

# EE460: Thai Economy

## Coping with the 1998 crisis

Mr. Bhanupong

Lecture 5

# 19 years later

	<b>July 1997</b>	<b>July 2014</b>	<b>August 2016</b>
Baht/dollar	55.5	32.6	35.0
International Reserves	\$30 million	\$167.5 billion	\$180.2 billion

# Outline

- Adverse consequences of capital inflows
- Macroeconomic management and sustainable growth
- The roots of the 1997/98 economic financial crises
- A V-shaped recovery
- Lessons from the 1998 crisis
- Debt deflation episode

# Adverse consequences of capital inflows

- A surge in capital inflows into Thailand began in the late 1980s and continued unabated until 1996.
- The flows brought high economic growth and a surplus in the balance of payments. The rise in capital flows stemmed from external and internal factors.
- A decline in world interest rates widened the interest rate differentials, inducing excessive foreign borrowing.

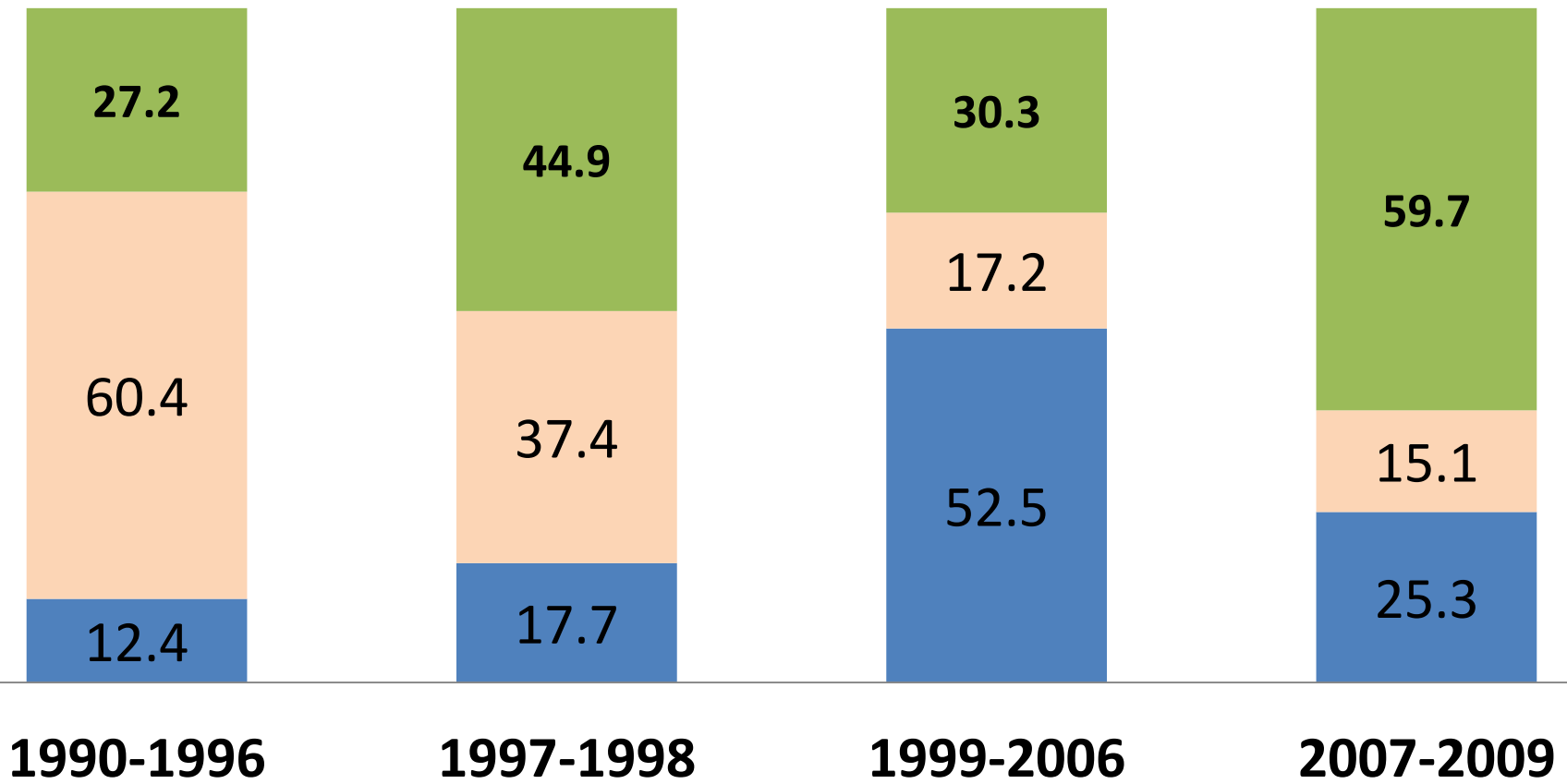
# An anatomy of Thailand's financial crisis

- High economic growth in Thailand in the early 1990s also contributed to the surge in capital inflows.
- Finally, the measures undertaken to establish Thailand as a regional financial center introduced short-term capital flows through offshore borrowings by the nonbank private sector.

# Changing structure of capital flows

% of total

■ FDI   ■ Loans   ■ Portfolio investment



# Dutch disease

- The surge in capital inflows caused a Thai case of the so-called “Dutch disease”, which results in the appreciation of the real exchange rate and a consequent reduction in international competitiveness.

# Same disease, different origins

- In the Dutch disease, the current account deficit worsens since the price of non-traded goods rises faster than that of traded goods
- Capital inflows relax liquidity constraints and stimulate over lending by commercial banks, resulting in a decline in private saving rate.
- Excessive credit booms lead to low quality of bank assets, high non-performing loans (NPL).

# Souring

Chinese commercial banks' non-performing loans

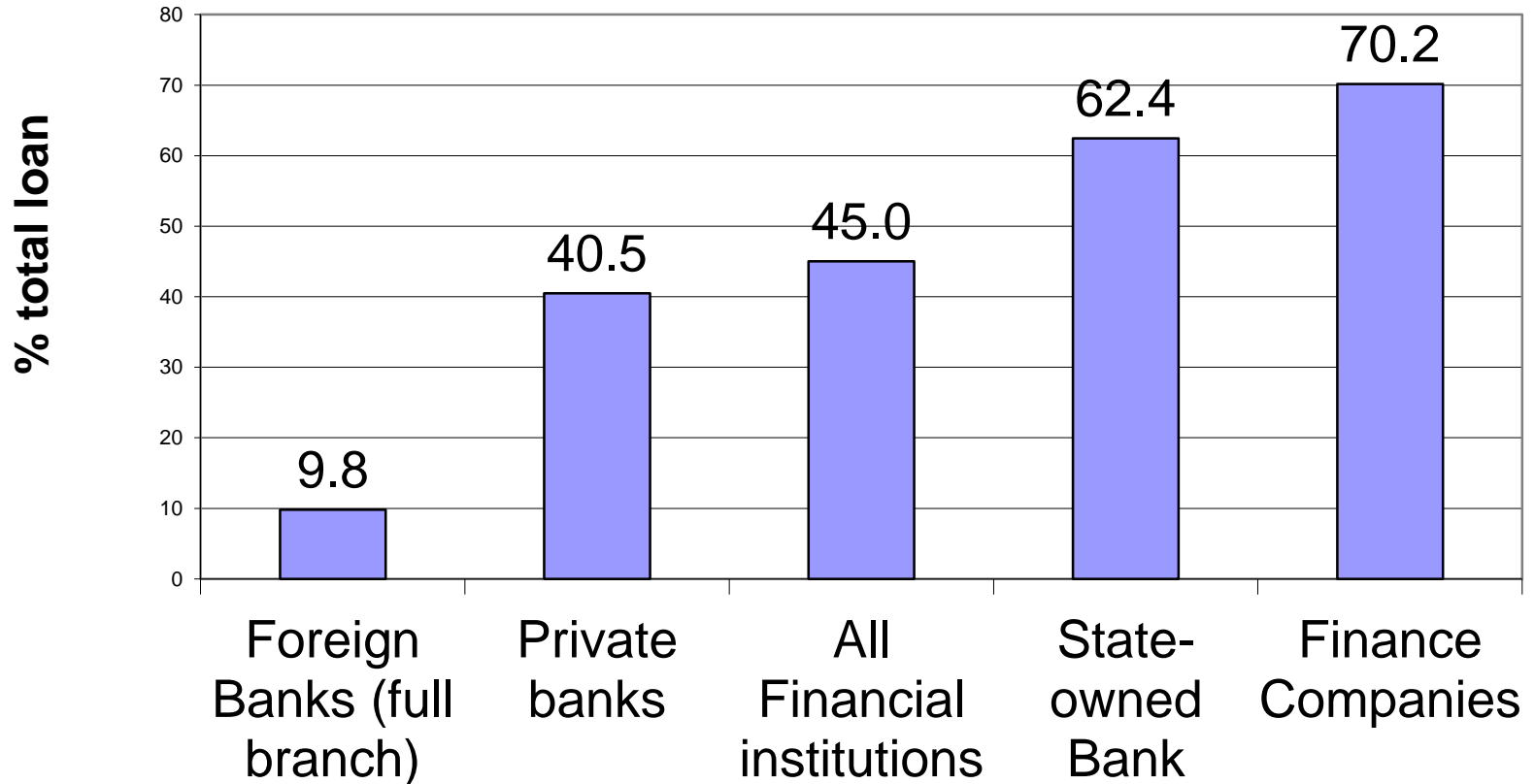
*Yuan trn*

*As % of total loans*



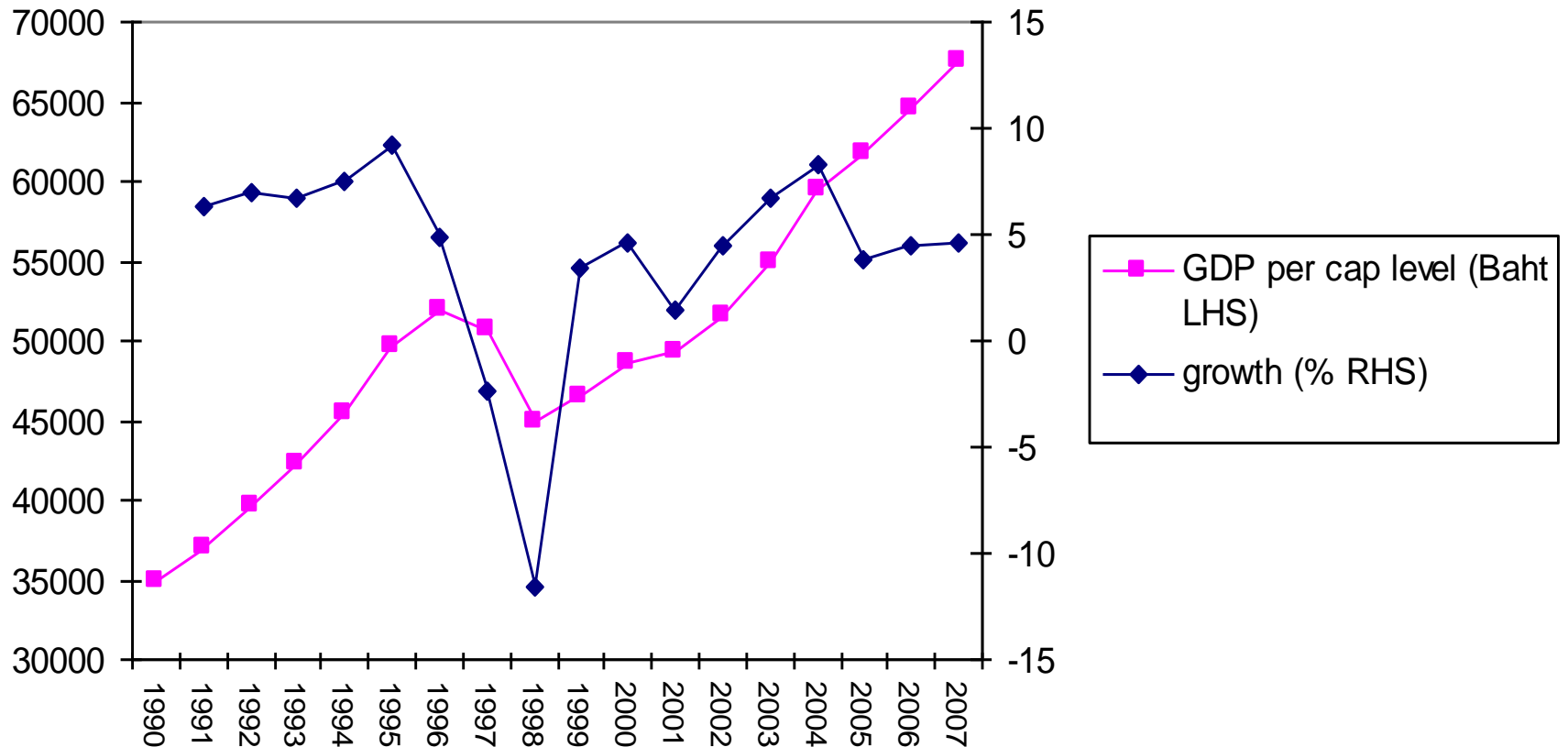
Source: Haver Analytics

# Thailand's Non-Performing Loans in 1998



# The V-shaped recovery

Real GDP per capita



# Shocks and adjustments

- There exist certain **mechanisms** in the structure of the Thai economy that would lessen the impact of the next economic crisis, whether the shock is internal or external.
- These shocks would not have a long-lasting impact and would simply reduce growth temporarily below a stable growth path. (***Too optimistic view?***)
- The adverse impact of shocks was mitigated by the resilient agricultural sector
- Regained the pre-shock growth part in a few years.
- ***Did that kind of mechanism operate in 2009 and 2016?***

# O learned Thailand

- The Asian currency crisis followed Thailand's decision to float the baht in July 1997.
- What could have been done to prevent the crisis?
- What went wrong?
- There are various hypotheses explaining the crisis.

# The original sin

- The original sin?
- Developing countries are not born with mature capital markets; no local currency bond markets;
- Therefore they rely on bank lending for financing investment.
- With capital flight, bank credit contracted, leading to collapses in investment and consumption.

# The impossible trilemma

- A country cannot possibly have all of the following three scenarios:
  - (1) fixed exchange rate,
  - (2) open capital account (free flows of capital)
  - (3) independent interest rate from the world markets' rate (efficient monetary policy)

The country can choose just two of the three impossible trilemma.

# There are two sides of a coin

- Thailand's experience of currency crisis shows that capital inflows can have both positive and negative impacts.
- Thailand should have allowed the baht to appreciate during the booms and stratified with a lower growth rate.
- Even if appreciating currency discourages exports, it is better live with the resulting lower output growth and lower level of foreign debt.

# Premature liberalization

- Capital control relaxation undertaken when bank supervision and financial regulations are not sufficiently stringent can lead to over-borrowing and inefficient lending.
- A gradual approach to capital account liberalization should be adopted instead.
- Since international capital flows are many times larger than international trade flows, when a country relies too heavily on short-term foreign debt to finance a current account deficit, it is impossible for the central bank to defend a fixed exchange rate for very long-let alone to inflict wounds on currency speculators

# Accountability is an issue here

- Thailand also learned that accountability should be well established so that the central bank is not tempted to engage in behavior that is akin to gambling in order to get out of a crisis.

# The labor market

- The flexibility of wage rates in Thailand helped mitigate the damaging effect of a sharp fall in output in the aftermath of currency crisis.
- What if downward rigidity exists?
- Unemployment had declined as the economy gradually recovered.

# Inflation decelerated after 1998

- Inflation remained subdued compared with global inflation.
- The exchange rate was stabilized and appreciated gradually.
- The resulting fall in domestic interest rates (lower inflationary expectations and declined default risks) enabled Thai firms to restructure their foreign debts, thereby reducing the degree of vulnerability to **the global financial crisis (GFC: 2007-2009)**.

# Responses in the agricultural sector

- The agricultural sector has been supporting the Thai economy by generating a high income through out the early 2000s.
- Agricultural output responded positively to high prices for world commodities.
- The agricultural sector generates demand for manufactured products and provides a steady pool of labor for the manufacturing and service sectors.
- It can act as a shock absorber during the time of recession: no body dies of starvation.

# Dynamism of the industry sector

- Export-oriented industries had raised output level far above the pre-crisis period.
- These industries were able to respond to the growing demand generated by the upturn in the business cycle.
- **The role of foreign direct investment is crucial to the industrial development** in Thailand.
- The consistently open policy towards FDI has contributed to continued flows of **technology transfer** and **spillover effect** into local industries.

# Growth and Volatility by sector

1990-2007

	Agriculture	Industry	Services
Growth ( $\mu$ )	1.8	6.8	4.6
SD ( $\sigma$ )	5.7	6.5	4.9
$\sigma / \mu$	<b>3.2</b>	0.95	1.1
Correlation coefficient between the service sector)	-0.12	0.91 <i>services and industry moved together</i>	

# Changing vs. switching expenditure policy

- To restore both external and internal balances, domestic demand (sum of consumption, investment and public spending) and the exchange rate must be allowed to play an equilibrating role .
- To reduce the current account deficit:
  - (1) imports must be reduced through output contraction (cut down domestic absorption);
  - (2) exchange rate must depreciate to switch spending from imports to domestic goods.

# Export Demand Function

## Substitution and Income effects

$$\ln(X) = \alpha - \beta \cdot \ln[(P_T/e)/P_w] + \gamma \ln(Y_w) + v$$

$\gamma$  = income elasticity of demand for exports

$\beta$  = price elasticity of demand

$e$  = baht/usd

$P_T$  = Thailand's export price (in baht) index

$Y_w$  = income,  $P_w$  = world price index

Price and income elasticities of demand for Thailand's Exports from the rest of the world

# Import Demand Function

## Income and substitution effects

$\tau$  = Tariff rate

$P_m$  = import price in USD

$$\ln(M) = \mu - \theta \ln[(1 + \tau)(eP_m/P_T)] + \eta \ln(Y_T) + ..$$

Price and income elasticities of demand for Thailand's imports

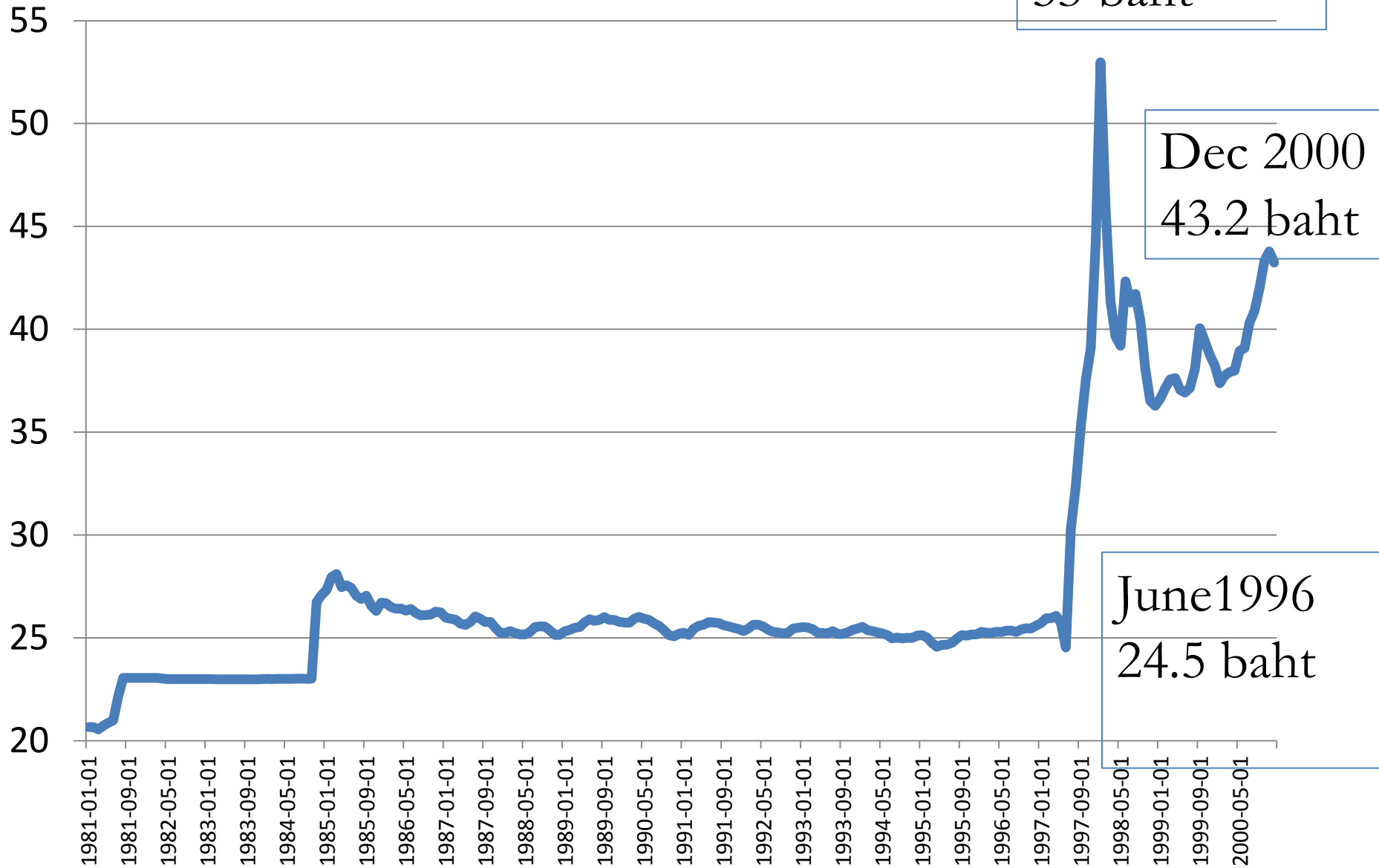
# Before the crisis broke out

- A fixed exchange rate regime created an illusion of a zero foreign exchange rate risk.
- Premature relaxation of capital controls over borrowing in foreign currencies.
- The export shortfall in 1996 and widening current account deficit raised doubt about the sustainability of the baht currency peg.

# Currency and financial crises

- With the baht succumbing to speculative attacks, the Bank of Thailand decided to float the baht on 2 July 1997.
- Without a nominal anchor and given the lack of policy credibility, the value of the baht fell 56% through January 1998.
- This large currency depreciation aggravated the foreign debt burden, causing a credit crunch, bankruptcy, and financial disintermediation.

# Currency Crisis: THBUSD



January 1998  
53 baht

Dec 2000  
43.2 baht

June 1996  
24.5 baht

## It is a matter of confidence

- The loss of consumer and business confidence stemming from the expected recession exacerbated the contraction in consumption and investment.
- Until the exchange rate rebounded to the level determined by economic fundamentals, the economy will continue this debt-deflation episode.

# Pigou Effect

- $C = f(\text{Net Wealth}/P)$ ;  $f' > 0$ .
- In theory, as prices fall during recession, consumption can increase as real wealth increases.
- In practice, prices do not fall large enough to stimulate consumption to move the economy out of recession.
- Irving Fisher (1933) Debt-deflation theory of great depressions, *Econometrica* (1) no.4

# Debt is negative wealth

- $C = f(\text{Debt}/P)$  ,  $f' < 0$
- If net wealth is negative due to rising foreign debt caused by massive devaluation, real debt burden increases when price level falls.
- Hence price deflation increases real value of debt, leading to further contraction of consumption and contraction of output.

# FX risk, what risk?

- A fixed exchange rate regime can create an illusion of a zero-exchange rate risk, while premature relaxation of capital controls can encourage over-borrowing in foreign currencies.
- Currency and maturity mismatching of Thai commercial banks generated their overexposure to external shocks.

# Debt-deflation episode in Thailand

- Without a nominal anchor and given the lack of policy credibility, the value of the baht fell by 56 % through to January 1998.
- This large currency depreciation aggravated the foreign debt burden, causing a credit crunch, high interest rates, bankruptcy, and financial disintermediation.

# Deflation can be destabilizing

- The loss of consumer and business confidence stemming from the expected recession exacerbated the contraction in investment and consumption.
- Until the exchange rate rebounds to a level determined by economic fundamentals, the economy will continue this debt-deflation episode.

# Capital inflows Update: 2005-2015

- Financial accounts

Liabilities = inflows, assets outflows

(A) Depository corporation (banks, finance companies)

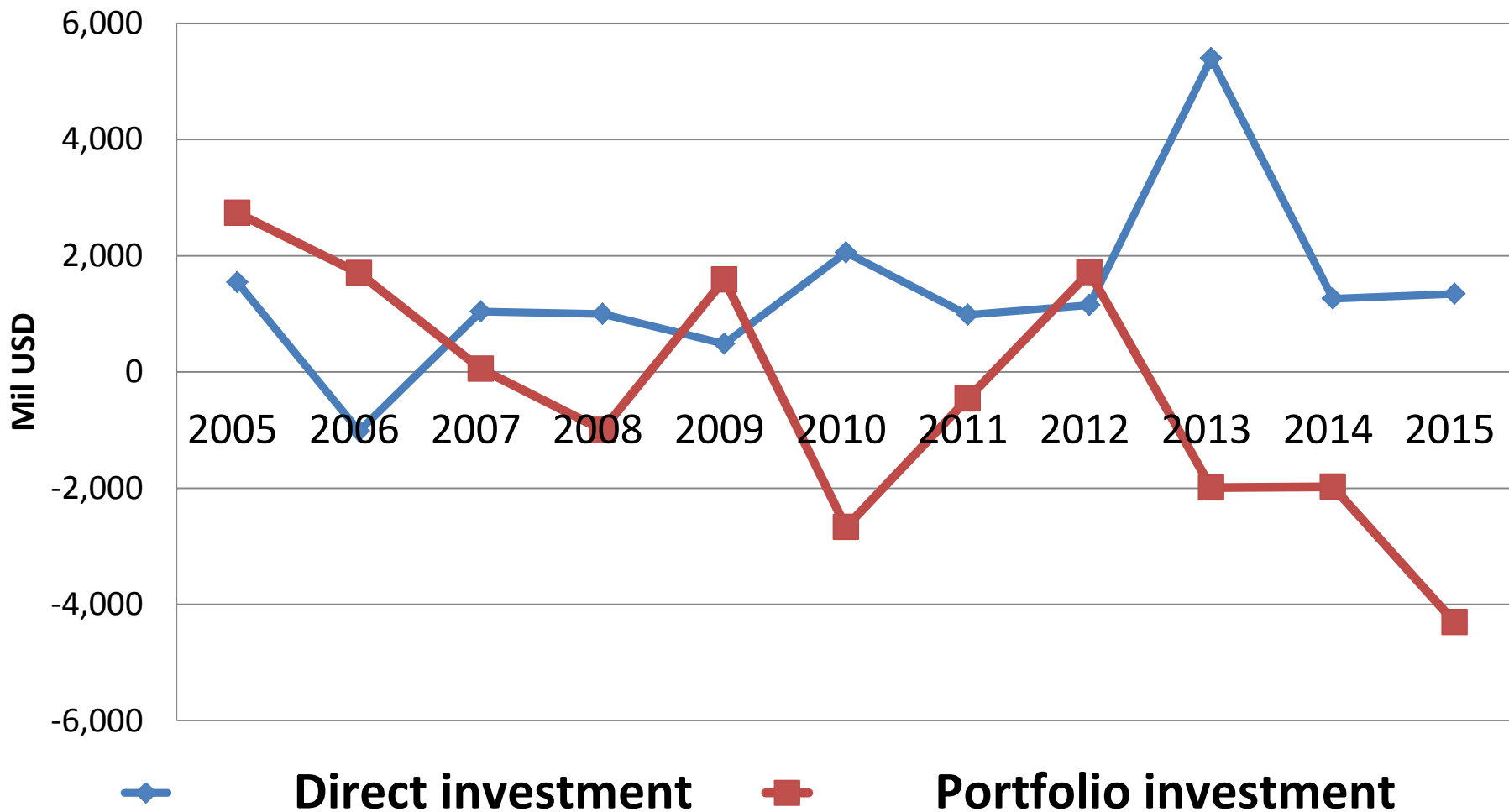
(B) non finance firms, households, and others

FDI=foreign direct investment

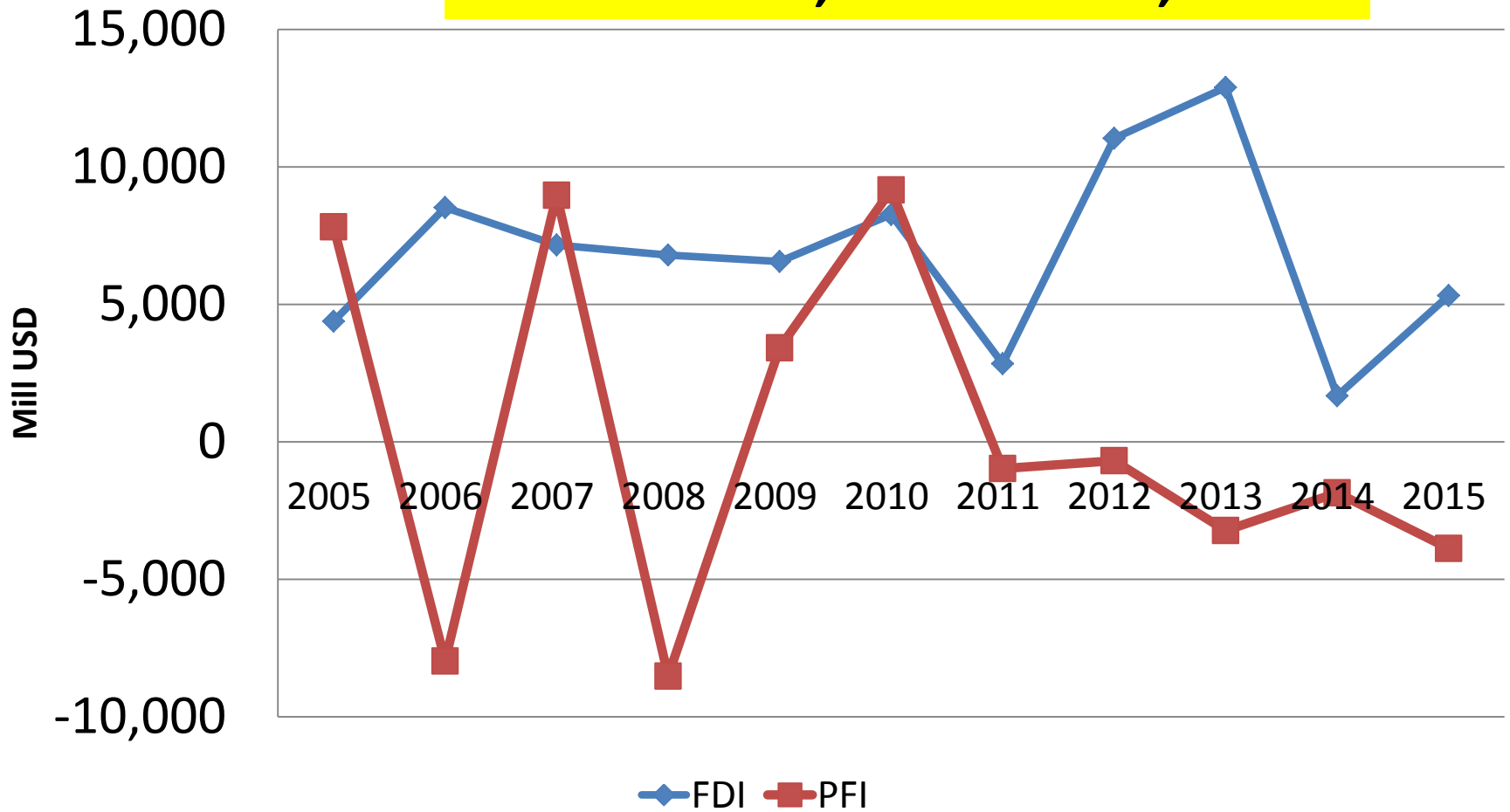
FPI=foreign portfolio investment

# Financial Account (A)

## Liabilities of Depository Corporations



**Financial Account (B)**  
**Liabilities**  
**Non-financial, households, others**



# Review questions

- How did Thailand cope with the Global Financial Crisis (GFC)?
- Did Thailand learn any lessons from the past mistakes?
- How resilient is the Thai industry when facing external shocks?

# Review questions

- What are social implications of Thailand's economic fluctuations?
- How important is the role of macroeconomic policy management for long term growth?