Lecture 3: Financial Liberalization

Development Finance

Fall Semester

2009

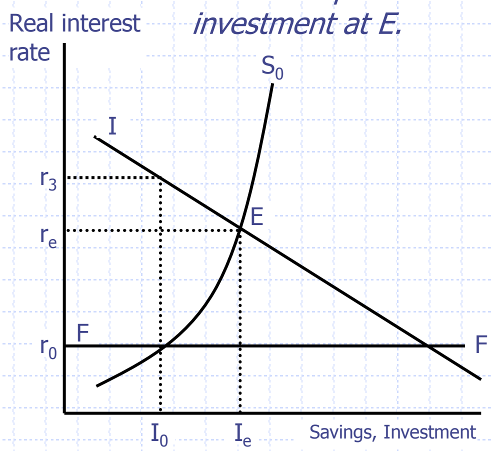
Effects of Financial Repression (McKinnon & Shaw 1973)

- Strict control over interest rates, high reserve requirement coupled with inflation usually leading to negative deposit rates ⇒ impeding the financial deepening process.
- Low interest rates do not increase investment as expected because the ability to mobilize savings is limited.
- Household and business investment tends to concentrate on high-value inflation-free assets (e.g. gold or real estate).
- Due to the decrease in loans available from the formal financial system, investors have to rely more on self-finance.
- Reliance on self-finance reduces the liquidity of business liabilities.
- Investment activities of insurance companies and investment funds are constrained once the currency becomes unstable and financial assets are illiquid.
- Directed credit schemes accompanied by other preferential interest rates create a wide disparity in interest rates between the favored and non-favored groups.

Financial Repression

- Savings S_0 corresponding to the economic growth rate g_0 are a function of the real interest rate.
- The line FF represents the nominal interest rate ceiling causing the real deposit rate to remain below the equilibrium.
- Real investment I_0 is equal to the amount of savings at the real interest rate r_0.

With this policy of interest rate control, investment I_0 is lower than the equilibrium investment at E.



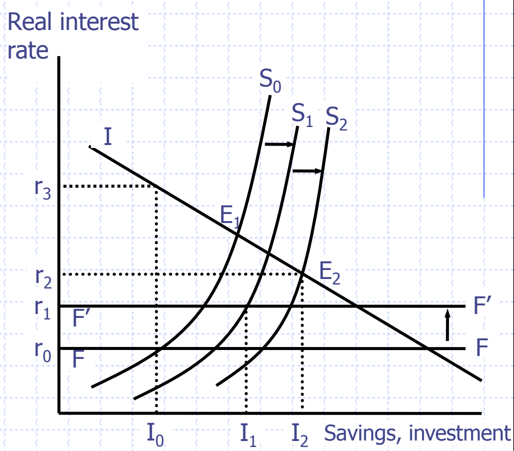
Proposed Solution

- Price stabilization
- Liberalization of interest rates to insure that real interest rates reflect market forces.

  ⇒ Financial Liberalization

Financial Liberalization

- The interest rate ceiling is increased from FF to FF′.
- The growth rate increases from g_0 to g_1.
- Savings shift to the right from S_0 to S_1.
- Investment increases to I_1.



- Control over interest rates is totally removed, savings moves to S_2 corresponding to the growth rate g_2. The equilibrium is now E_2. The real interest rate is r_2 and investment is I_2.

Real interest rate and financial depth

- Gelb's (1989) regression (taken from McKinnon, 1993, Chapter 2) based on panel data of 34 countries from 1965-1985:

  $$M3/GDP = \alpha + \underset{(+)}{\beta_1 RR} + \underset{(+)}{\beta_2 GDPPE} + \underset{(-)}{\beta_3 INF} + \underset{(+)}{\beta_4 SHIFT}$$

  - ✓ RR: real deposit rate of interest
  - ✓ GDPPE: GDP per capita
  - ✓ INF: rate of price inflation
  - ✓ SHIFT: dummy variable = 0 for 1965-73 (before the 1st oil shock); = 1 for 1975-85.
- McKinnon postulates that the real deposit rate of interest was initially set below the equilibrium level. Raising the real deposit rate would dampen investment demand, but create a positive effect on savings and loanable funds, resulting eventually in increased investment.

Critics of Financial Liberalization

- The New Structuralists
  - ✓ The deregulation in the formal financial market will increase the deposit rate and therefore move deposits away from the informal to the formal market.
  - ✓ Banks are subject to the reserve requirement on savings deposits, while lenders in the informal sector is not.
  - ✓ The transfer of deposits from the formal to the informal market therefore reduces the total capital available.
- Market Failure
  - ✓ The higher the returns on the loan, the higher the proportion of risky borrowers applying for credit; while the prudent borrowers will be forced to leave the market (adverse selection)
  - ✓ Any borrower will try to change the nature of their project to make it more risky (moral hazard). Because the expected return on the loan of the prudent borrowers may not be high enough to pay loan interest rates.

Financial Liberalization and Macroeconomic Instability

- Financial liberalization through interest rate deregulation and lower reserve requirement has taken away an instrument for the government to offset budget deficits.
- If the government is unable to borrow from domestic sources and yet does not want to increase inflation tax, then the capital account must be relaxed to access foreign savings and finance the budget deficits.
- Foreign capital inflows make the real exchange rate appreciate. In fact, the exchange rate can over-appreciate and gradually depreciates due to the capital inflow decreasing over time once foreign debts approach the level required by the economy.

Financial Liberalization and Macroeconomic Instability (Cont.)

Capital inflows make the exchange rate appreciate

Profits in the non-traded good sector increase

Profits in the traded good sector decline

Current account deficits increase, financed by foreign capital inflows.

Overvalued ER gets to the unsustainable level. → Capital flight occurs → The exchange rate is devalued → Profits in the non-traded good sector declines → Economic adjust-ment continues

But if the government still runs budget deficits, then financial repression must be re-imposed.

Surveys of Financial Liberalization

- Financial liberalization leads to:
  - ✓ Rising real interest rates
  - ✓ Financial deepening (except for low-income countries)
  - ✓ Increases in foreign investment
  - ✓ Improvement in productivity
- Financial liberalization and domestic savings
  - ✓ Mixed results.
  - ✓ In some cases, gross domestic saving as a percentage of GDP declines after financial liberalization.

Before and after domestic financial liberalization: Real lending rate

	Before	After
All 50 countries (1970-1998)	1.58	7.73*
Developed	0.43	6.28*
Emerging		
Asia	5.52	5.0
Latin America	1.42	14.7*
Africa	-1.49	8.96*
Middle East	12.12	8.06
By income level		
High	1.10	6.02*
Upper-middle	-3.28	9.03*
Lower-middle	15.47	9.97*
Low	0.06	9.73*

* Significant at 5% level *Source*: Reinhart & Tokatlidis (2001).

Before and after domestic financial liberalization: Private domestic credit/GDP

	Before	After
All 50 countries (1970-1998)	32.2	55.2*
Developed	56.9	82.5*
Emerging		
Asia	32.7	57.9*
Latin America	25.8	33.5*
Africa	19.7	26.8*
Middle East	28.3	37.7*
By income level		
High	56.5	81.9*
Upper-middle	32.1	44.7*
Lower-middle	24.5	41.6*
Low	17.7	18.2

* Significant at 5% level *Source*: Reinhart & Tokatlidis (2001).

Before and after domestic financial liberalization: Gross domestic saving/GDP

	Before	After
All 50 countries (1970-1998)	19.7	21.0*
Developed	24.8	22.8*
Emerging		
Asia	23.2	28.9*
Latin America	23.0	19.2*
Africa	14.5	12.2*
Middle East	11.4	14.2*
By income level		
High	24.1	24.5
Upper-middle	24.4	23.8
Lower-middle	18.6	18.3
Low	14.1	13.1

* Significant at 5% level *Source*: Reinhart & Tokatlidis (2001).

Financial Liberalization and Financial Fragility - Demirguc-Kunt & Detragiache (1998)

- Banking crises are more likely to occur in countries with a liberalized financial sector, even when other factors (including the real interest rate) are controlled for.
- A weak institutional environment makes liberalization more likely to lead to a banking crisis.
- Franchise values tend to be lower when financial markets are liberalized, possibly because bank monopolistic power is eroded. This suggests that theories attributing increased moral hazard to low bank franchise value may help explain why financial liberalization tends to make banking crises more likely.

Banking crises are more likely to occur in countries with a liberalized financial sector

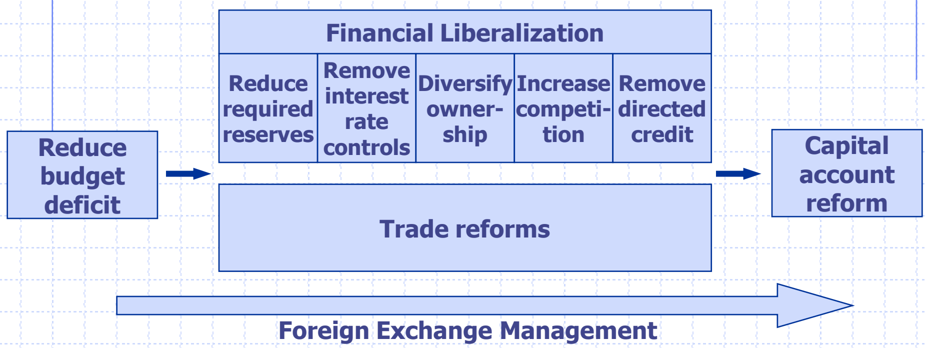
	Crisis Year	Probability of Crisis Predicted by Baseline	Predicted Probability of Crisis had the Country not Liberalized
US	1980	0.459	0.126
Japan	1992	0.071	0.012
Sweden	1990	0.033	0.006
Chile	1981	0.174	0.035
Colombia	1982	0.047	0.008
Mexico	1994	0.207	0.043
India	1991	0.221	0.047
Malaysia	1985	0.170	0.034
Indonesia	1992	0,306	0.071

Source: Demirguc-Kunt & Detragiache (1998).

Financial Liberalization, Financial Crisis, and Financial Development

- conditional on no banking crisis, countries/time periods in which financial markets are liberalized have higher financial development that countries/time periods in which markets are controlled
- Countries/time periods with both financial liberalization and a banking crisis have approximately the same level of financial development as countries/time periods with neither.
- For countries whose financial system is strongly repressed financial liberalization is accompanied by higher financial development even if a banking crisis also takes place.

Sequence of Financial Liberalization



International Financial Liberalization

- Removing control over capital inflows and outflows is called capital account liberalization.
- Benefits of Capital Account Liberalization
  - ✓ Static benefits: A reallocation of capital investment from capital rich countries with low returns into capital poor countries but with high returns.
  - ✓ Dynamic benefits: Providing opportunities for risk diversification (domestic assets can be incorporated into a wider international investment portfolios), reducing the costs of capital for domestic enterprises.
  - ✓ In addition, capital account liberalization often goes with the import of foreign financial services and therefore enhances the efficiency of the domestic financial system.

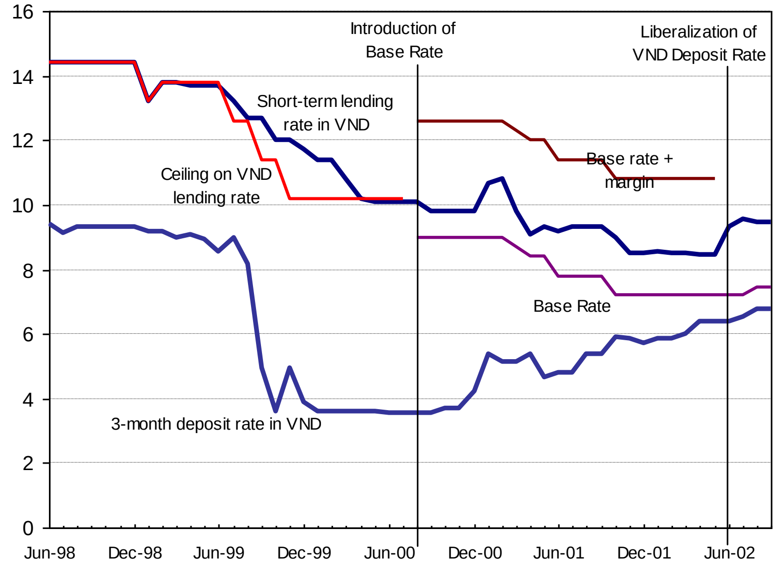
International Financial Liberalization (Cont.)

- Costs of Capital Account Liberalization
  - ✓ Capital account liberalization leads to financial crisis.
  - ✓ The problem of information asymmetry is even more serious in international financial markets due to geographical, cultural and legal differences which further complicate the collection of information.
  - ✓ On the one hand, IT and telecommunications shorten the economic distance and promote trans-national financial transactions.
  - ✓ But on the other hand, international financial markets are more strongly affected by reaction from investors and unexpected market fluctuations.

International Financial Liberalization (Cont.)

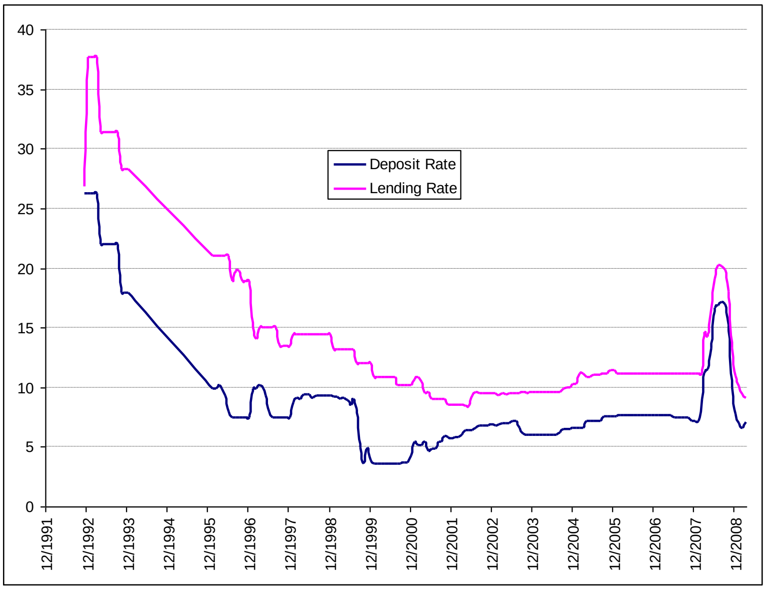
- Role of policy
  - ✓ Research has yet to produce consistent empirical evidence on whether complete capital account liberalization has a positive or negative effect on economic growth, poverty reduction and economic stability.
  - ✓ Policy planning to minimize costs and maximize benefits of international financial liberalization is of paramount importance - and can be an enormous challenge.
  - ✓ Areas that need special attention are: macroeconomic policies, prudent regulations applicable to banks as well as non-bank financial institutions, accounting-auditing practices and bankruptcy laws.

Vietnam's Interest Rate Policy, 1998-2002



Source: NX Thanh, The road to interest rate liberalization, FETP Case Study, 2002

Deposit and lending rates of commvercial banks in VN



Source: Global Financial Data