictions on international trade in assets
- economy is **small:**  
cannot affect the world interest rate, denoted  $r^*$

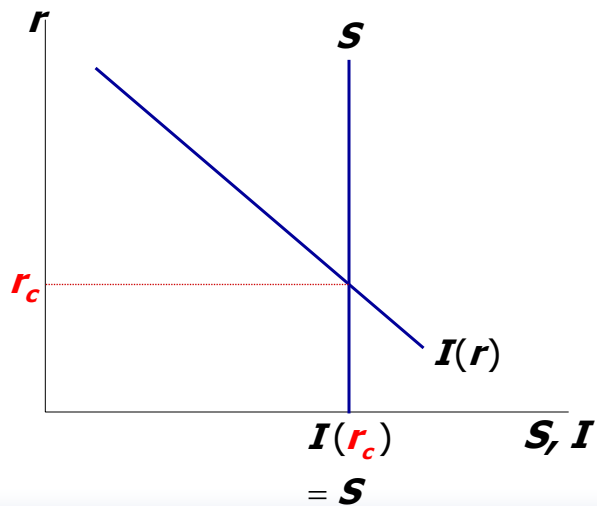
a & b imply  $r = r^*$   
c implies  $r^*$  is exogenous

## Investment: The Demand for Loanable Funds



## If the economy were closed...

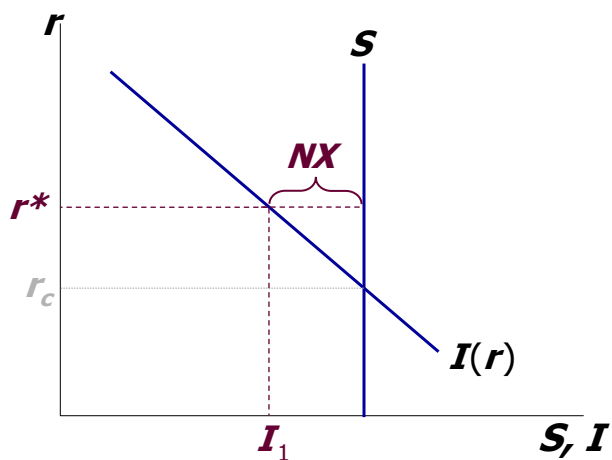
...the interest rate would adjust to equate investment and saving:



## But in a small open economy...

the exogenous world interest rate determines investment...

...and the difference between saving and investment determines net capital outflows and net exports



## Three experiments

1. Fiscal policy at home
2. Fiscal policy abroad
3. An increase in investment demand

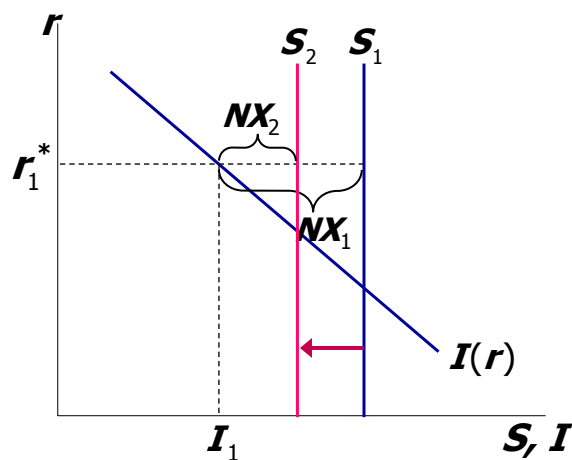
## 1. Fiscal policy at home

An increase in  $G$   
or decrease in  $T$   
reduces saving.

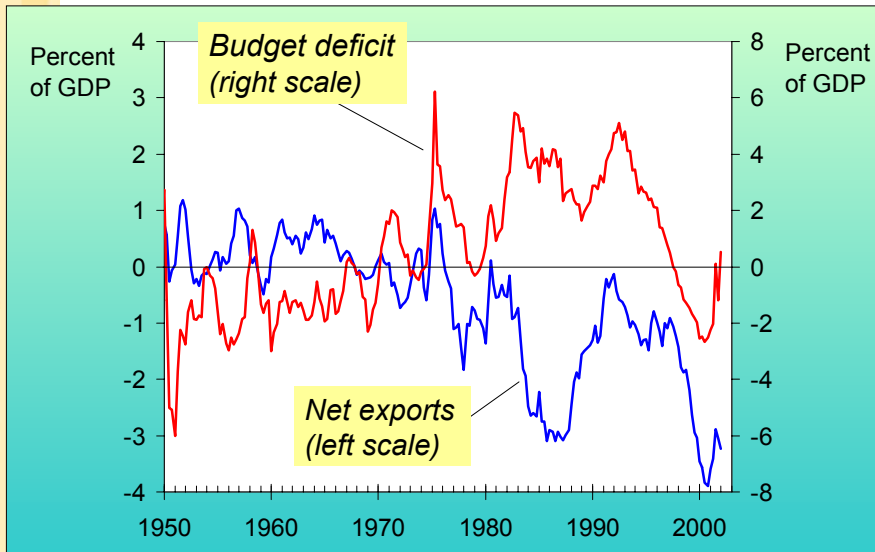
Results:

$$\Delta I = 0$$

$$\Delta NX = \Delta S < 0$$



## NX and the Government Budget Deficit



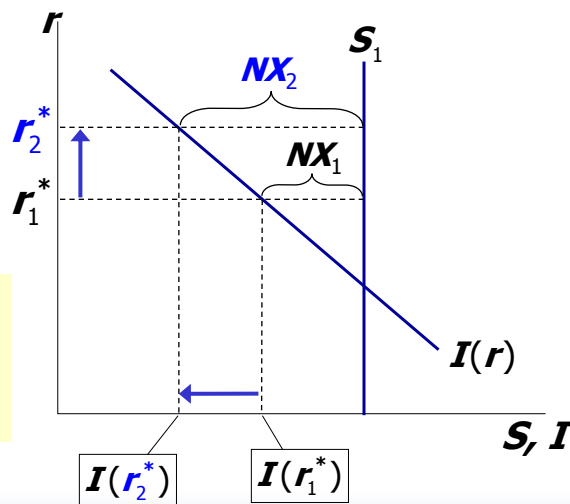
## 2. Fiscal policy abroad

Expansionary fiscal policy abroad raises the world interest rate.

Results:

$$\Delta I < 0$$

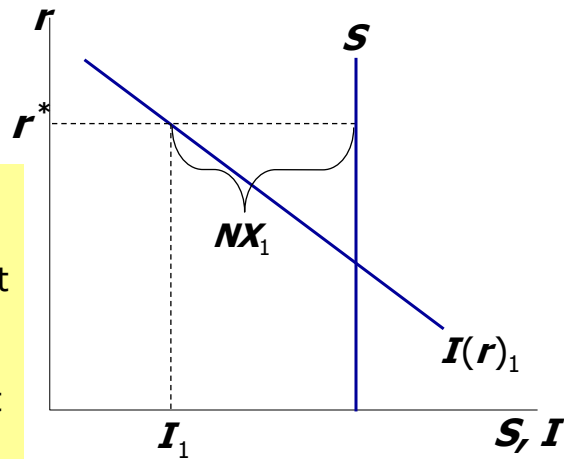
$$\Delta NX = -\Delta I > 0$$



### 3. An increase in investment demand

**EXERCISE:**

Use the model to determine the impact of an increase in investment demand on  $NX$ ,  $S$ ,  $I$ , and net capital outflow.



### 3. An increase in investment demand

**ANSWERS:**

$\Delta I > 0$ ,  
 $\Delta S = 0$ ,  
net capital outflows and net exports fall by the amount  $\Delta I$

