Exchange regime and capital control

Gov.'s supports for FDI

- Business environment reform⇨MNEs (Smaller Value Chains for production and distribution networks), Location fragmentation in global competition
- Infrastructure investment (Electricity, Water, Telecommunication, Legal framework to protect investors, Service (One-stop window), Transparency (Public comments)
- Maximizing agglomeration effects
- Positive externalities for local firms (≠ Export enclave), Supporting industries
- MNE's contributions for national economy (Adjusting profit maximization, monitoring)

Gov.'s concerns for FDI(2)

- Transfer pricing：Manipulating prices in intra-company trade for tax evasive purposes, Profit transferring
- Market monopoly：Avoiding technology transfer, Controlling product development, Export control, Competition control…(Host gov. vs. MNEs: Investor-States Dispute Settlement (ISDs)
- Crowding-out local firms (Brand power, Job market…)
- Balance of payment: Income transfer, Overseas remittance
- Migrating MNEs for cheaper labor

Host governments and FDI

- Host gov. vs. Investors (Sovereignty vs. MNEs)

  ⇨ FDI control and industrial policy tool

  ex. Linking foreign share and export ratio

  Local content requirement, Foreign exchange control

  Latest technology transfer

  ⇨1995：TRIMs（Trade Related Investment Measures) in WTO

  ⇨Bi-lateral investment treaty (Investor protection from expropriation (socialist countries), IPR and others

  ⇨OECD: Multilateral Agreement on Investment (MAI) for MFN and National treatment

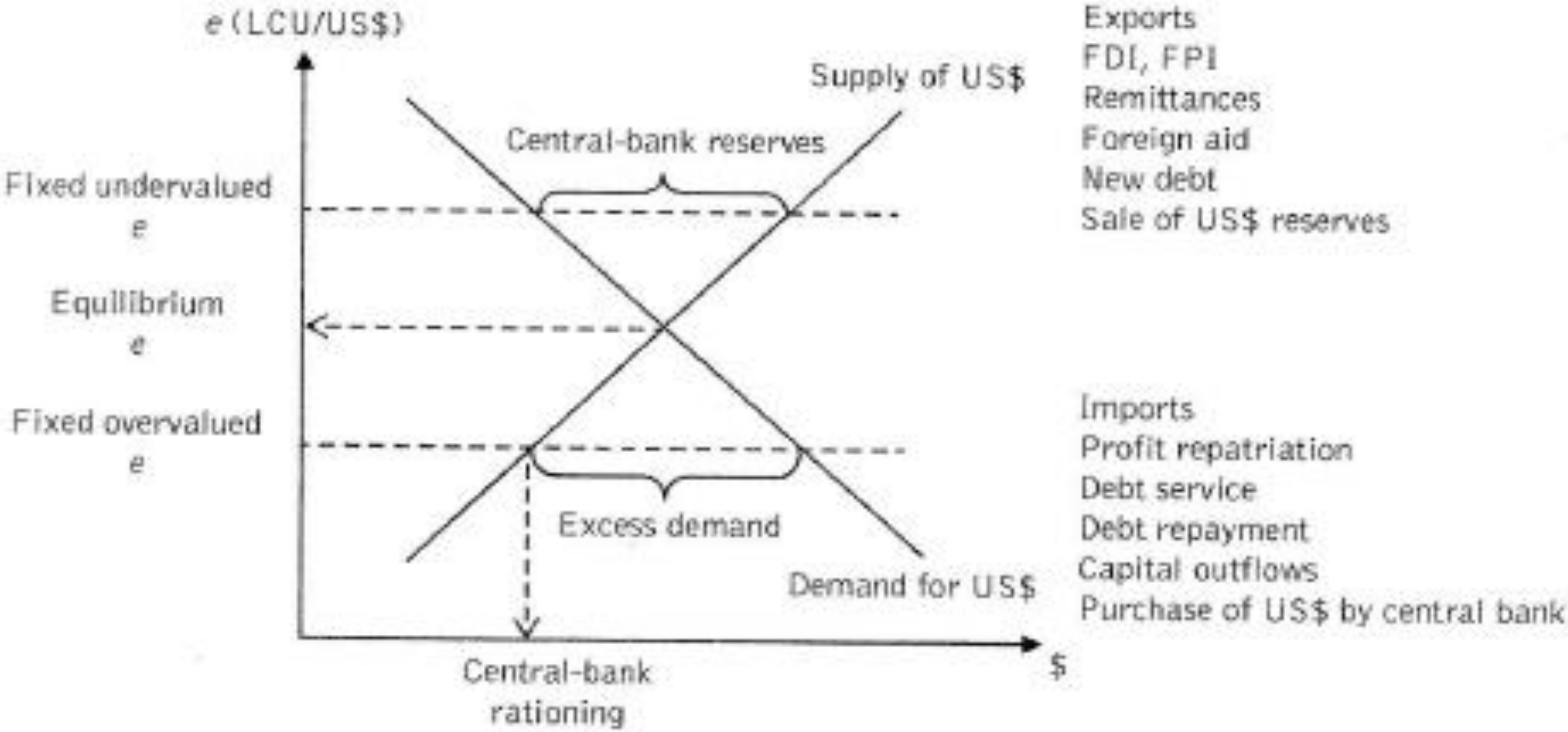
  ⇨FTA + Bilateral Investment Treaty(BIT)

  ⇨FTA + ISDs

Currencies and Exchange Rates: Definitions

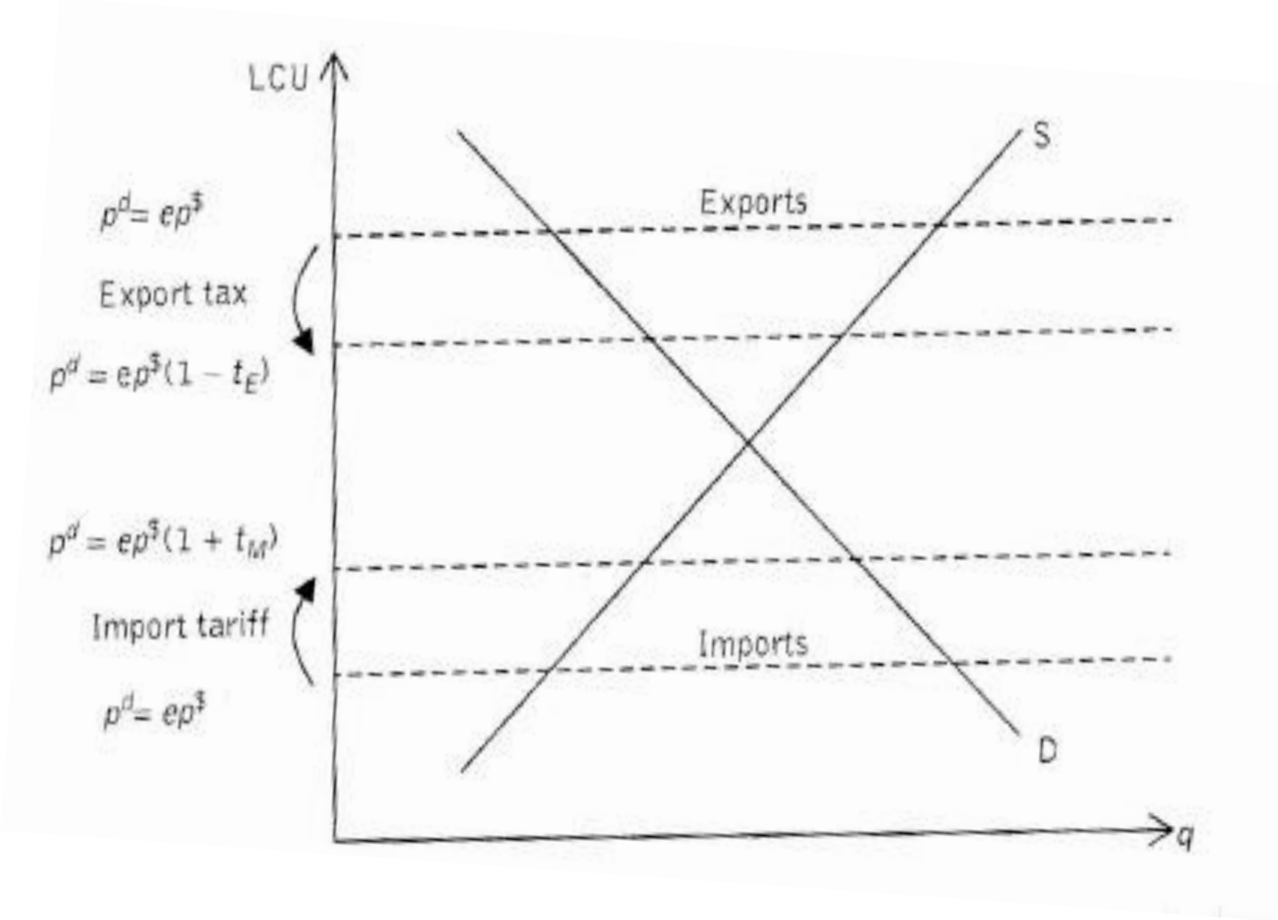
- Different currencies: Own currencies, Currencies with monetary union (EU, West African Economic and Monetary Union), Dollar or Euro fixed currencies (fixed ratios varied)
- Different convertibility: Full one with no restriction ($, €, ¥ and other key currencies), Partial one (Chinese Yuan, Indian Rs)
- Nominal: Relative price of the currencies, e = current price of a dollar (or another foreign currency) in terms of local currency (appreciated or depreciated by demand and supply of dollar and can be intervened by central bank), e =LCUs/YS$
- Real Exchange Rate(RER): Relative price of goods and services, (internal)RER=Pt(tradable goods)/Pnt(nontradable goods) in local currency or (external) RER=$eWPI^{\$}$ (wholesale price index in the U.S) (converted in LCU at the nominal exchange rate)/CPI ^{LCU} (domestic consumer price index)
- Real Effective Exchange Rate (REER): Exchange rate + Trade policies, Combining RER and the effects of tariffs and Subsidies on export and import
- Tradable goods: p(domestic price of imported good with a tariff t_M is $p^d=ep^{\$}(1+t_M)$ and with an export tax of t_E is $p^d=ep^{\$}(1-t_E)$
- REER for imports: RER$(1+t_M-s_M)$, Export: RER$(1-t_E+s_E)$

Supply and Demand for dollar (Textbook, Chapter 10)

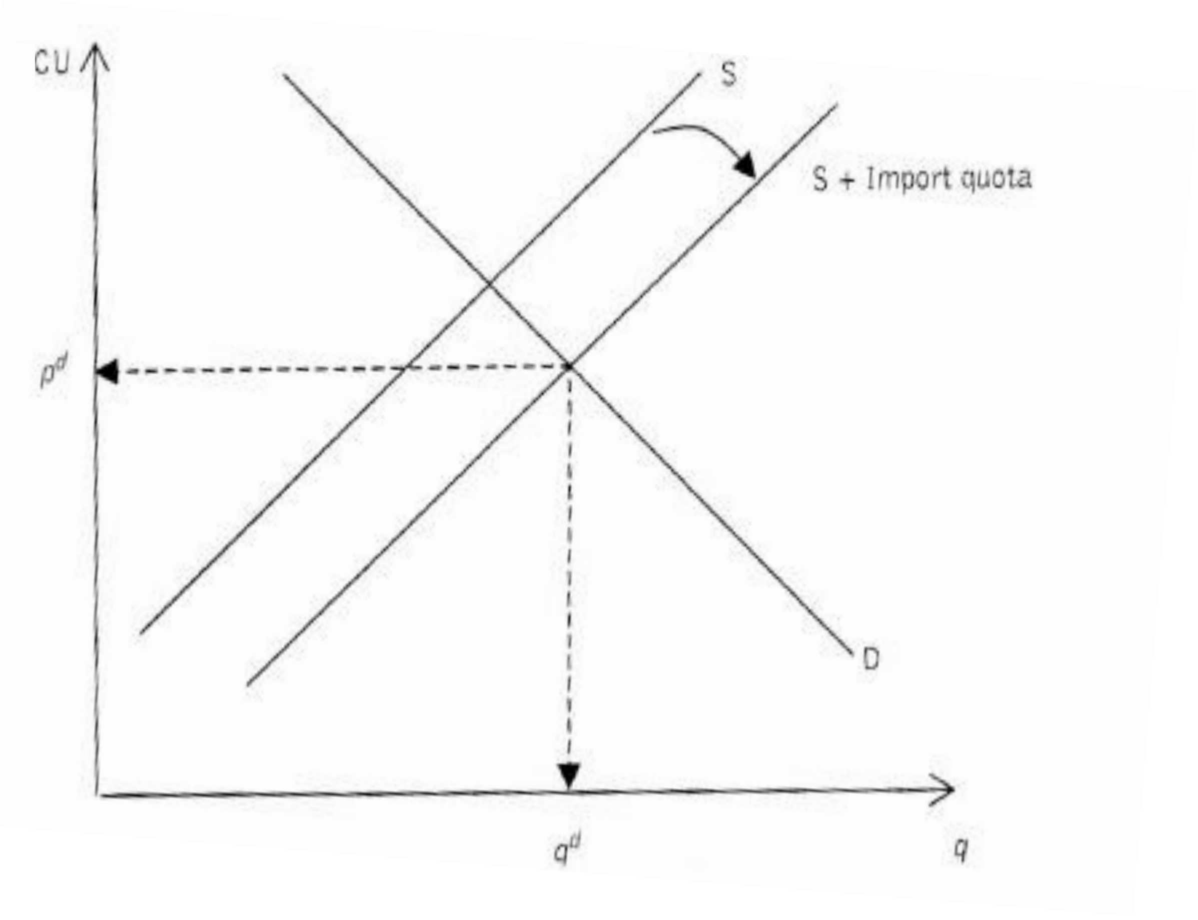


Currencies and Exchange Rate Definition(2)

Tradable goods Equilibrium



Non-tradable goods Equilibrium



Impact of RER changes: Appreciation case

Table 10.1 *Real-balances implications of RER appreciation*

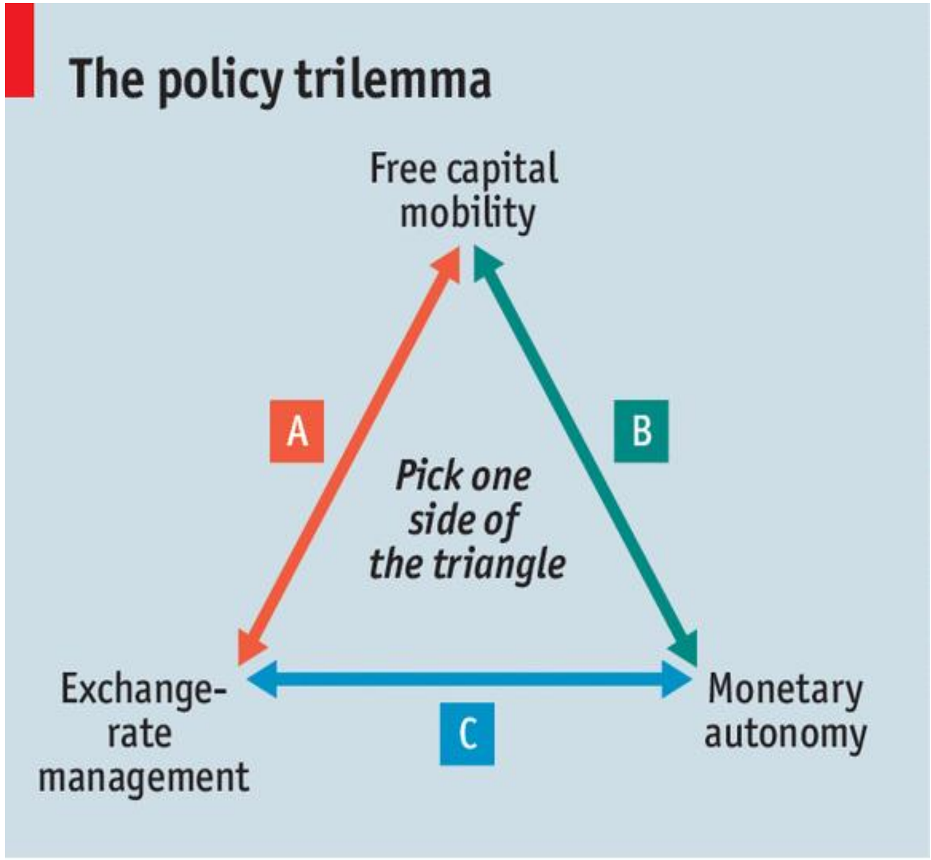
	Change induced by appreciation
Impact on the production structure (Q_T, Q_{NT})	$Q_T \rightarrow Q_{NT}$
Impact on the consumption structure (C_T, C_{NT})	$C_T \leftarrow C_{NT}$
Impact on the structure of input use	$X_T \leftarrow X_{NT}$
Impact on imports (M) and exports (E)	$M \uparrow$, $E \downarrow$
Impact on the balance of trade = $E - M$	$BofT \downarrow\downarrow$

Exchange Rate Regime

- Nominal: Price for currency transaction (Equilibrium is the LCU price of foreign currency that balances S and D in existing market)
- Real: Comparative advantage, resource allocation, growth are more driven by Real than nominal

- Flexible (floating) : Nominal rate obtained by unfettered private supply and demand for foreign currecy
- Fixed (pegged) with capital control: Excess demand for dollars when exchange rate is overvalued (ex. Latin America), opposite if undervalued (ex. China)→ Intervention by central bank (selling or buying, or rationing access to dollars) → foreign reserve matters (Import substitution for against-depreciation policy, Export orientation for against-appreciation policy) ⇔ Importance of inflation control
- Dallarized or Currency board: Full convertibility to dollar for price stability (Political burden as well as loss of exchange rate policy to adjust tradable goods → Big cost on the real economy)

The policy trilemma in international finance



Economist.com

Free capital mobility	Exchange rate management	Monetary autonomy	Policy choice for developing countries
○	○	×	A: Higher interest rates (ex. Hong Kong)
×(→ ○)	○	○	B: Capital control (ex. Pre-crisis Asia, China)
○	×	○	C: Ex. rate fluctuation (Most mature economies) (ex. Post-crisis Asia)

Why exchange regime matters?: Case of export-led Asian Economies

- "EA Miracle" (1986~1996): Export-led, Flying gees industrialization (FDI-trade nexus)
- Trade friction with the U.S. → Capital market opening pressures

  → Gradual opening without exchange rate regime change → Virtual "without trilemma" regime → Hot money inflow → Bubble economy→Bubble collapse
- Euphoria among international investors: "Asia is different" because of strong economic fundamentals

  (High growth, High saving rate, Fiscal balance, Competitiveness….)

  → Bubble investment without risks (No exchange risk, Only higher returns with investment opportunities)

Why exchange regime matters?: Case of export-led Asian Economies (2)

- Dollar pegged exchange regime (virtually fixed) in EA
  ← The role of U.S. market as export absorber (export income by $, import payment by $ or ¥ (limited)
  ← Settlement by $ within EA (without exchange risks)
- As bubble economy continued….
  → Over valuation for the dollar-pegged exchange → Weaker export competitiveness → Rising risks for investors for potential devaluation

Why exchange regime matters?: Case of export-led Asian Economies (3)

- As bubble economy continued….(Easy, cheap money from abroad)

  → Over borrowing by banks and non-banks without proper supervisory (prudential regulations)

  → Over borrowing by firms (private debt, not sovereign debts, without proper corporate governance (debt disciplines)

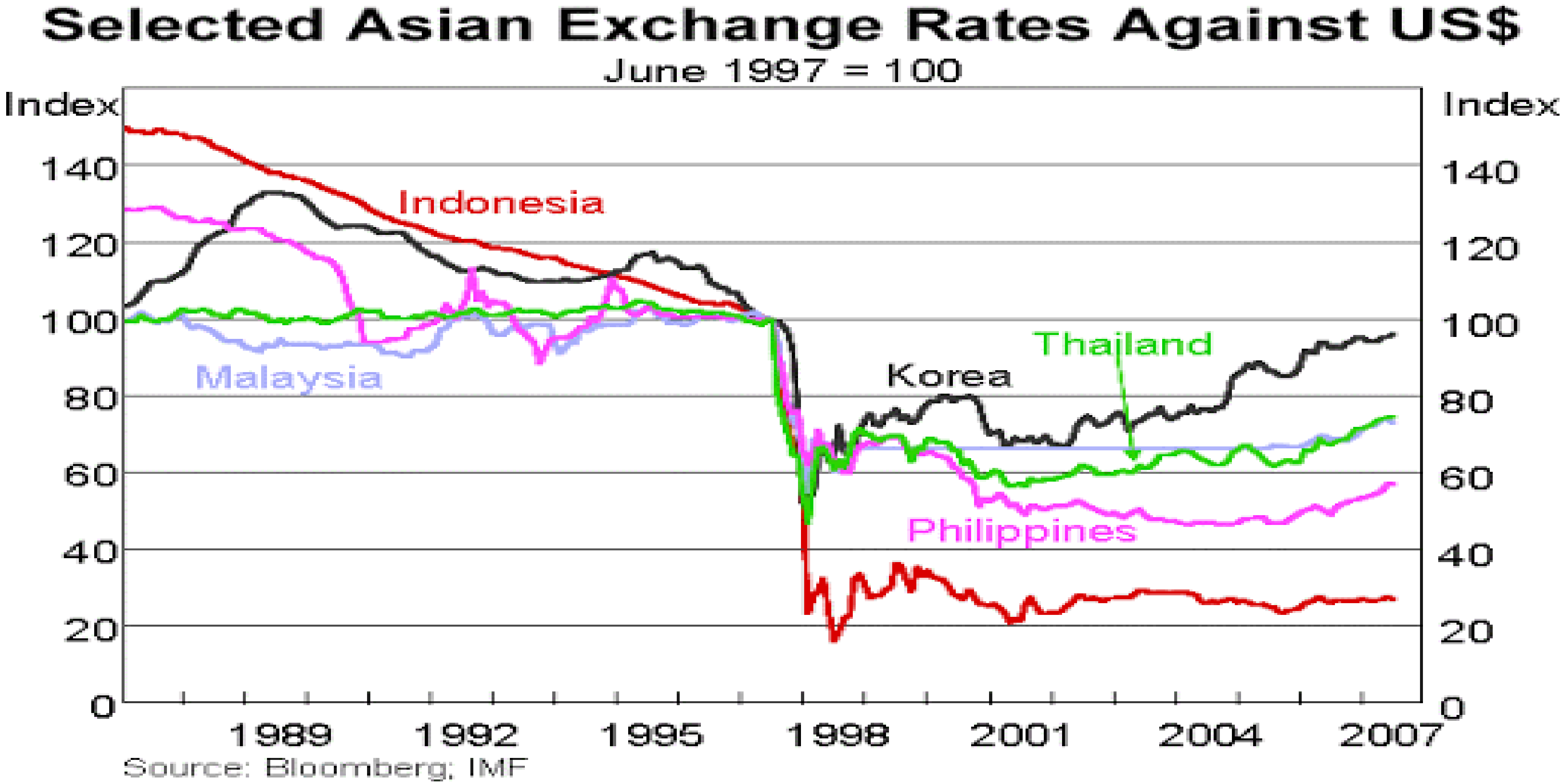
  ← Family business

  → Maturity mismatch by banks (Borrowing by short term and loans/investment in long term)

  → Currency mismatch by banks (Borrowing by $ and Income by local currencies: Baht, Rupia, Won …..)

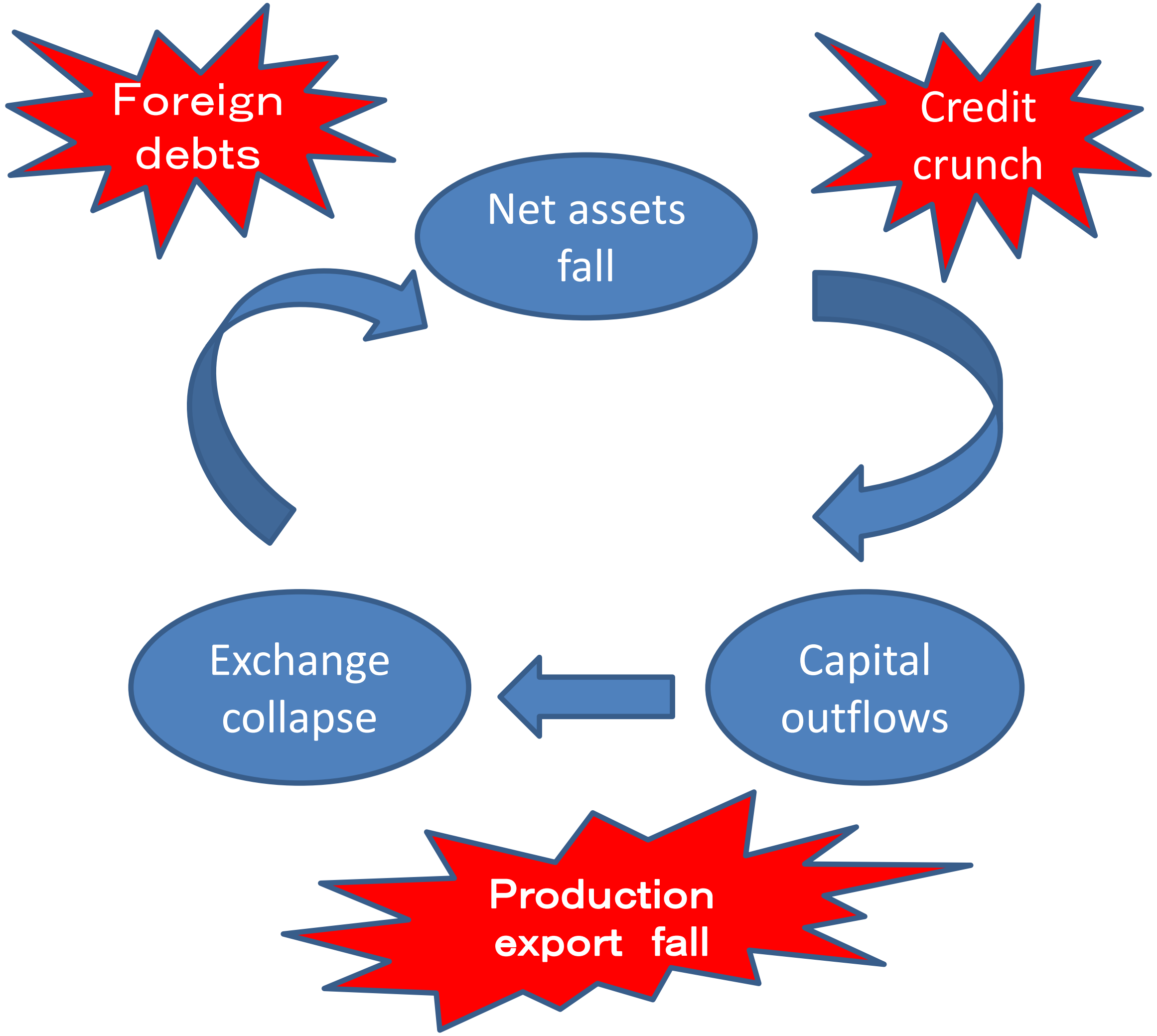
  → Failures in defending the pegged regime

Currency collapse in 1997

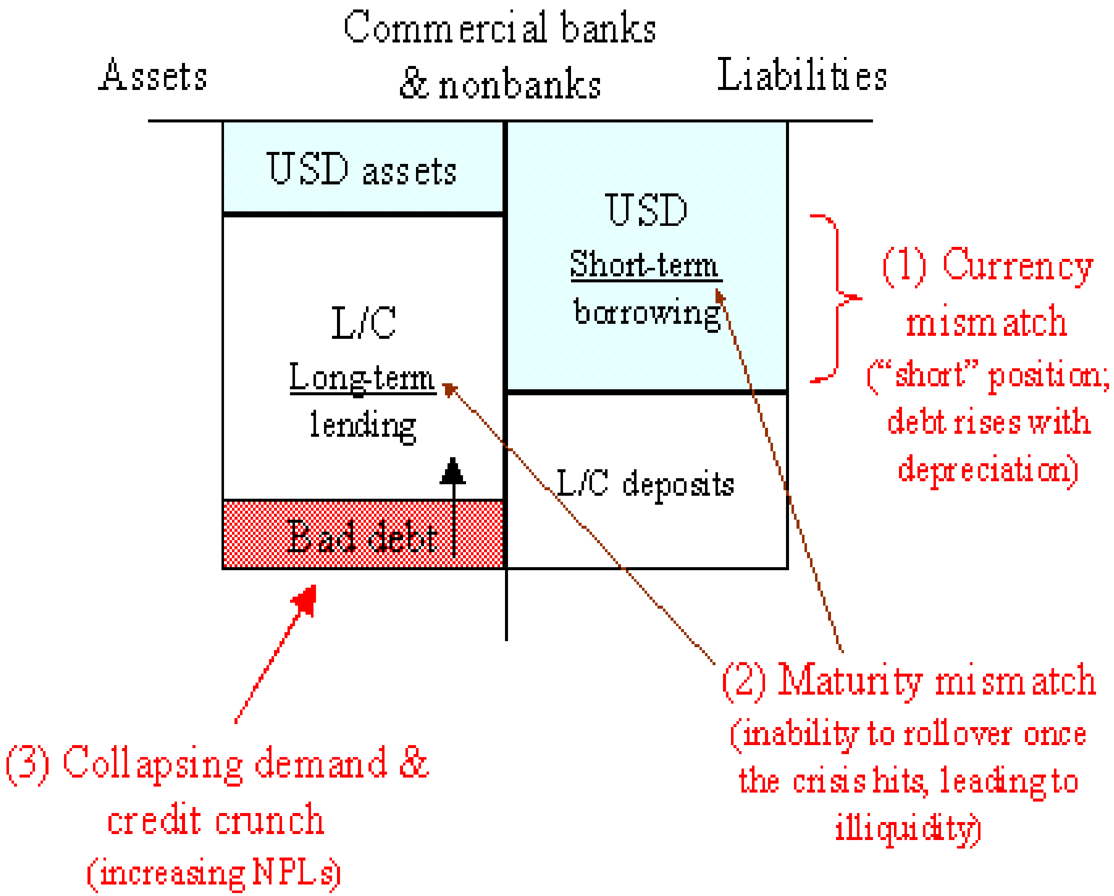


Why exchange rate matters? (4)

- Accelerated crisis



Balance Sheet Vulnerability in East Asia



Suggested Readings

- Ito, Takatoshi, Ogawa, Eiji and Yuri Sasaki (1998) "How did the Dollar Peg Fail in Asia?", NBER Working Paper No.6729, National Bureau of Economic Research
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