

# *EMERGING CAPITAL MARKETS*

## *Lecture 16. Financial Sector Reform*

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# Financial Sector Reform

- A. Objectives of Financial Sector Reform
- B. Measuring Financial Deepening
- C. Controlling the Pace of Credit Growth
- D. Main Areas of Reforms
  - 1. Improve Mobilization of Resources
  - 2. Improve Resource Allocation
  - 3. Improve Prudential Supervision of Financial Institutions
  - 4. Strengthen Financial Competition

# A. Objectives of Financial Sector Reform

- A first objective of financial sector reform is to bring the bulk of capital accumulation in a country through the formal financial system, away from the informal financial markets.
- In other words, the objective is to induce “**financial deepening**” by increasing the volume of savings going to physical investments through formal, supervised financial institutions.
  - An increase in the proportion of savings going to investments through the financial system should lead to an improvement in the use and allocation of these savings.
  - Potential borrowers will have to compete for these savings and those with the most profitable opportunities and higher returns will have an advantage in obtaining these funds.
  - The deepening or increase in the size of the financial system, therefore will improve the allocation of resources in the economy.

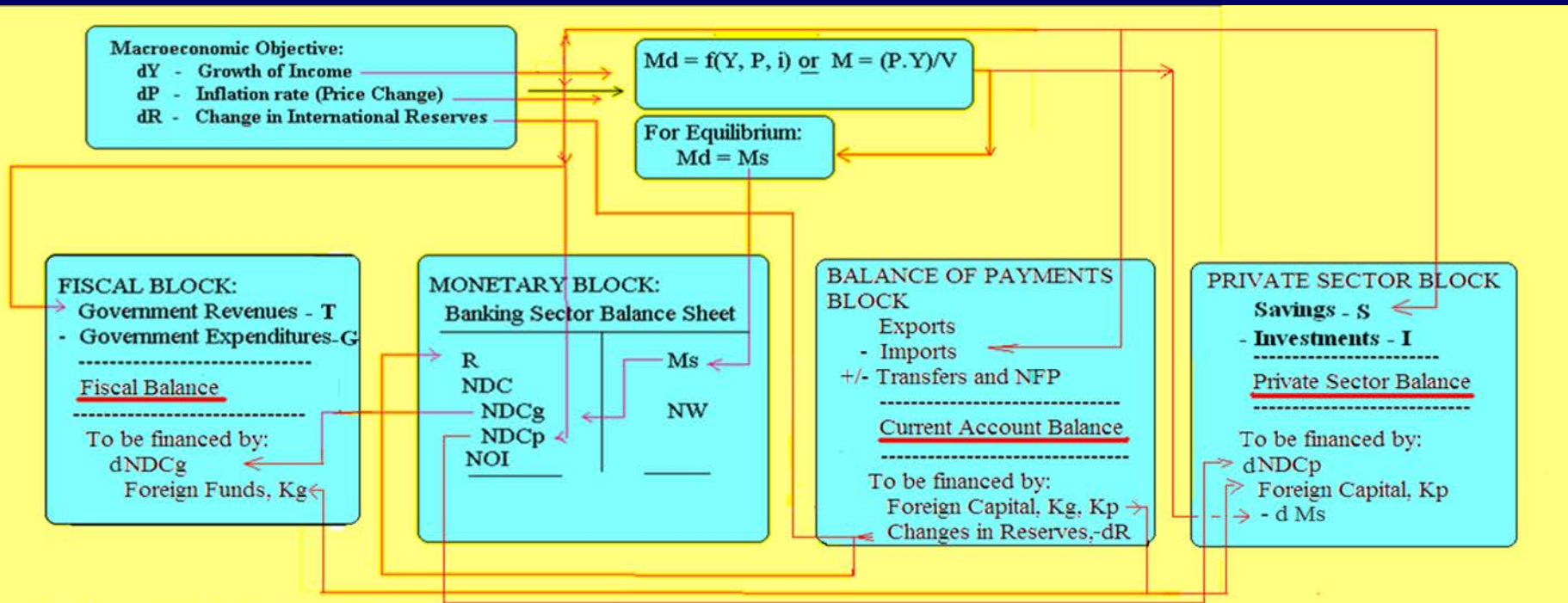
- A second objective in reforming the financial system is to facilitate "**term transformation**"; that is, to convert relatively short-term savings and deposits into long-term financing, which is needed by capital investments with a relatively long depreciation period.
- A third objective of the financial system is "**size transformation**"; that is to consolidate relatively small private savings into larger blocks of finance that can be used to fund large profitable investments. Otherwise large projects would not be financeable.
- A fourth objective of an adequate financial system is to achieve "**financial efficiency and stability**"; that is, to intermeditate between savings and investments with minimum intermediation costs and with minimum risks of disruptions and crises (which requires strong prudential regulations and supervision).

## B. Measuring Financial Deepening

- In most Emerging Markets, the banking system is the mainstream of the financial system.
- Therefore, the degree of financial deepening can be measured by the actual flow of bank loans granted by the banking system.
- Since this flow is difficult to measure, a rough indicator of the size of the financial/banking system is the ratio of M2 (Currency in circulation plus demand and savings deposits) to GNP.
- Changes in the M2/GNP ratio over time indicate changes in the flow of private savings through the system. It indicates real additions to the ongoing loanable fund capacity of the banks.
- Typical M2/GNP ratios are: Latin America, 0.35, Transition Europe, 0.45, Emerging Asia, 0.75, USA/Canada, 0.60, Western Europe, 1.00, Japan, 1.20
- Excessive M2/GDP ratios may also indicate over-reliance on banks and inadequate capital market development.

# C. Controlling Pace of Credit Growth

- The rate of growth of banking credit should be consistent with the growth in money supply-demand and GDP growth.
- Excessive credit growth will reflect excessive money supply (greater than money demand) and will lead to inflation and CA deficits.



For the economy to be in equilibrium:

1. Money supply should not exceed money demand. Otherwise the inflation rate will be higher than  $dP$
2. The Fiscal Deficit can not exceed the amount financed by  $NDCg$  and  $Kg$
3. The Private Sector Deficit can not exceed the amount financed by  $NDCp$ ,  $Kp$  and  $dMs$
4. The Current Account Deficit can not exceed amounts financed by  $K$  and  $dR$

These four relations implies that the national identities hold:  $AD = AS = Y = C + I + G + X - J = C + S + T - TR$ ;  $\Rightarrow$

The IMF Performance criteria include: (i) Maximum size of the fiscal deficit;

(ii) Ceiling on public sector borrowings;

(iii) Minimum international reserves of three months of imports

$$(X - J + TR) = (S - I) + (T - G)$$

$$CAB = PSB + FBB$$

$$(Kg + Kp - dR) = (dNDCp + Kp - dMs) + (dNDCg + Kg)$$

$$dMs = dNDC + dR$$

## D. Main Areas of Reform

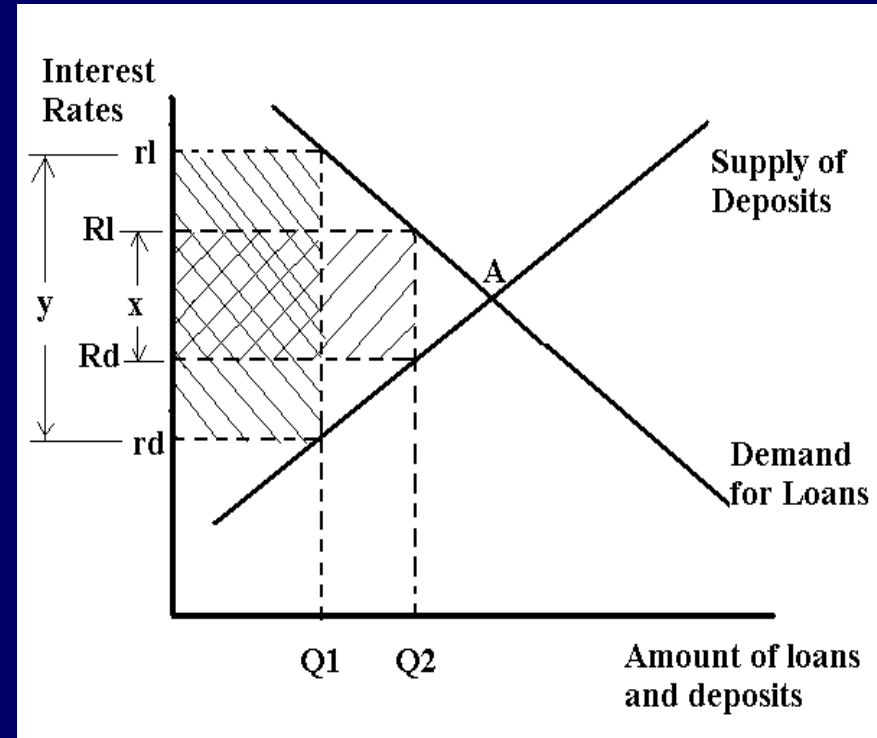
- A precondition for the soundness of the Financial Sector is **Macroeconomic Stabilization**. With high inflation and devaluations, the financial systems will not be viable over the long term.
- The health of the Financial Sector also depends on the soundness and creditworthiness of its borrowers. In turn, this will depend on the sustainability of economic growth. **Economic Liberalization and Public Governance** are key to achieve sustainable rates of growth.
- In fact, the financial sector just "reflects" the real economy.
- Within these preconditions, the following measures are needed to develop a sound financial sector:
  1. **Improve Mobilization of Resources** (the liability side of the system)
  2. **Improve Resource Allocation** (the asset side of the system)
  3. **Improve Prudential Supervision of Financial Institutions**
  4. **Strengthen Financial Competition** by Opening International Capital Flows and by Developing Capital Markets

# 1. Mobilization of Resources

- A major purpose of the reform of a financial system should be to increase its size by mobilizing increasing amounts of private resources through the financial system.
- To increase the flow of private savings to the formal financial system, the following measures are needed:
  - (i) Liberalize Deposit interest rates.
  - (ii) Expand Competition & Banking Coverage.
  - (iii) Diversify Savings Instruments.

## (i) Liberalize Deposit Rates.

- In many EMs, interest ceilings on savings are a major cause of financial repression.
- With low deposit rates ( $r_d$  vs  $R_d$ ), savers will supply a lower level of deposits to the banking system ( $Q_1$  instead of  $Q_2$ , with "x" being intermediation costs).
- Savers will tend to bypass the banking system, increasing risks of resource misallocation.
- It generates nepotism rather than economic criteria in allocating the lower amounts of credit available though at higher lending rates ( $r_l$  instead of  $R_l$ ).



- Furthermore, rationing of credit by the banking system inhibit innovation, as the funds would be normally channeled to well established firms.

- In EMs, with greater market orientation to deposit rates, competition among financial institutions is bound to take interest rates on savings to the level of around 5% - 9% p.a. in real terms.
- Liberalization of deposit rates should be accompanied by measures to remove barriers to competition in the mobilization of resources (particularly by enabling the entry of foreign banks). Otherwise, monopolistic banks will pay low deposit rates.
- Liberalization should also be accompanied by the development of deposit insurance for small depositors, to ensure that small depositors will not suffer if a bank gets into trouble.

## (ii) Expand Competition & Banking Coverage.

- Eliminate restrictions to the creation of more branches to provide easier access to depositors and induce additional private savings throughout the country.
- Facilitate the establishment of well-capitalized banks, in order to introduce competition and technology.

## (iii) Diversify Savings Instruments.

- Banking laws in some countries list only “permitted” instruments. This inhibits innovation. A better system is just to prohibit certain types of undesirable instruments.
- In order to attract different types of depositors, banks should be legally allowed to offer a diversity of types of interest bearing instruments (passbook savings, time deposits, and certificates of deposits) with different maturities, risks and rates.

## 2. Improved Resource Allocation

- Another major objective of financial sector reform is to encourage the allocation of resources to the most economically viable investment opportunities
- This will improve economic efficiency and accelerate economic growth.
- For this purpose the following measures are normally included in financial sector reforms:
  - (i) Liberalize Interest Rates on Lending.
  - (ii) Eliminate Preferential and Directed Credits.
  - (iii) Reduce Intermediation Cost.

## (i) Liberalize Interest Rates on Lending.

- Interest rates on lending should not be controlled by Government. Otherwise, the formal system will be by-passed.
- As deposit rates are liberalized and becomes positive, lending rates will also become positive in order to cover deposit cost, the cost of reserve requirement and intermediation cost.
- If determined by free market forces, lending rates will reflect the opportunity cost of capital the country.
- Lending rates may become excessively high if the Government introduces excessive regulations, such as:
  - forced holdings by banks of low interest government securities,
  - interest transaction taxes,
  - high reserve requirements (the proportion of the bank deposits that must be placed for precautionary purposes at the Central Bank free of interest rates), and

- high inflation rates (which combined with high reserve requirements will lead to high nominal and real lending rates).

## Effect of High Inflation and High Reserve Requirements on Lending Rates:

- The effect of high reserve requirements is to increase the lending rate that the banks will need to charge on its loanable funds, to compensate for the fact that a portion of the deposits is not earning any interest.
- High reserve requirements will also reduce the interest rate that the banks can pay to depositors.
- Either depositors or other borrowers as a whole end up paying for the high reserve requirements and the financial system becomes weaker and bypassed.

- Furthermore, high reserve requirements in the presence of high inflation can have a devastating effect by increasing dramatically the level of nominal and real lending rates.
- The combination of high inflation and high reserve requirements requires banks to charge very high real interest rates on loans, to enable them to pay positive rates to the depositors; e.g.:
  - With a 55% inflation rate and a 5% real deposit rate, the nominal deposit rate will be 60%.
  - On a \$100 deposit, the bank needs to earn \$60 to pay depositors.
  - If the reserve requirement is 30%, the bank will not earn any return on \$30 out of the \$100 deposit.
  - Therefore, the bank will need to recover the needed \$60 just on \$70 of investments.
  - The lending rate on these \$70 will need to be  $\$60/\$70$ , or 85%
  - This represents a real lending rate of 30% ( $85\% - 55\%$ ) or five times the real deposit rate of 5%.

## (ii) Eliminate Preferential and Directed Credits.

- Many Governments in Emerging Markets have established special facilities to provide preferential and subsidized credits for sectors they wish to encourage, such as agriculture, small scale industries, exports, etc.
- In some cases, banks are forced to have a share of its loans in these preferential sectors normally at lower interest rates.
- Experience has shown that these subsidies are normally ineffective: In fact, most investments are not sensitive to the level of interest rates, as interest rates represent a small share of total costs.
- If special assistance needs to be provided, it is preferably and economically more efficient to provide it directly, such as through investment tax credits accelerated depreciation, etc. rather than indirectly through interest rates.

### (iii) Reduce Intermediation Cost.

- To reduce intermediation costs, a key measure is to eliminate excessive Government regulations on the kind of activities permitted to banks.
- This excessive regulations may just lead to excessive fragmentation of activities, with heavy overhead costs, as banks will just established different companies to operate in the various activities.
- Reducing fragmentation in the financial market will allow banks to cover a wide set of activities and to have a wider regional representation.
- This will also help in narrowing the disparities of lending rates in the financial sector, and reduce operating cost.

# 3. Improve Prudential Supervision of Financial Institutions

## Banking Institutions:

- The “Core Principles for Effective Banking Supervision and Regulation” of the Basle Committee on Banking Supervision (composed of G-10 Senior Bank Supervisors), provides a good assessment of the components of an effective system.
- Its main five elements include:

### I. Organization of the Banking Supervisory Authority:

- Clear objectives and a regulatory framework set by legislation.
- Operational independence to free it from political pressures.
- Accountability and enforcement powers to achieve its main objective: Enforcement of bank regulations that set out the minimum standards that banks must meet.
- For this, the authorities should:
  - Strengthen bank surveillance capacity
  - Improve in-site and off-site audit examination procedures

## **II. Bank Licensing**

- To define institutions to be supervised, there should be clear bank licensing arrangements
- The licensing authority should determine that the new bank has suitable shareholders, adequate capital, feasible operating and financial plans and management with sufficient experience and integrity to operate the bank prudently.
- Objective and clear criteria for licensing should be issued.

## **III. Prudential Requirements.**

- Prudential regulations and enforcement play a key role to ensure that inherent banking risks are recognized, monitored and managed.
- The Basle Accord established prudential measures and regulations that all banks should follow.
- Some countries with weak banking supervisory authorities may wish to have stronger prudential regulations, as a cushion for weak supervisory capacity.

- The main prudential regulations include:
  - Capital adequacy standards, based on the riskiness of assets.
  - Loan classification (Standard, Watch, Substandard, Doubtful, Loss) and provisioning requirements, with criteria to define performing vs non-performing loans (quantitative criteria (overdues) and qualitative (borrowers' creditworthiness)).
  - Limits on Large Exposures (including country limits).
  - Limits on Connected Lending (groups).
  - Requirements for Liquidity and Market Risk Management.
  - Internal Control Standards

#### **IV. Accounting and Information Requirements**

- Introduce generally accepted International Accounting Standards for all banks.
- Introduce regular information reporting requirements.
- Introduce external audit of banks by qualified auditors

#### **V. Exit Procedures for Bank Failure.**

- In order to permit expeditious action, develop Prompt Corrective Action and exit procedures in cases of bank failures.

## **4. Strengthen Financial Competition.**

- A degree of competition in the financial sector is needed to bring competition to financial services and improve service quality.

### **International Financial Liberalization**

- Competition can be brought by opening of the financial sector to foreign banks and liberalizing the flow of international capital.
- However, liberalization of International Capital should be preceded by the development of strong prudential regulations and supervision, as well as a “stable” foreign exchange rate system. Otherwise, it would lead to Moral Hazard problems

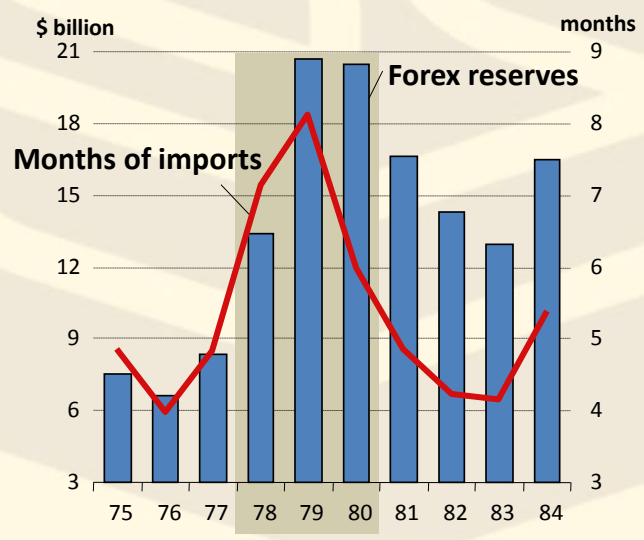
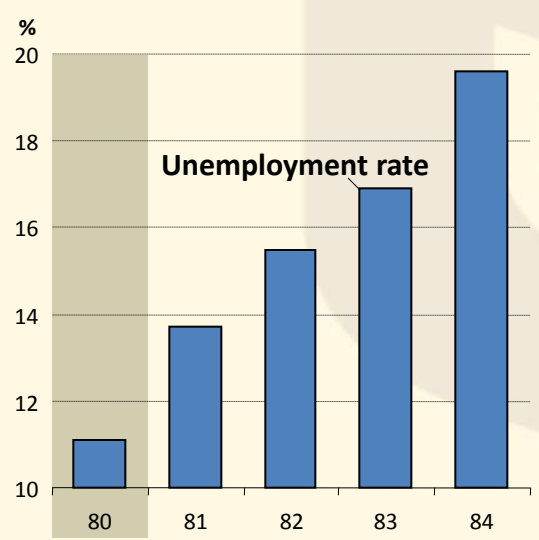
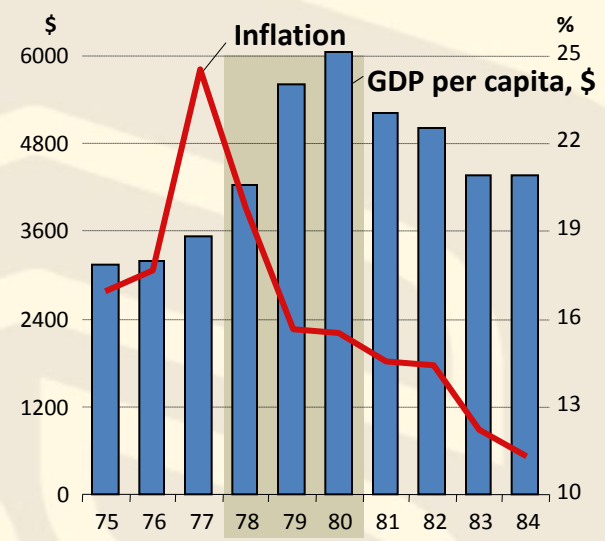
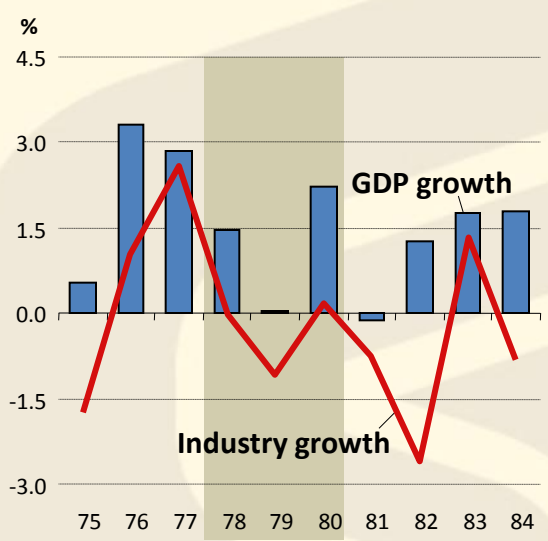
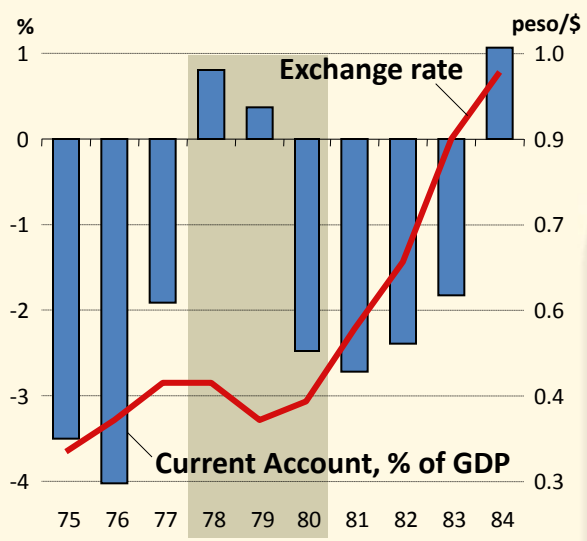
### **Domestic Capital Markets Development**

- A second way to bring competition in the financial sector is by developing alternative mechanisms for firms to get financing.
- For this, the development of domestic capital markets is essential.

- The main measures to develop a domestic capital market include:
  - Strengthening security trading systems, including stock exchanges, regional exchanges, and over-the-counter markets.
  - Develop modern capital market infrastructure, including a central depository, custodians, clearance and DVP settlement.
  - Improve the legal and regulatory framework for capital markets, including protection of ownership rights and small shareholders, prevention of abuses, prevention of fraud, conflict of interest, inside information, broker/dealer regulations.
  - Improve the functions of Prudential Supervision by the Capital Market Supervision Board
  - Improve financial disclosure requirements, such as compensation of senior management.
  - Improve accounting and financial reporting according to international standards.
  - Encourage self-regulation.
  - Encourage or establish rating systems.

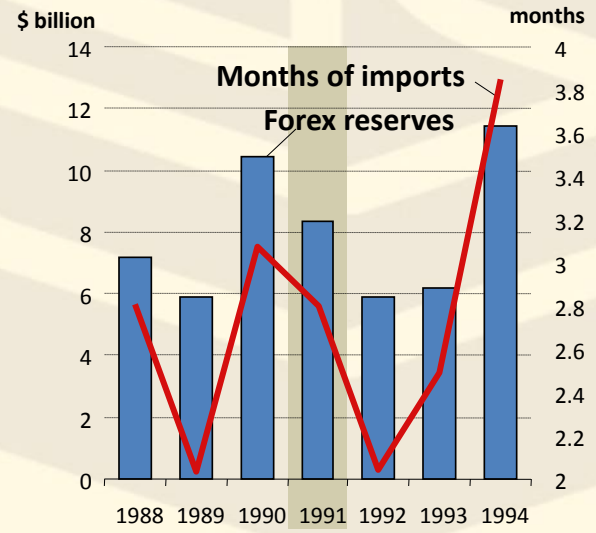
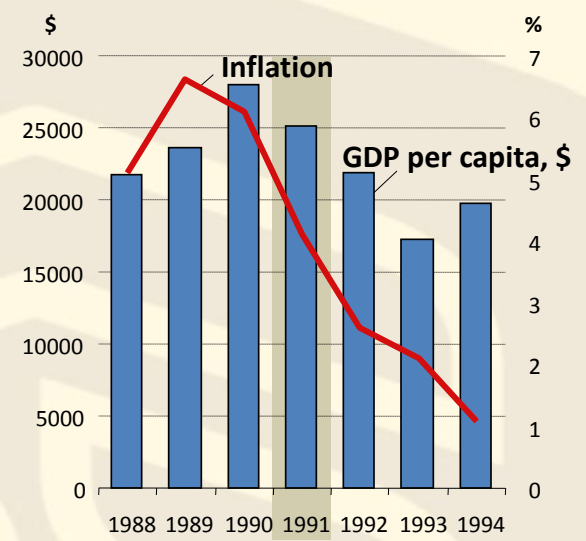
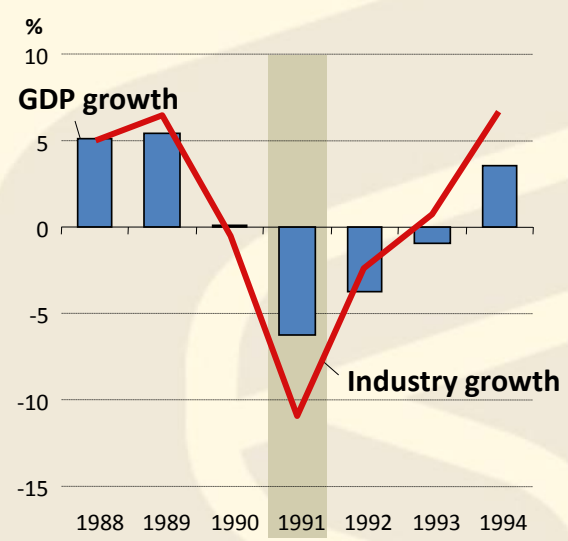
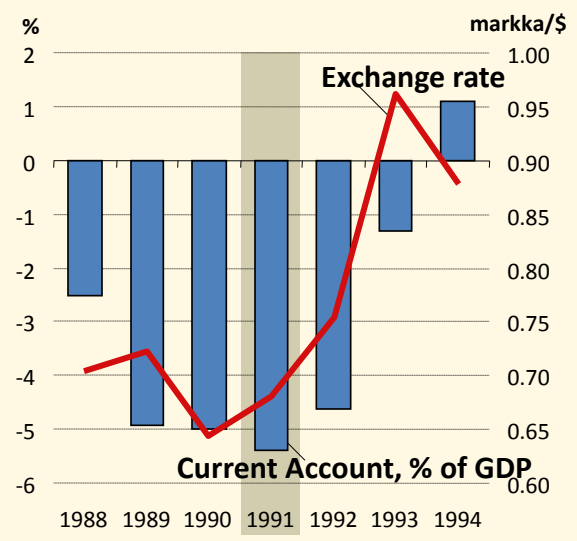
## **II. MAIN FEATURES OF RECENT FINANCIAL AND BANKING CRISES**

# Spain – 1978-80 Crisis: A recession following the 1973 oil shock, bank liberalization with credit expansion, and weak bank supervision led to solvency problems; the government took over 20 banks.



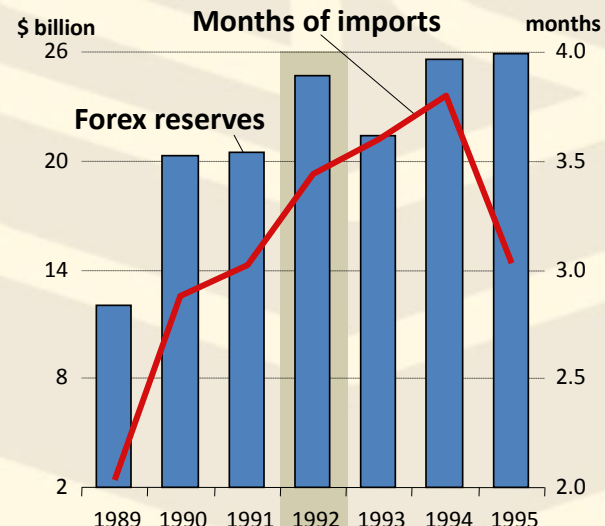
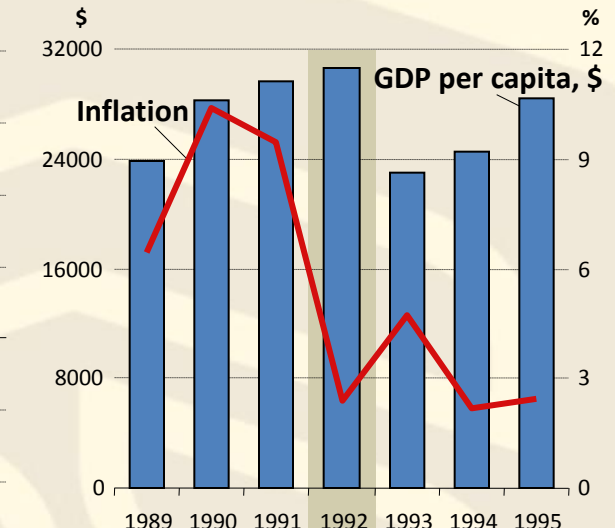
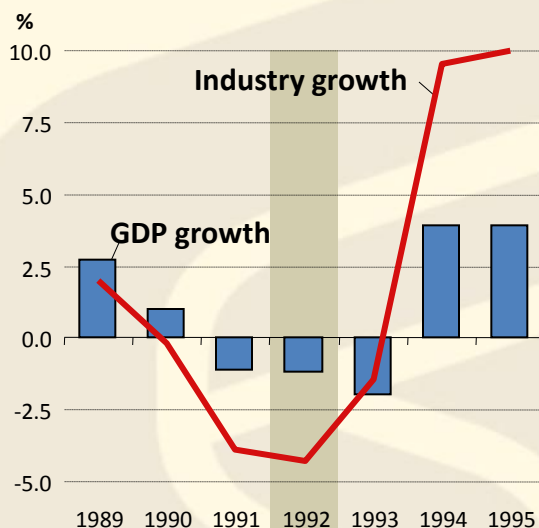
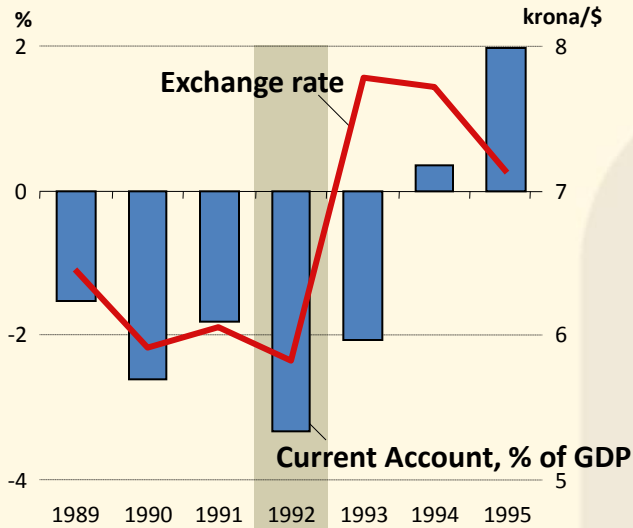
Source: World Bank, World Development Indicators Database

# Finland – 1991 Crisis: Big increases in household debt and overly optimistic assessments of asset quality added to problems caused by the loss of exports to Soviet Union.



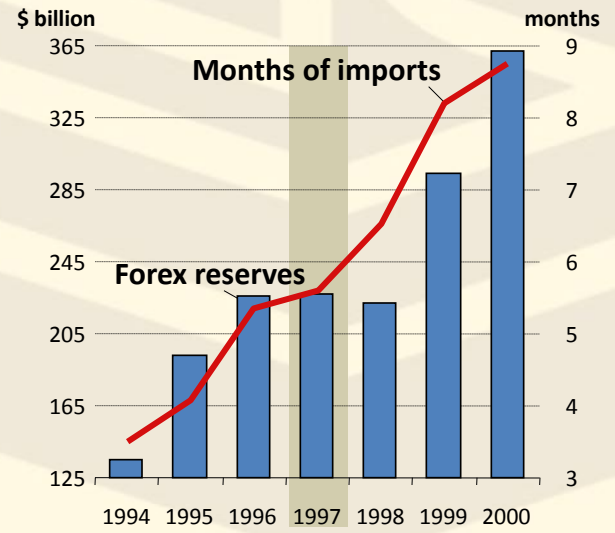
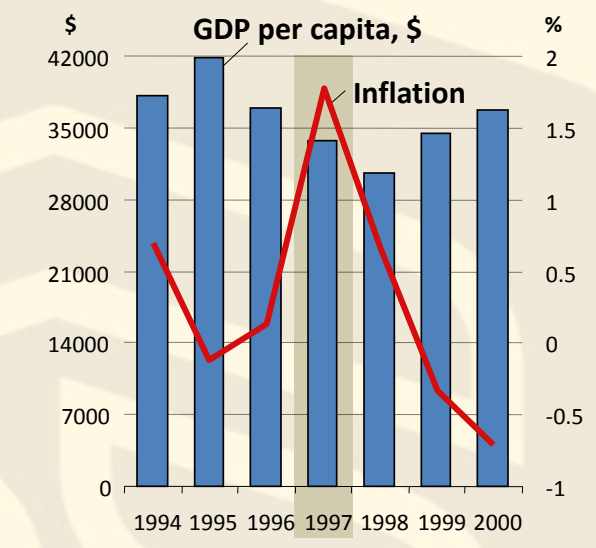
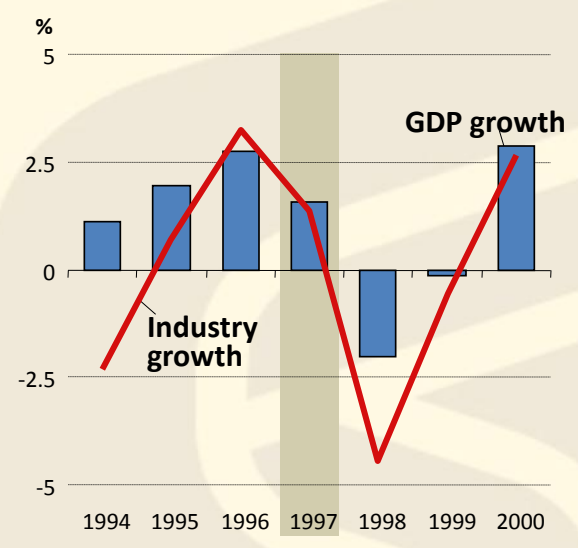
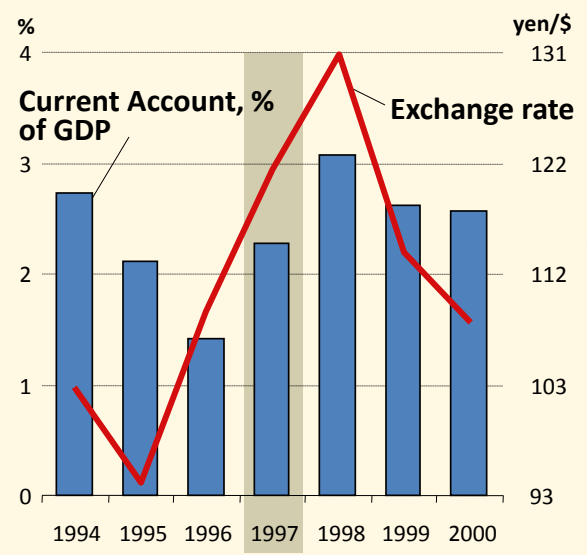
Source: World Bank, World Development Indicators Database

# Sweden – 1992 Crisis: Low saving & GDP, credit growth/deregulation led banks to make poor loans (real estate), without proper bank supervision. A real estate bubble collapsed and banks failed.



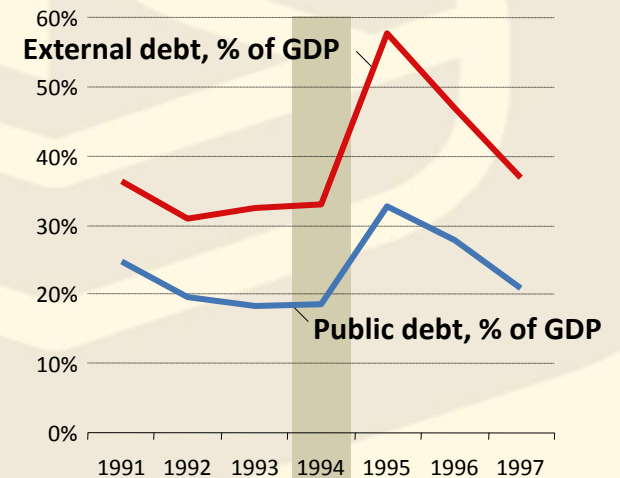
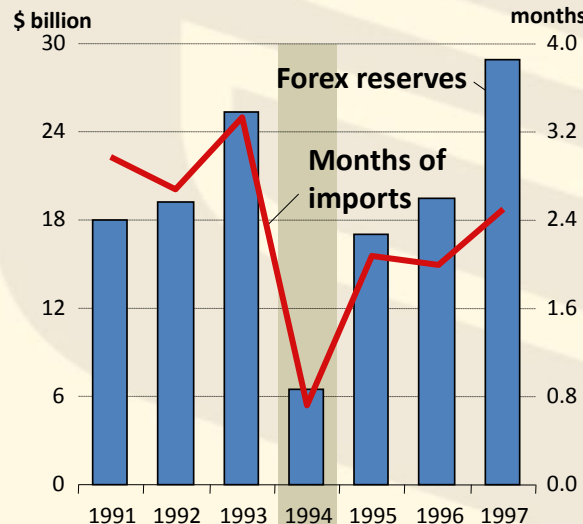
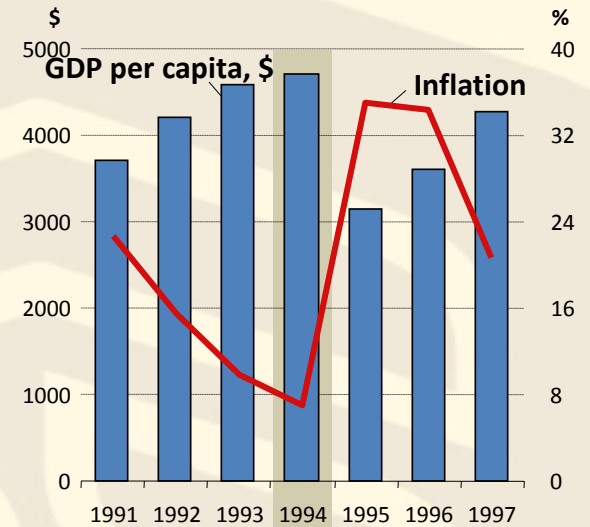
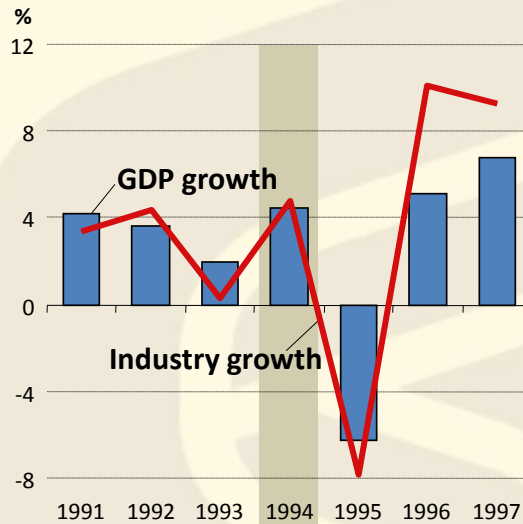
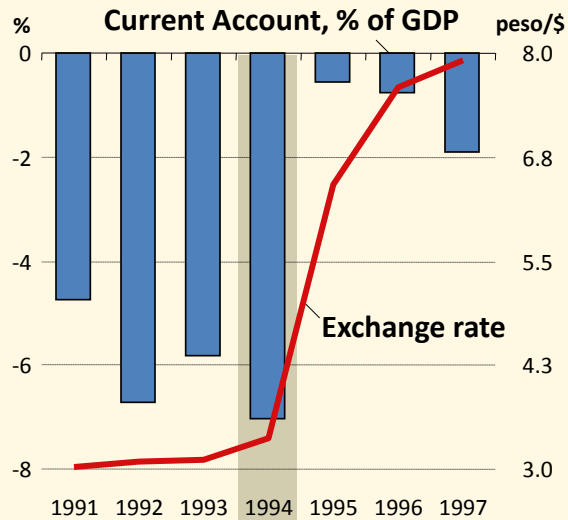
Source: World Bank, World Development Indicators Database

**Japan – 1997-98 Crisis:** Capital market deregulation increased competition, with banks moving to finance real estate and smaller firms with real estate collateral. Aggressive competition in lending led to high real estate prices, which collapsed and increased non-performing loans. 180 banks failed.



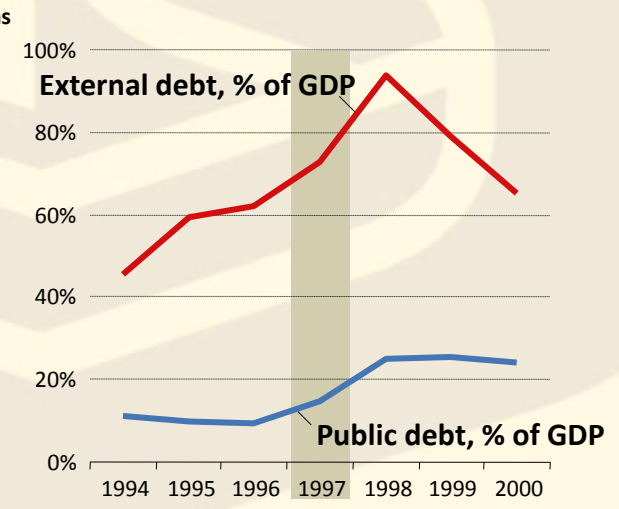
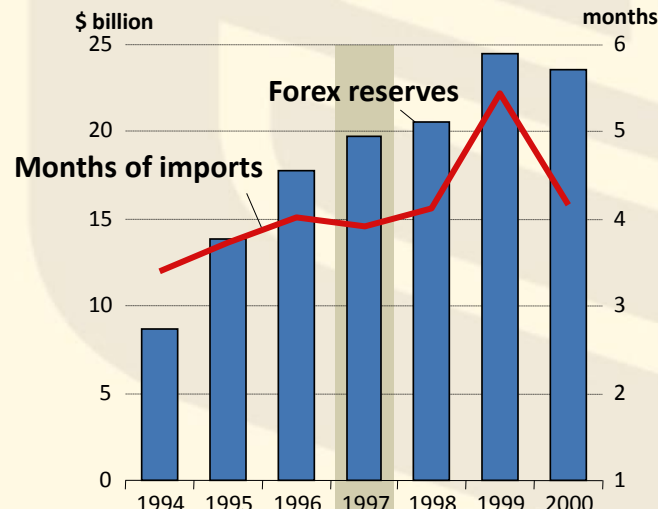
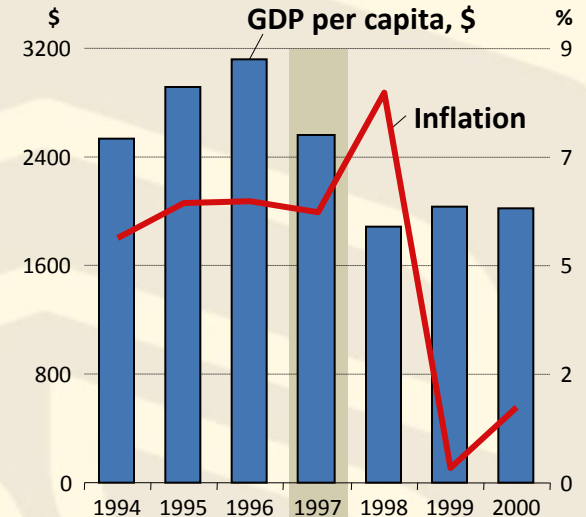
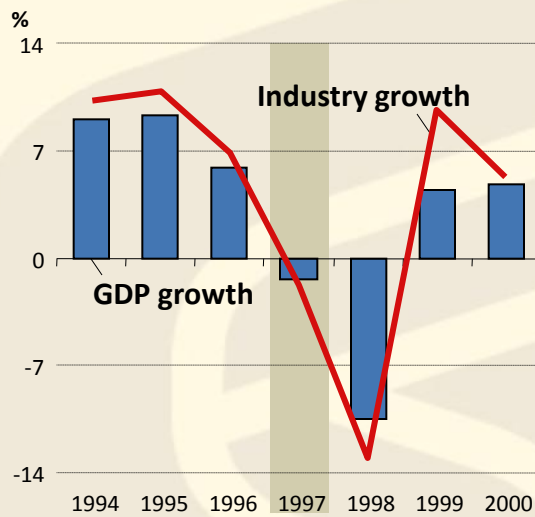
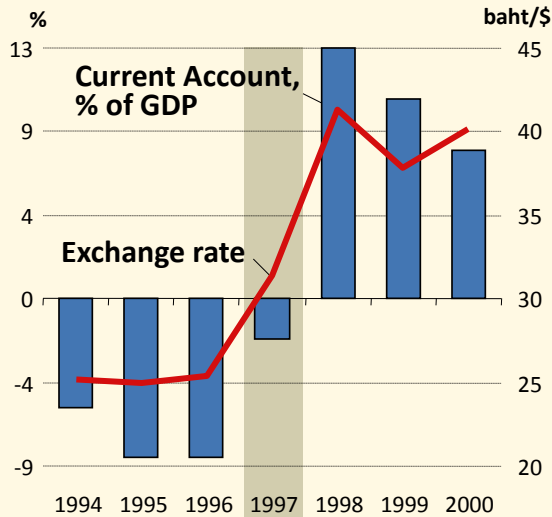
Source: World Bank, World Development Indicators Database

# Mexico – 1994 Crisis



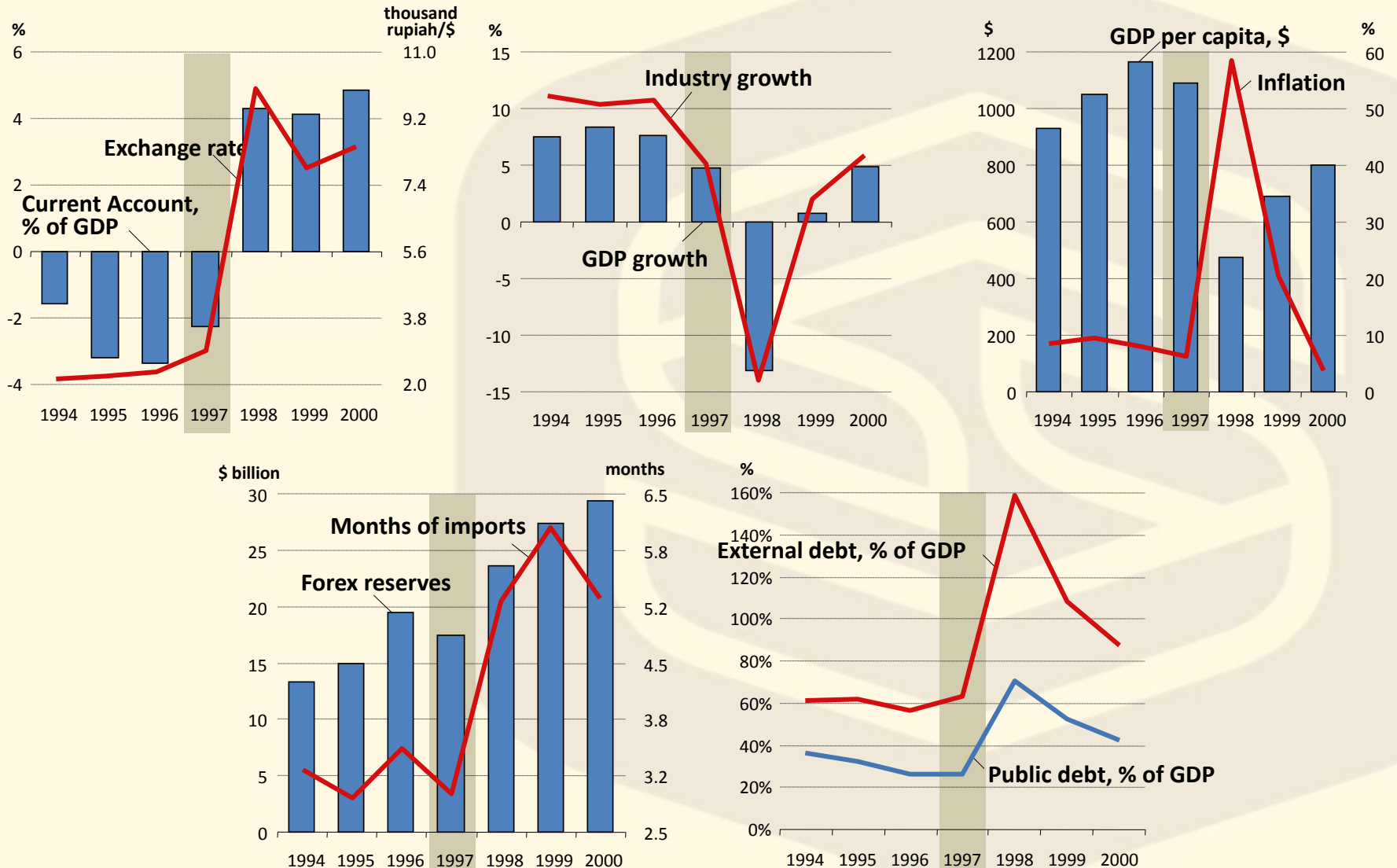
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# Thailand – 1997 Crisis



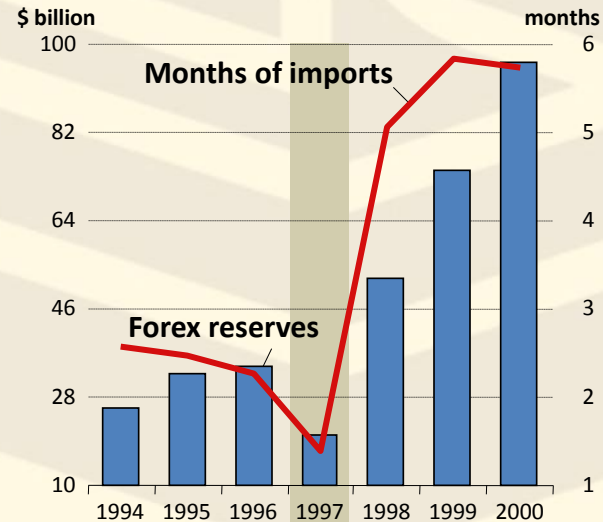
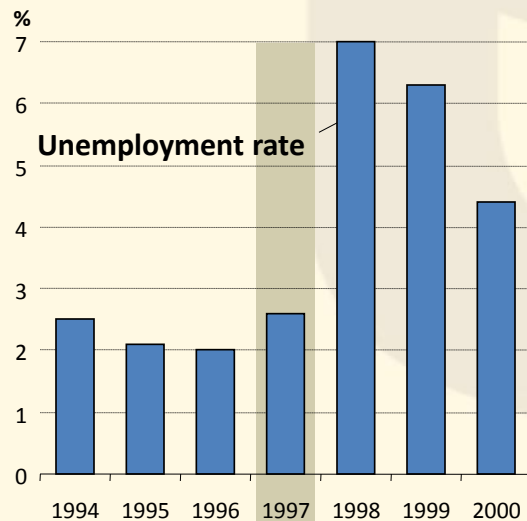
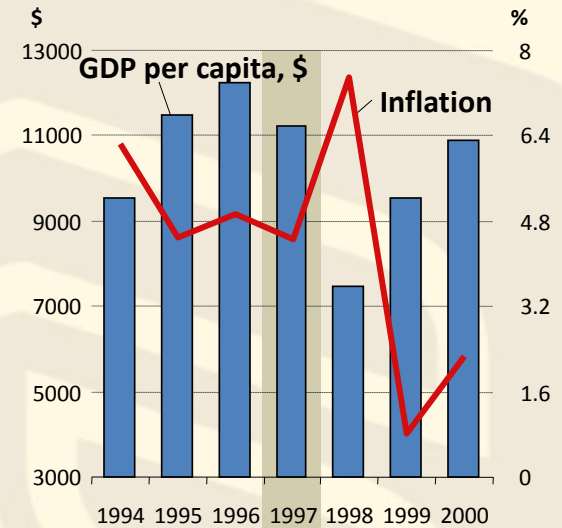
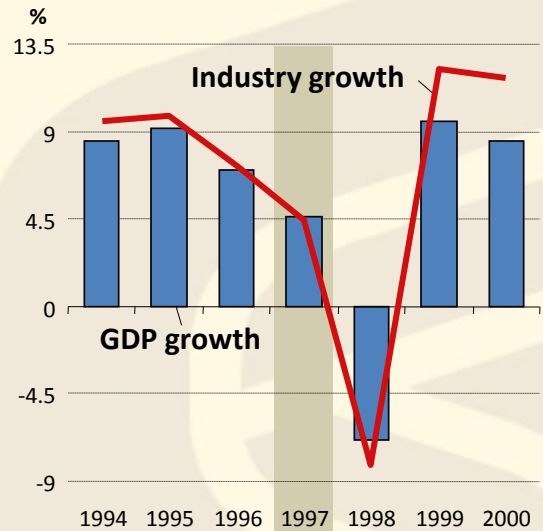
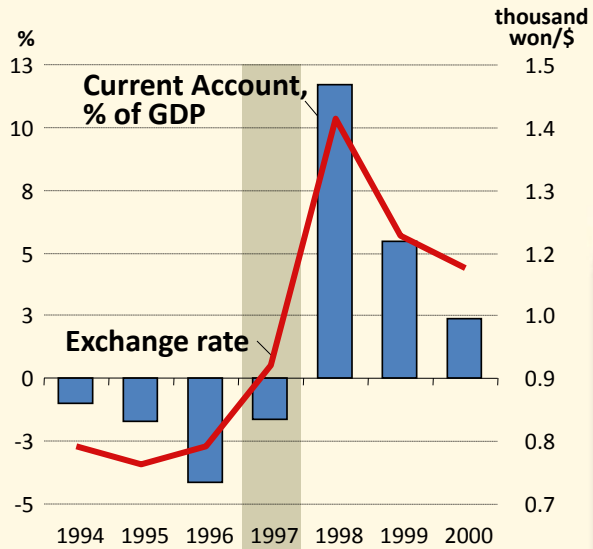
Source: World Bank, World Development Indicators Database

# Indonesia – 1997 Crisis



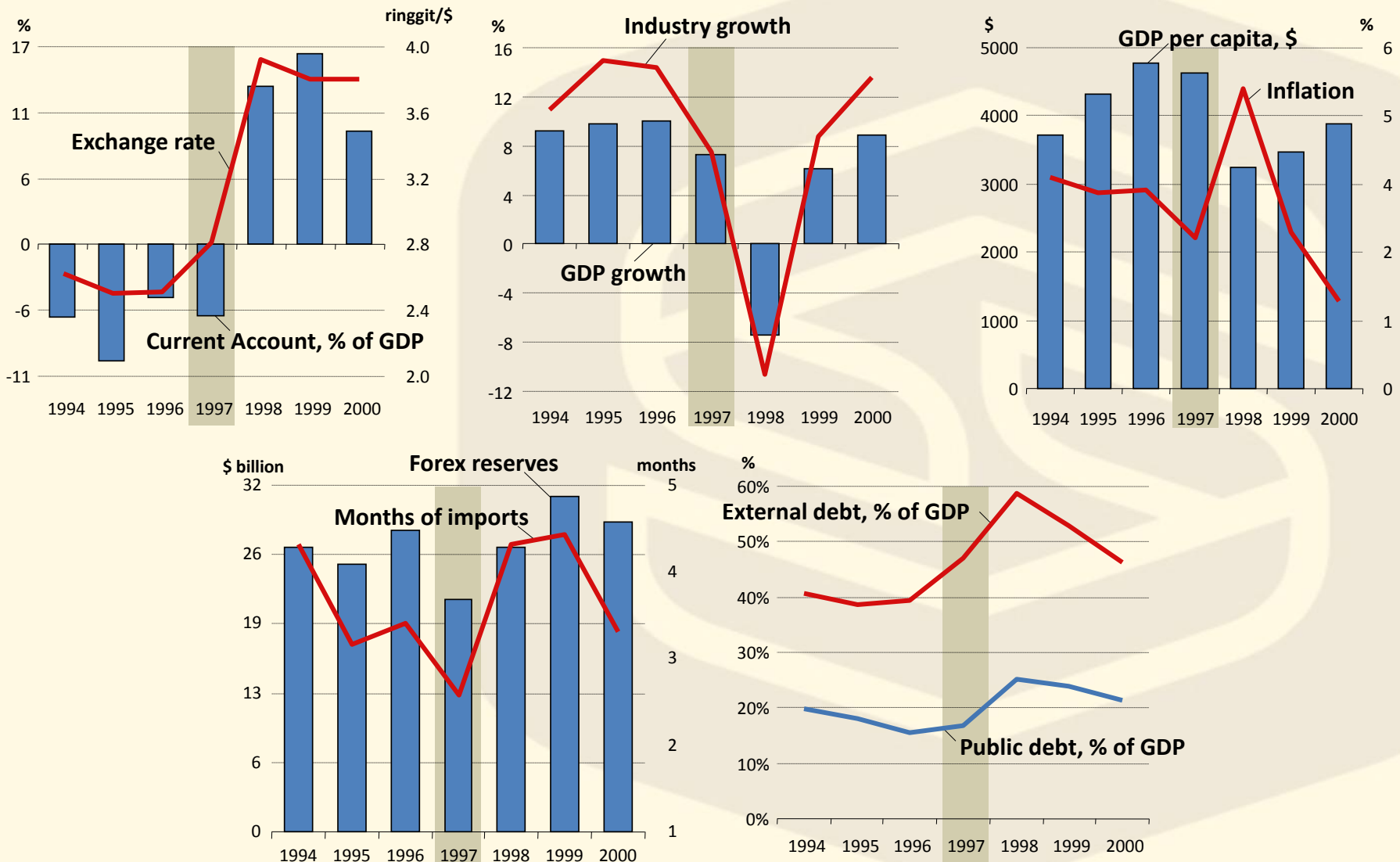
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# Korea – 1997 Crisis



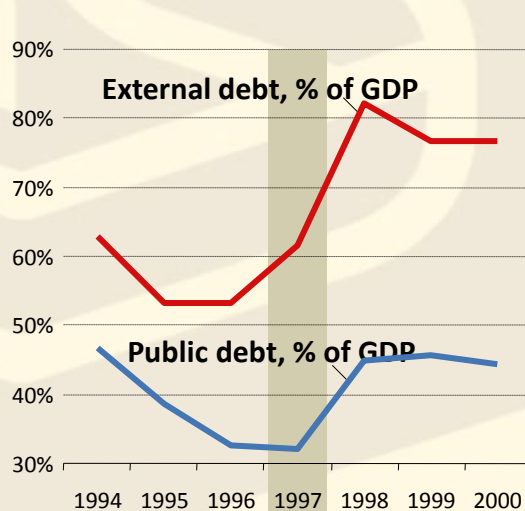
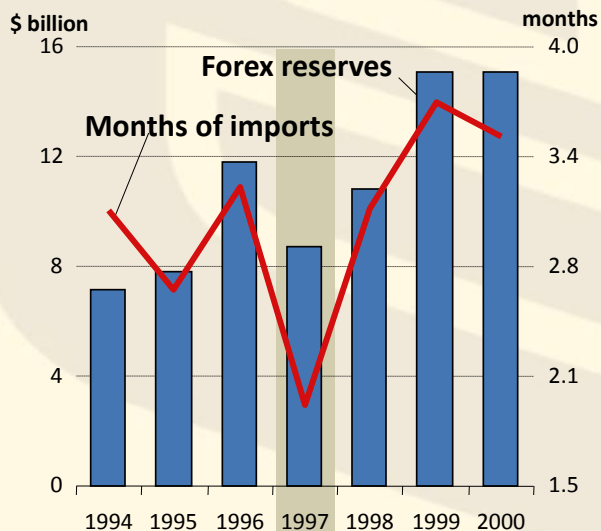
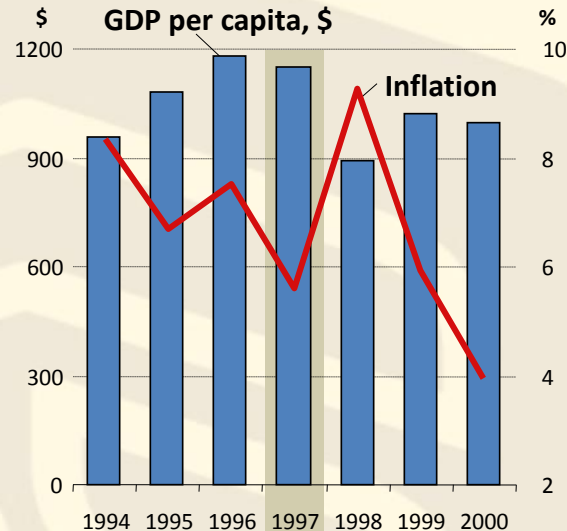
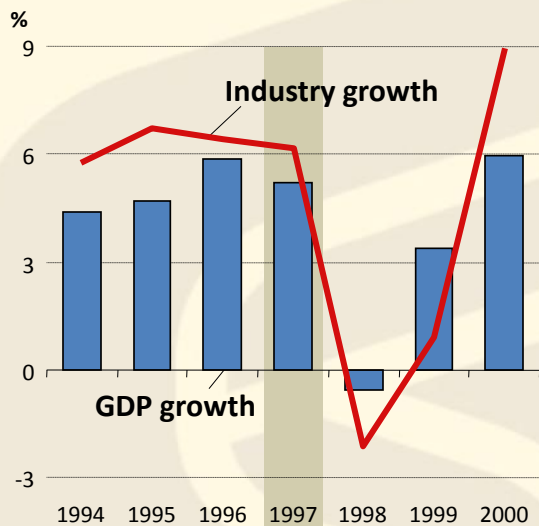
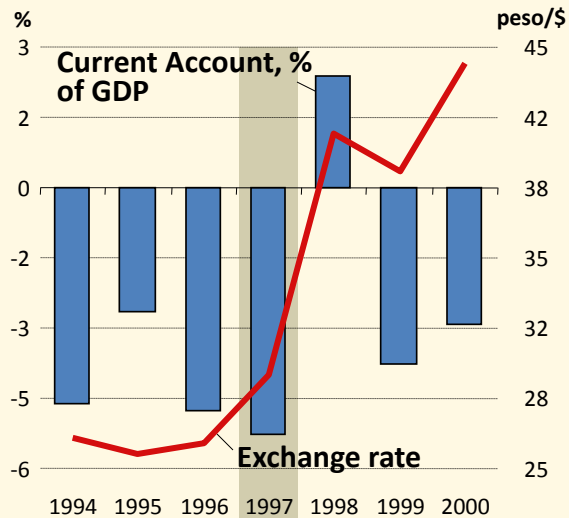
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# Malaysia – 1997 Crisis



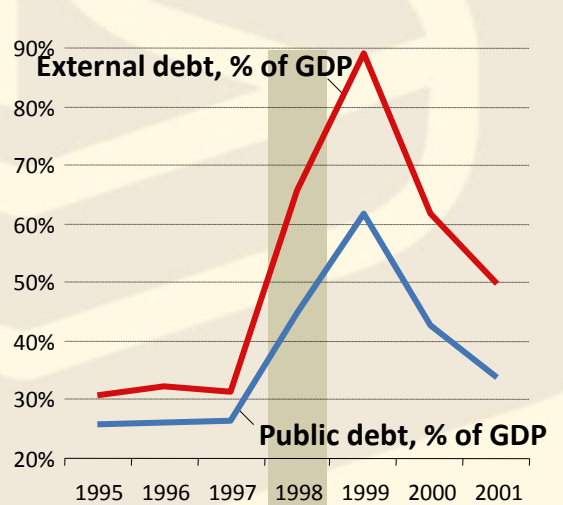
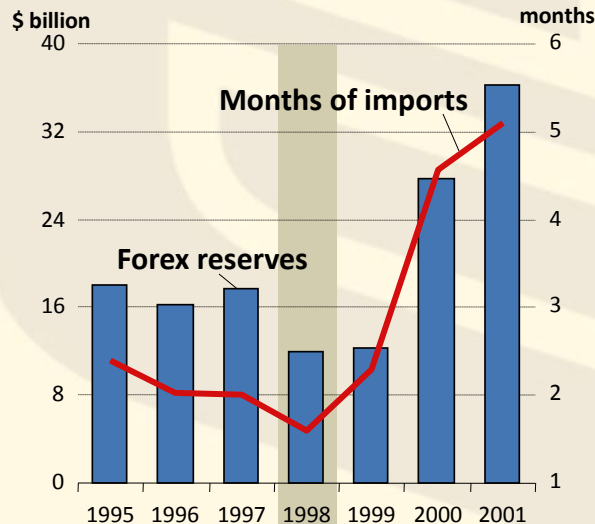
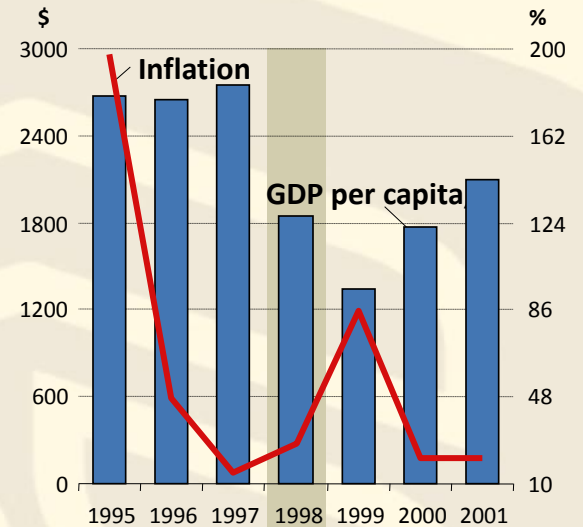
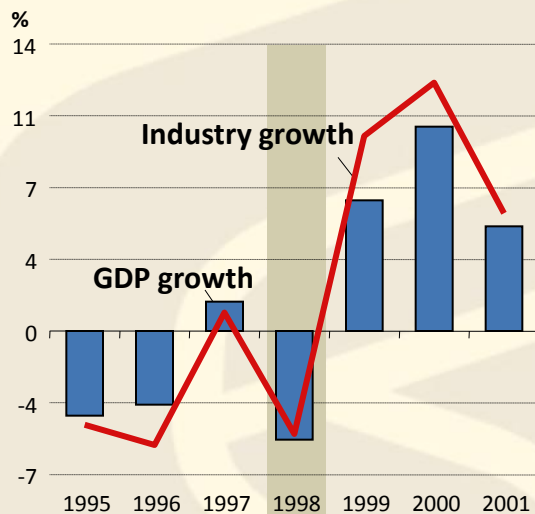
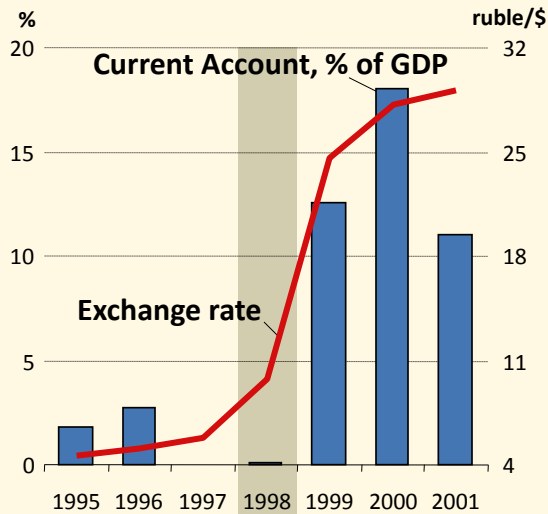
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# Philippines – 1997 Crisis



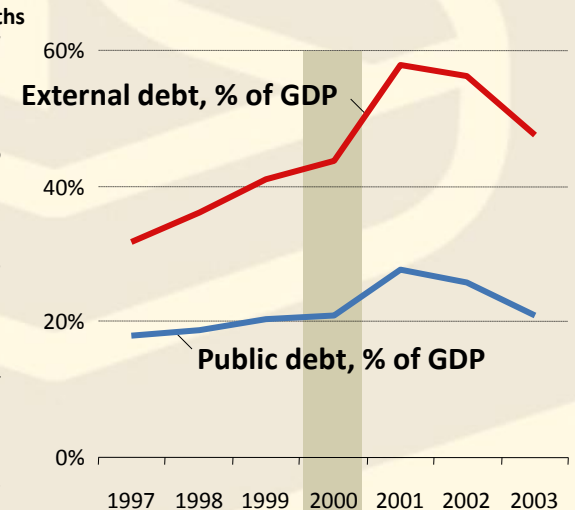
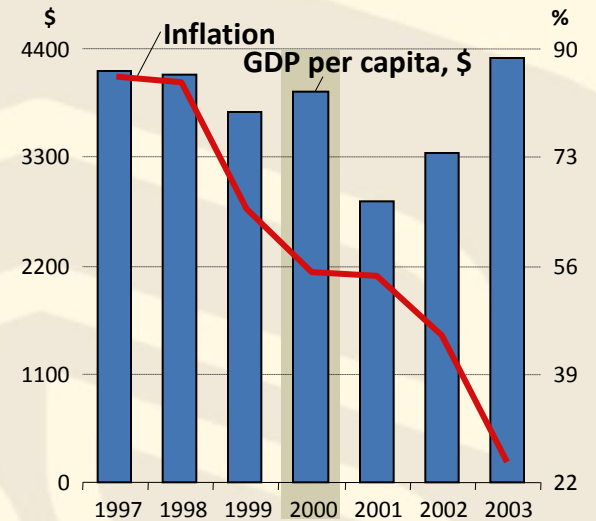
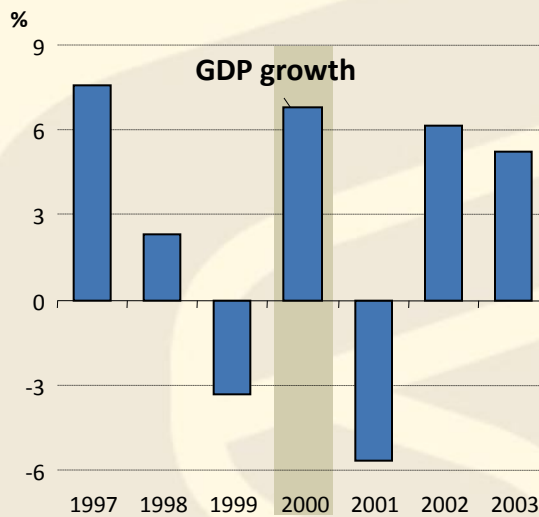
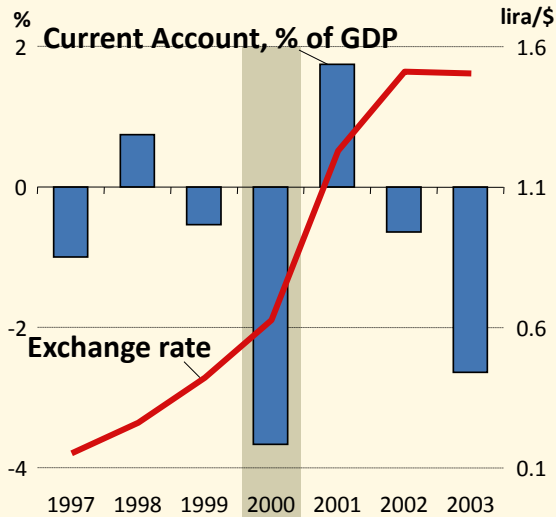
Source: World Bank, World Development Indicators Database

# Russia – 1998 Crisis



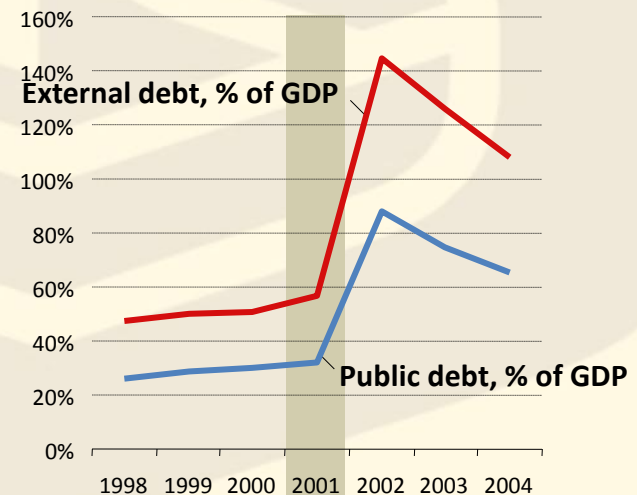
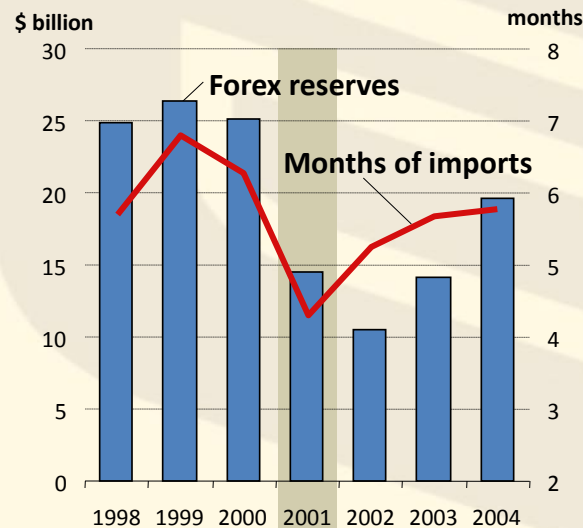
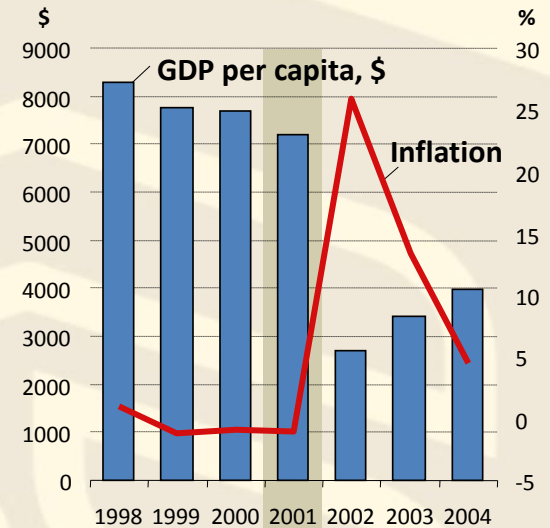
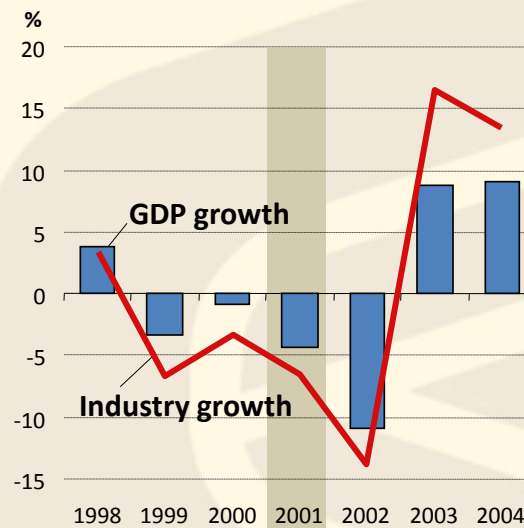
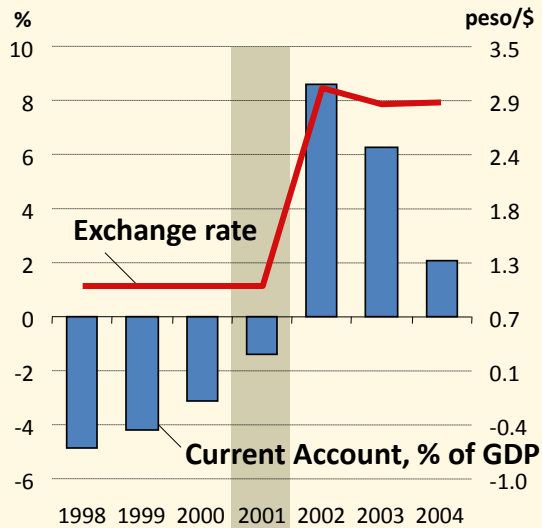
Source: World Bank, World Development Indicators Database

# Turkey – 2000 Crisis



Source: World Bank, World Development Indicators Database

# Argentina – 2001 Crisis



Source: World Bank, World Development Indicators Database

# The Economic Costs of Financial Crises are Large

Country	Systemic banking crisis (starting date)	Share of NPLs at peak (%)	Gross fiscal cost (% of GDP)	Output loss (% of GDP)	Minimum real GDP growth rate (%)
Argentina	2001	20.1	9.6	42.7	-10.9
Finland	1991	13	12.8	59.1	-6.2
Indonesia	1997	32.5	56.8	67.9	-13.1
Japan	1997	35	24	17.6	-2
Korea	1997	35	31.2	50.1	-6.9
Malaysia	1997	30	16.4	50	-7.4
Mexico	1994	18.9	19.3	4.2	-6.2
Philippines	1997	20	13.2	0	-0.6
Russia	1998	40	6	0	-5.3
Thailand	1997	33	43.8	97.7	-10.5
Turkey	2000	27.6	32	5.4	-5.7

Source: IMF: *Systemic Banking Crises: A New Database*

- ▶▶ Fiscal costs have been above 13% of GDP; output losses averaged 20% of GDP.
- ▶▶ GDP growth declined after the banking crisis, while unemployment increases.
- ▶▶ GDP per capita (in \$) may not recover to the pre-crisis level even after 3 years.
- ▶▶ After-crisis spikes in consumer prices may deepen economic woes.
- ▶▶ A weaker currency and falling GDP pc (in \$) help to fix external imbalances.

However, the current account can be only brought to a surplus by a sharp currency depreciation.

