ECO 403 – L0301
Developmental Macroeconomics

Lecture 6
Capital Inflows and Currency Appreciation

The Orthodox View of Investment

- Orthodox economists see ***investment*** as an almost ***automatic outcome*** of social decisions to ***save***
  - ➢ All that's needed to increase ***investment*** is to ***save*** more
  - ➢ The ***market*** mechanism will ensure that all savings are invested and in the most productive uses

- In a closed economy, orthodox economists identify the ***supply*** of loans with households' decisions to ***save***
  - ➢ But the supply of loans is provided by ***financial institutions***

- And they identify the ***demand*** for loans with businesses' decisions to invest

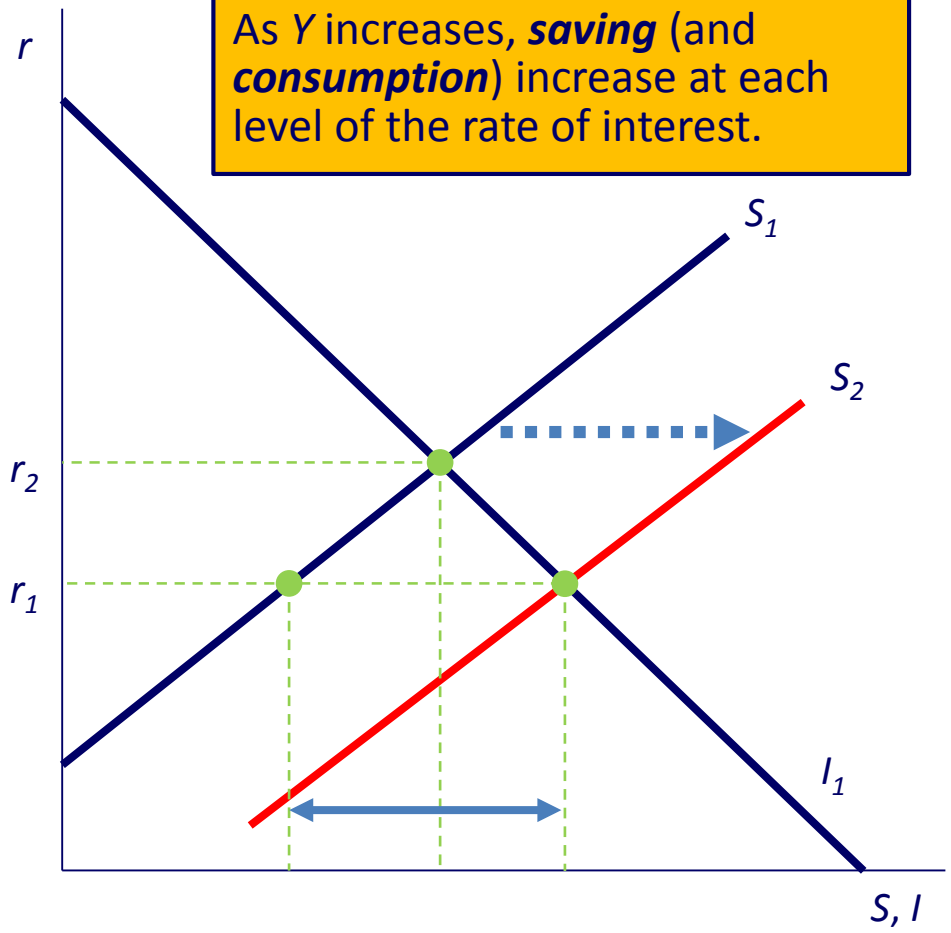
- In their view, therefore, higher ***savings*** are needed for ***investment*** to increase and the economy to ***grow***

The Orthodox View of Saving and Investment

- Consider a closed economy without government sector
  - $\boldsymbol{Y = C + I}$
  - $\boldsymbol{Y = Y_D}$
- By definition, ***saving*** is equal to ***actual investment***
  - $\boldsymbol{Y = C + S}$ and $\boldsymbol{Y = C +}$ ***actual*** $\boldsymbol{I}$
  - Therefore, $\boldsymbol{S =}$ ***actual*** $\boldsymbol{I}$
  - This is an ***accounting identity***, not an ***economic relationship***
- In ***equilibrium*** (i.e., when $\boldsymbol{Y = AE}$) there is no ***involuntary*** change in ***inventory*** and thus:
  - ***Desired*** investment is equal to ***actual*** investment
  - ***Desired*** investment is equal to ***saving***

The Saving and Investment Functions

As *Y* increases, ***saving*** (and ***consumption***) increase at each level of the rate of interest.



According to the orthodox view, ***saving*** increases and ***investment*** decreases as the rate of interest rises. The orthodox view identifies savings with the ***supply of loanable funds*** and investment with the ***demand for loanable funds***.

Mainstream economists will argue that at r_1 there is an excess demand for ***loanable funds*** and thus the rate of interest will increase to r_2.

Keynesian economists will argue that at r_1 there is an excess demand in the goods market and thus *Y* will increase. As *Y* rises, the *S* curve shifts to the right until $S = I$ at r_1.

Domestic and Foreign Savings

- For orthodox economists, ***foreign savings*** would also contribute to increasing ***investment***
  - They implicitly assume that ***foreign savings*** complement ***domestic savings***
  - But the evidence suggests that ***foreign savings*** mostly replace ***domestic savings***
- They associate ***free*** capital mobility with a better ***allocation*** of financial resources and greater economic ***growth***
- Justification for the ***growth*** cum ***foreign savings*** policy:
  - Rich countries should transfer ***capital*** to capital-poor developing countries
  - Most developing countries are facing a ***foreign exchange*** constraint

Foreign Savings and Investment

- Consider an economy with no government sector, where the balance in the ***current account*** is equal to ***net exports***:

$$Y = C + I + NX$$

$$\boxed{NX = -S_x}$$

where Y is GDP, C is consumption, I is investment, NX is net exports, and S_x is the balance in the ***capital account*** (i.e., the so-called ***foreign savings***)

- Since $Y = C + S_i$ where S_i is domestic savings, then

$$C + S_i = C + I - S_x$$

$$\boxed{S_i + S_x = I}$$

- But these are ***ex-post*** concepts, expressing mere ***accounting identities*** and not ***economic relationships***

Growth Cum Foreign Savings Policy

- For orthodox economists, ***foreign savings*** contribute to increasing ***investment***
  - ➢ All a developing country needs is to attract ***foreign savings***
- The neoliberal agenda of the early 1990s included the ***growth*** cum ***foreign savings*** policy
  - ➢ It implied financial ***indebtedness***
- But developing countries are unable to ***borrow*** in their own currency (the so-called ***original sin***)
  - ➢ And thus they are subject to ***balance-of-payment*** crises or ***currency*** crises
- But while ***foreign savings*** add to a countries ***indebtedness***, they are not necessarily converted to ***investment***

Foreign Savings and Currency Appreciation

- When a business obtains investment financing in ***domestic*** currency, this financing adds directly to total ***investment***
- But when a business obtains investment financing in ***foreign*** currency, this financing adds to total ***investment*** through an intermediate variable – the ***exchange rate***
  - ***Foreign financing*** thus appreciates the ***domestic*** currency
- ***Foreign financing*** implies capital ***inflows*** and thus:
  - An ***appreciation*** of the domestic currency
  - And ***indebtedness*** in a currency the country cannot issue
- Therefore, deciding to ***grow*** with ***foreign savings*** implies accepting all the problems of having an ***overvalued*** currency

Currency Overvaluation and Current Account Deficits

- The exchange rate becomes an ***endogenous*** variable resulting from the decision to ***grow*** with ***foreign savings***
- Neoclassical economics is not concerned with capital ***inflows*** financing ***chronic*** current account ***deficits***
- It assumes the ***equilibrium*** exchange rate is the ***"foreign debt"*** equilibrium rate (e_{fd})
  - e_{fd} is the rate at which the ***deficit*** in the ***current account*** grows at the same rate as ***GDP***
- The only concern is short-term misalignments
  - Policymakers only need to choose between a ***fixed*** or a ***flexible*** exchange rate

Foreign Savings, Currency Appreciation, and Real Wages

- Degree of currency ***appreciation*** depends on the elasticity of the ***exchange*** rate to ***foreign*** savings ($\boldsymbol{e_{lS_x}}$)
  - Where $\boldsymbol{e}$ is the exchange rate, $\boldsymbol{l}$ is the elasticity, and $\boldsymbol{S_x}$ is foreign savings

- The increase in ***wages*** due to currency ***appreciation*** depends on the wage elasticity of the exchange rate ($\boldsymbol{w_{le}}$)
  - The greater the ***price*** and ***income effects*** of the appreciation, the higher $\boldsymbol{w_{le}}$

- Both $\boldsymbol{e_{lS_x}}$ and $\boldsymbol{w_{le}}$ are relatively ***stable***, changing only over the long term

Impact of Foreign Savings on Domestic Savings and Investment

- ***Foreign savings*** usually do not add to ***domestic savings*** but rather replace them
  - Most foreign savings finance ***consumption***, not ***investment***
- The substitution of ***foreign*** for ***domestic savings*** can be explained in ***supply*** (or ***income***) terms and in ***demand*** terms
- In ***supply*** or ***income*** terms, ***appreciation*** causes an increase in ***wages*** and ***consumption*** (and a decrease in ***domestic savings***)
  - Price of ***tradables*** falls relative to price of ***non-tradables***
  - ***Purchasing power*** of wages increases (***income effect***)
- In ***demand*** terms, domestic firms lose ***access*** to markets
  - ***Investment*** opportunities for domestic firms decrease

Impact of Foreign Savings on Investment

- Substitution of ***foreign*** for ***domestic savings*** is not instantaneous
- In the ***short run***, the increase in ***real wages*** increases ***consumption***
  - For domestic firms, only a ***temporary*** increase in ***demand***
  - Product of ***less efficient*** firms soon replaced by ***imports***
- In the ***medium run***, this ***real wage*** increase is not sustainable
  - Firms try to pass-through the ***wage*** increases to ***prices***
- In the ***long run***, ***real wages*** fall and ***profits*** rise to return to ***"equilibrium"***
  - This ***"equilibrium"*** refers to ***wage-profit*** relationship that guarantees a ***satisfactory*** profit rate

The Rate of Substitution of Foreign for Domestic Savings

- The ***rate of substitution*** of ***foreign*** for ***domestic savings*** (z_t) can be defined as:

$$z_t = -dS_i/dS_x$$

where dS_i is the variation in ***domestic savings*** and dS_x is the variation in ***foreign savings***

- As long as $z_t > 0$, some ***foreign savings*** is being channeled to ***consumption***

- The size of z_t depends on the elasticity of ***domestic savings*** relative to the ***exchange rate*** (S_{ile}), and S_{ile} depends on:
  - The elasticity of real **wages** to the **exchange *rate*** (w_{le})
  - The difference between the propensities to ***save*** out of ***profits*** (MPS_p) and out of ***wages*** (MPS_w)

The Rate of Substitution of Foreign for Domestic Savings (cont'd)

- The greater $\boldsymbol{w_{le}}$ and the greater the difference between $\boldsymbol{MPS_p}$ and $\boldsymbol{MPS_w}$, then:
  - The higher the rate of substitution of ***foreign*** for ***domestic savings*** ($\boldsymbol{z_t}$)
  - The greater the elasticity of ***domestic savings*** in relation to the ***exchange rate*** ($\boldsymbol{S_{ile}}$)
  - The greater the elasticity of ***investment*** in relation to the ***exchange rate*** ($\boldsymbol{I_{le}}$)

- The most relevant of these component is $\boldsymbol{I_{le}}$ which depends on the elasticity of the ***expected rate of profit*** in relation to the ***exchange rate*** ($\boldsymbol{p_{le}}$)

The Elasticity of Investment Relative to the Exchange Rate

- In the ***short run***, ***foreign savings*** may allow a country to grow very rapidly (i.e., to experience an ***"economic miracle"***)
  - Real ***wages*** increase and $\boldsymbol{MPS_w}$ might also increase
  - Great ***profit*** opportunities and the marginal propensity to ***invest*** increases
  - Therefore, $\boldsymbol{z_t}$ initially may fall

- In the ***medium run***, $\boldsymbol{z_t}$ will rise since it depends on $\boldsymbol{I_{le}}$ (which is associated with ***exports***)
  - If $\boldsymbol{I_{le}}$ is relatively high, currency ***appreciation*** causes ***exports***, ***investment*** (associated with exports), and ***savings*** to fall

The Expected Rate of Profit and Currency Appreciation

- Currency ***appreciation*** reduces the ***expected rate of profit*** in the ***tradable*** sector

- The smaller the difference between the ***expected rate of profit*** and the ***rate of interest***
  - ➢ The fewer the ***investment*** opportunities

- Inflow of ***foreign savings*** causes the ***appreciation*** of the domestic currency
  - ➢ Real ***wages*** rise and ***domestic savings*** fall
  - ➢ ***Expected rate of profit*** decreases in tradable sector and ***investment*** falls

Liberalization of the Capital Account and Capital Inflows

- ***Pro-cyclical*** capital flows are one of the major determinants of business cycles in emerging economies
  - Capital inflows are entirely delinked from their ***need for capital***
  - They have strong effects on major ***macroeconomic variables***
- Developing countries also have the disadvantage of having more ***"incomplete"*** domestic financial markets
  - Their capital markets are small relative to magnitude of the speculative pressure they face
- ***Capital flows*** exacerbate major macroeconomic trade-offs, reducing the space for ***counter-cyclical*** macroeconomic ***policies***

The Financial Resource Curse

- ***Current account*** deficits due to easy access to ***foreign capital*** causes a shift of productive resources toward ***non-tradable*** sector
  - ➢ It hinders the development of a dynamic ***export*** sector
  - ➢ It may reduce long-run competitiveness since ***productivity*** gains are more limited in non-tradable sector
- Capital account ***regulations*** can be ***justified*** during ***boom*** periods
  - ➢ To avoid ***currency appreciation***, risk of rising ***current account deficits***, and useless accumulation of ***foreign exchange reserve***
- Capital account ***regulations*** can also be ***justified*** during ***crises*** to avoid the opposite macroeconomic impacts