

EE460: Thai Economy

Coping with the 1998 crisis

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Lecture 5

- We examine the consequences of capital inflows and outline Thailand's macroeconomic management and sustainable growth. The roots of the 1997 financial crisis are exposed. The V-shaped recovery was evident.
- Debt deflation episode and the underground economy are explained.
- “Economic crises and debt-deflation episode in Thailand, ***Asian Economic Bulletin***, December. 1998.

20 years after the AFC

	July 1997	July 2014	August 2017
Baht/dollar	55.5	32.6	33.23
International Reserves	\$30 million	\$167.5 billion	\$185.5 billion

Main Themes

1. Consequences of capital inflows
2. Disequilibrium adjustment mechanisms
3. Sectoral analysis
4. Trade elasticities
5. Debt deflation

1. Consequences of Capital Inflows

CONCLUDING REMARKS

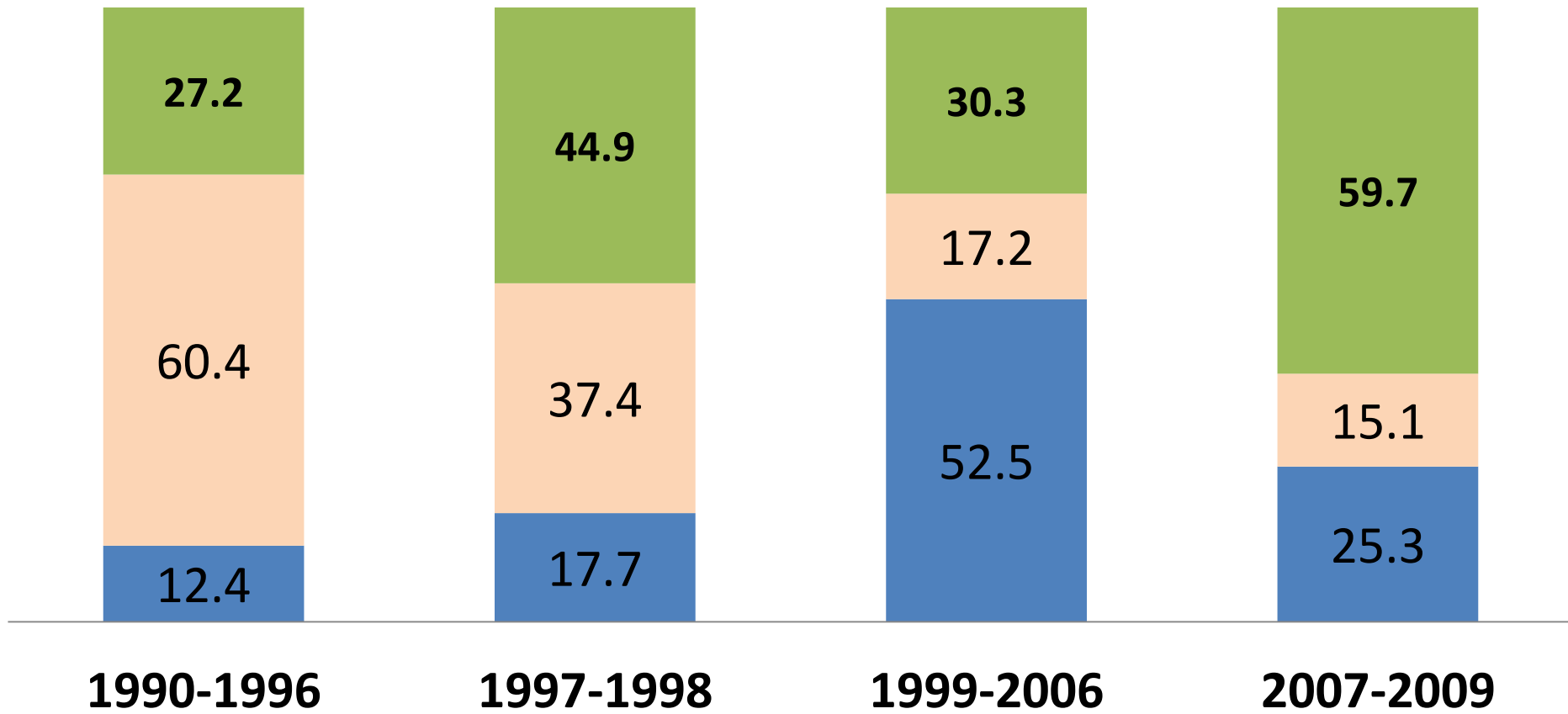
A surge in capital inflows into Thailand began in the late 1980s and continued unabated until 1996. The flows brought high economic growth and a surplus in the balance of payments. The rise in capital inflows stemmed from external and internal factors. A decline in world interest rates widened the interest rate differentials, inducing excessive foreign borrowings. Also, domestic financial liberalization increased the sensitivity of capital flows to the interest rate differential. 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 centre induced short-term capital flows through offshore borrowings by the nonbank private sector.

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 external competitiveness. In the Dutch disease, the current account deficit worsens since the price of non-traded goods rises faster than that of traded goods. Moreover, capital inflows relax liquidity constraints and stimulate over lending by commercial banks, resulting in a decline in the private savings rate. Although capital flows

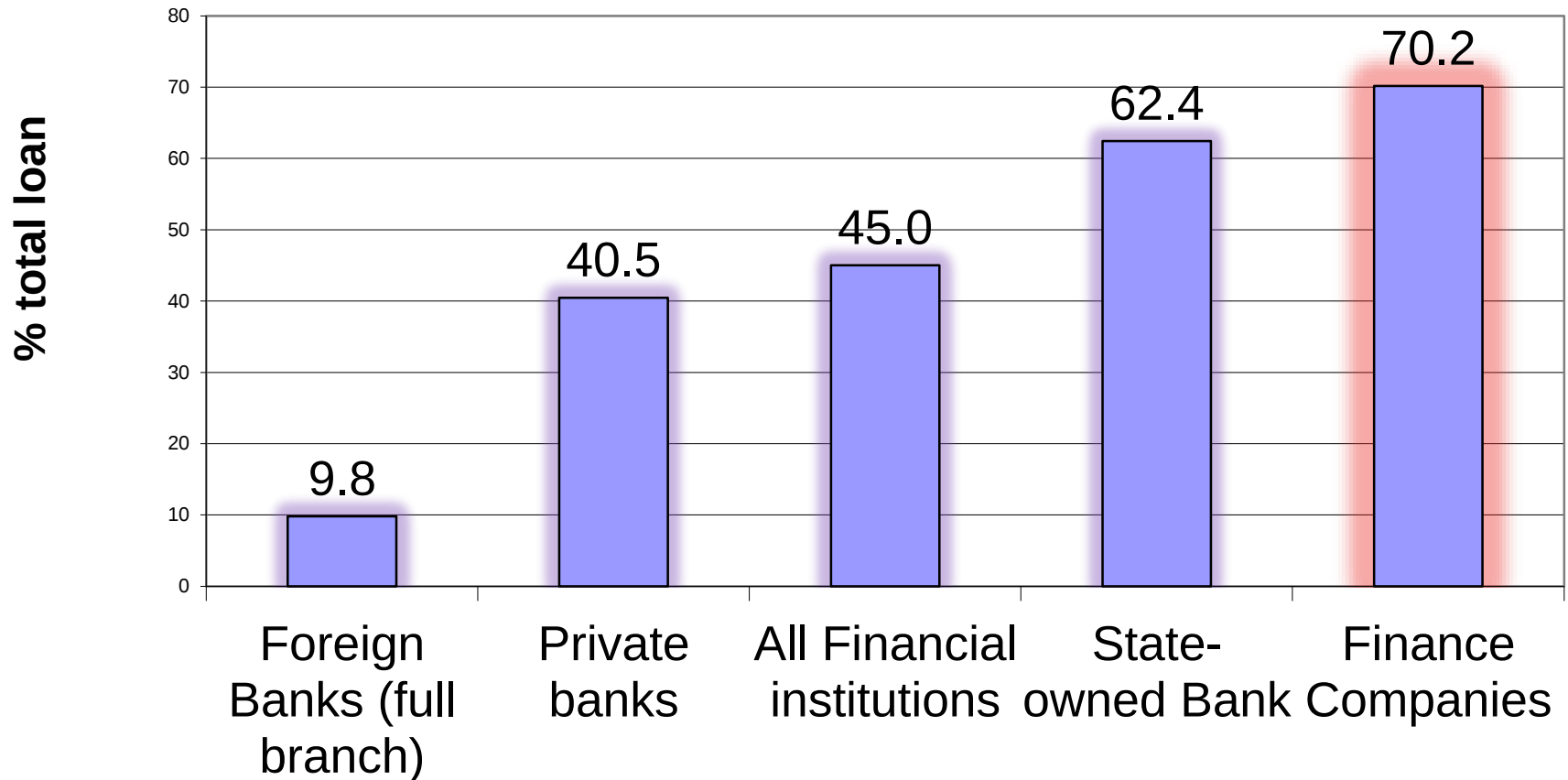
Changing structure of capital flows

% of total

■ FDI ■ Loans ■ Portfolio investment



Non-performing loans in 1998



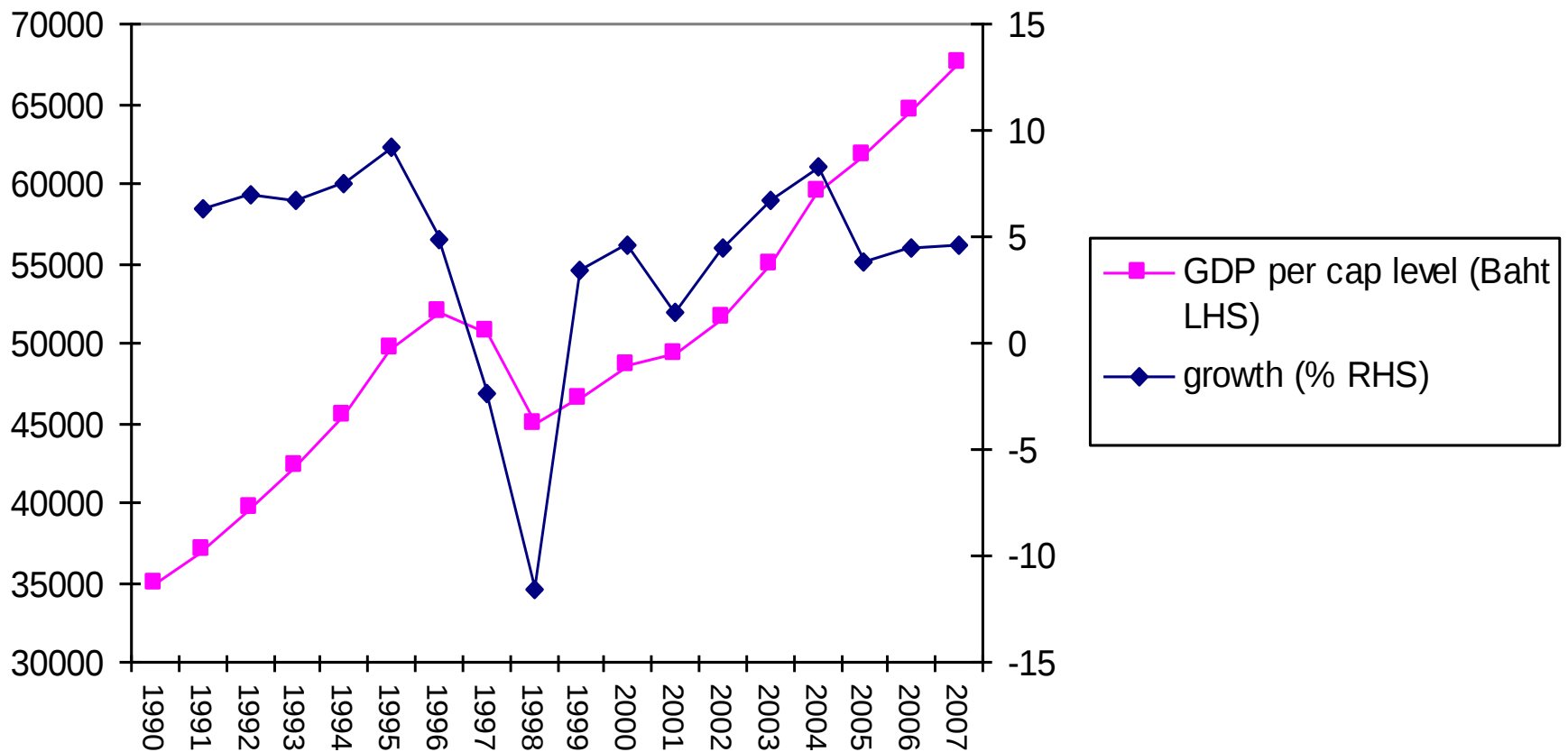
Lessons from the Currency Crisis

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 boom years and should have been satisfied with a lower growth rate. Even if appreciating currency discourages exports, it is better to live with the resulting lower output growth rate and lower level of foreign debt. In addition, 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. Furthermore, 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. 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.

January 1998

The V-shaped recovery

Real GDP per capita



2. Adjustment mechanisms to financial shocks

- 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”.
- The above statement is irrelevant when the rule of law has been trashed by military juntas.
- The adverse impact of the shocks was mitigated by the resilient agricultural sector
- Thai economy regained the pre-shock growth path in a few years.

2.1 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 declined as the economy gradually recovered.
- Inflation remained subdued compared with global inflation
- The resulting fall in domestic interest rates enabled Thai firms to restructure their foreign debts, thereby reducing the degree of vulnerability to **the global financial crisis** (2007-2009).

Average monthly wages in manufacturing



SOURCE: TRADINGECONOMICS.COM | BANK OF THAILAND

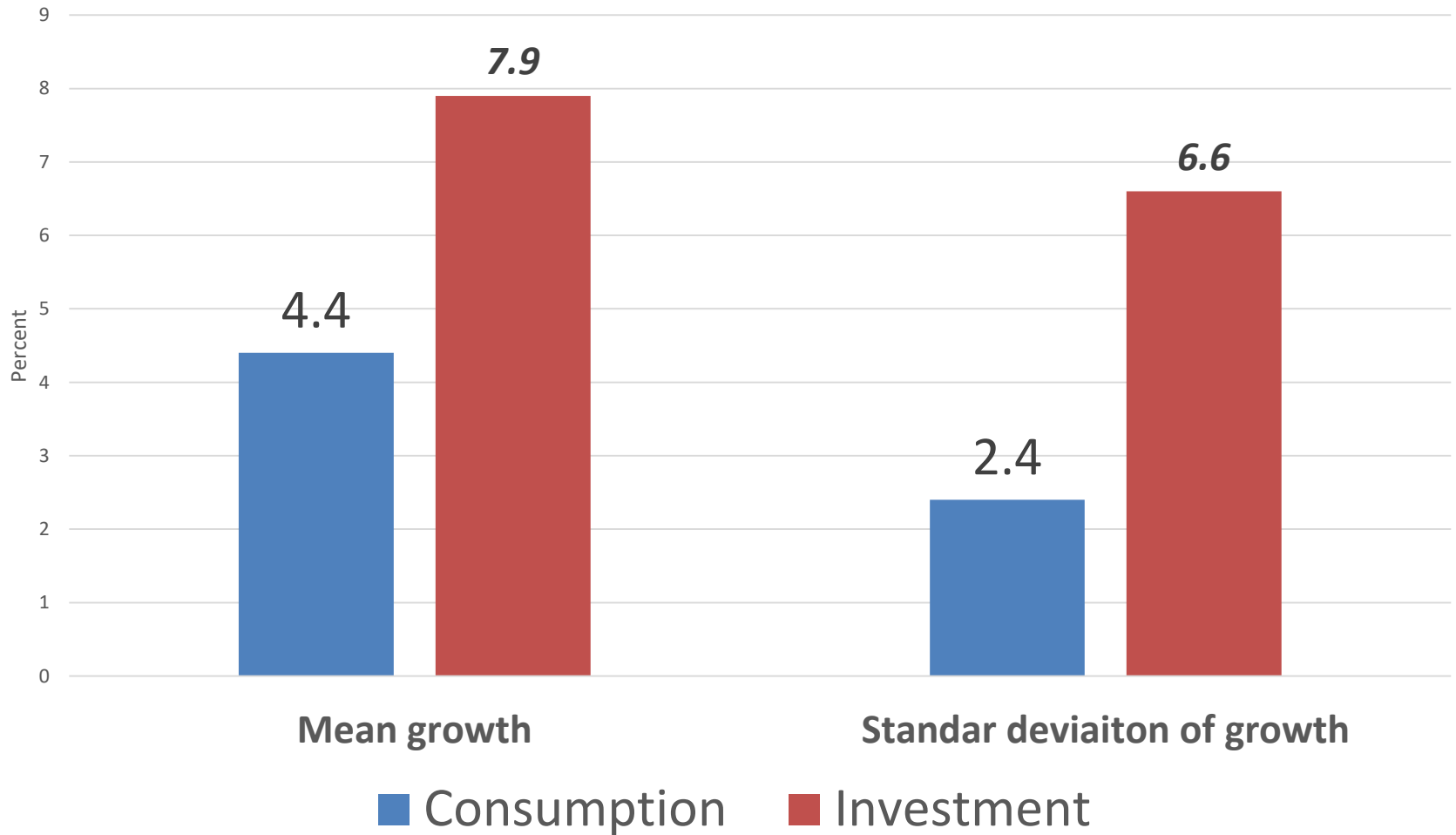
2.2 Agricultural responses

- 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.

2.3 Industrial Dynamism

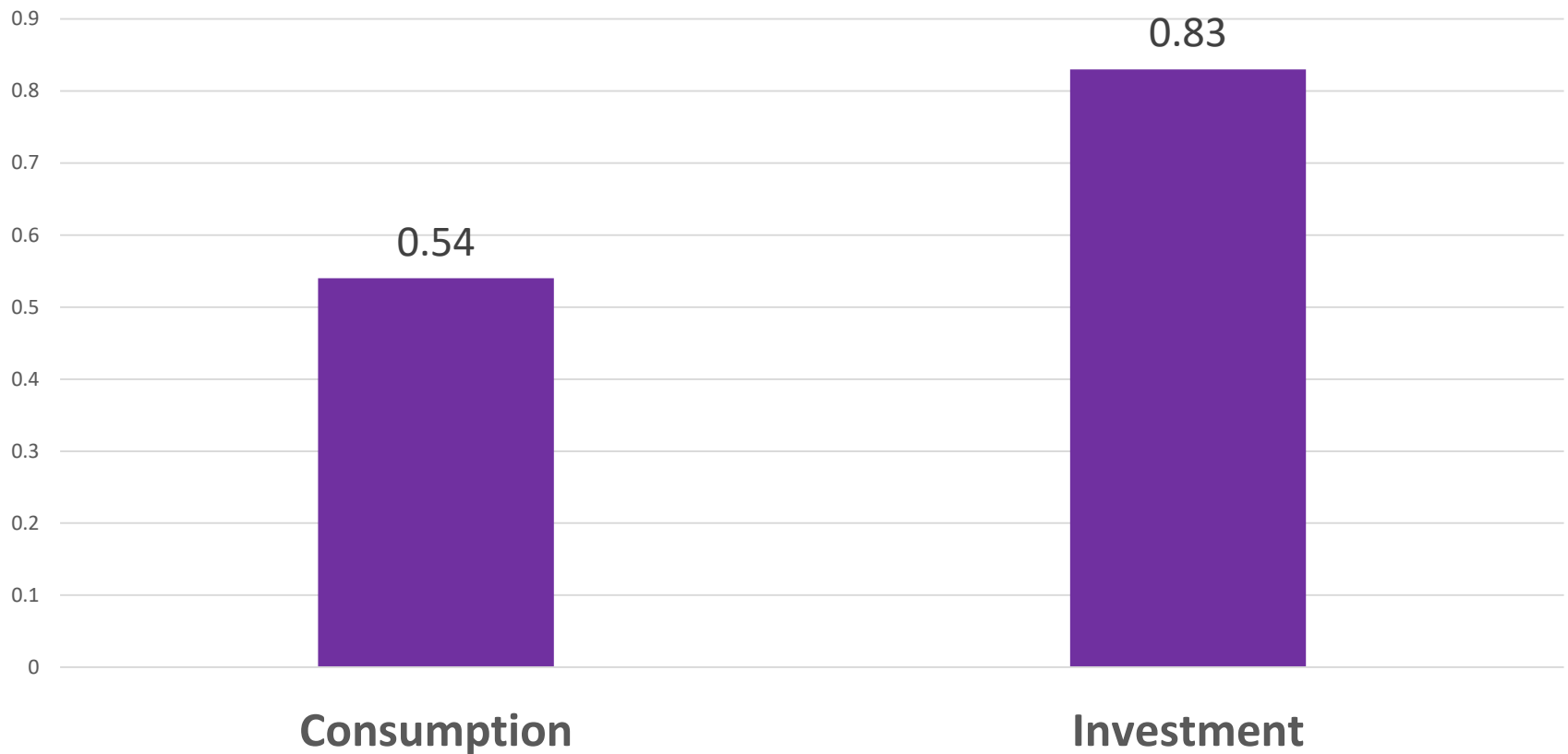
- Export-oriented industries had raised output level far above the pre-crisis period.
- These industries were able to respond to the growing demand generated by the upturn in the business cycle.
- The role of foreign direct investment is crucial to the industrial development in Thailand.
- The consistently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

Growth and volatility Jan 2000-Dec 2008



Consumers vs. Investors

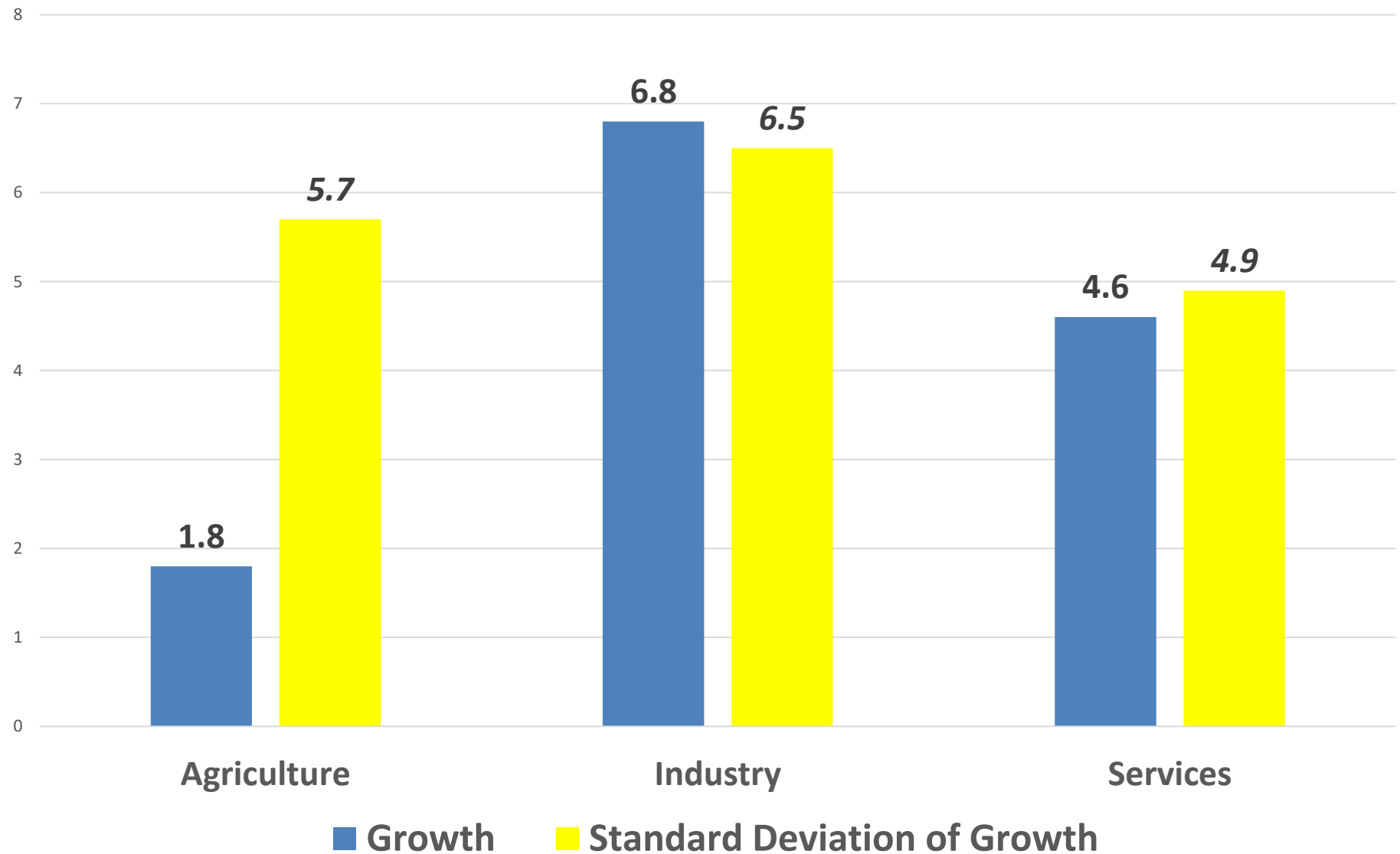
Coefficient of variations



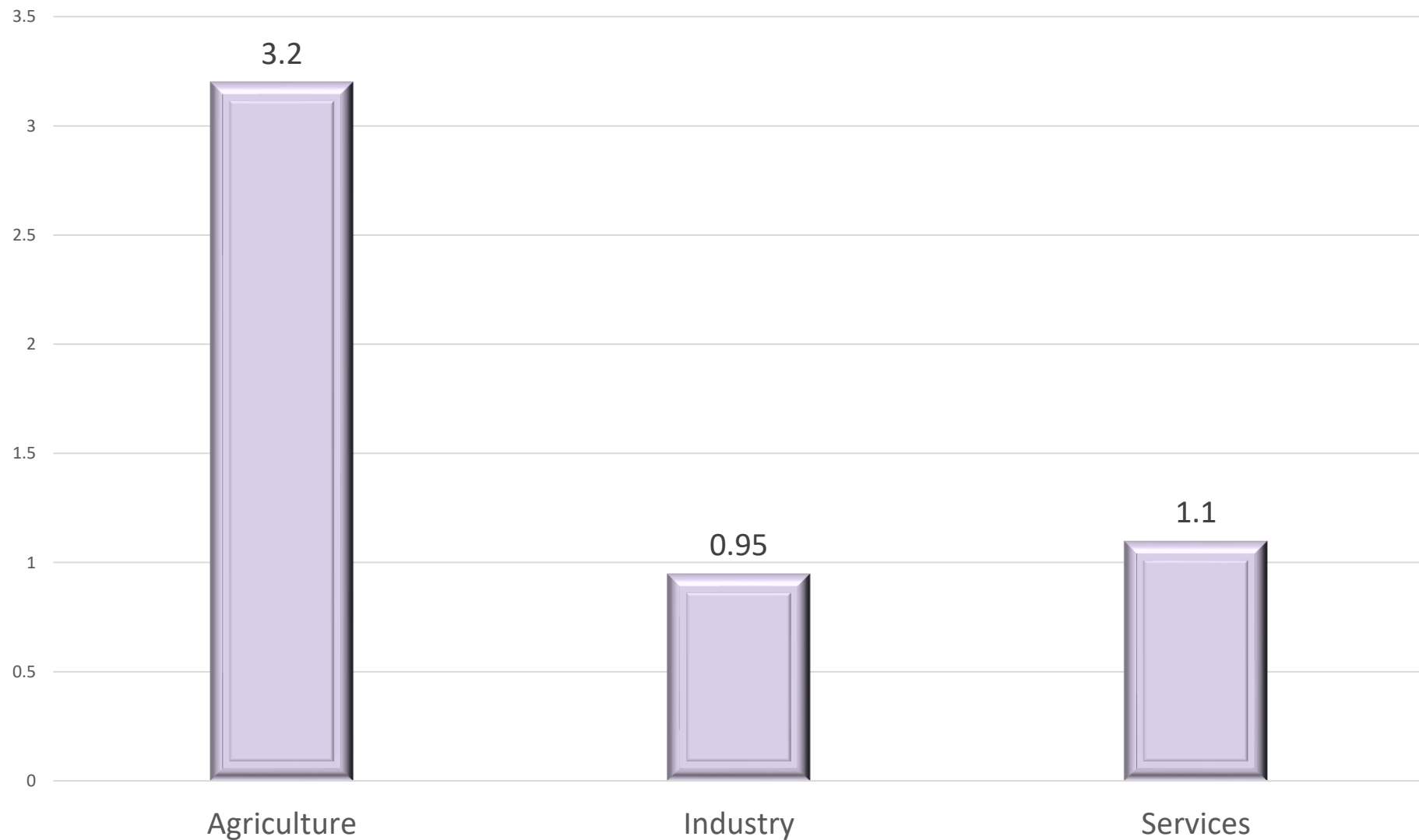
3. Sectoral Analysis

- Agriculture: Lowest growth and highest volatilities
- Industry: Strongest growth and lowest volatilities
- Services: moderate growth and modest vulnerability
- Industry and service sectors are strongly correlated, while agriculture is like an island independent of the other two sectors

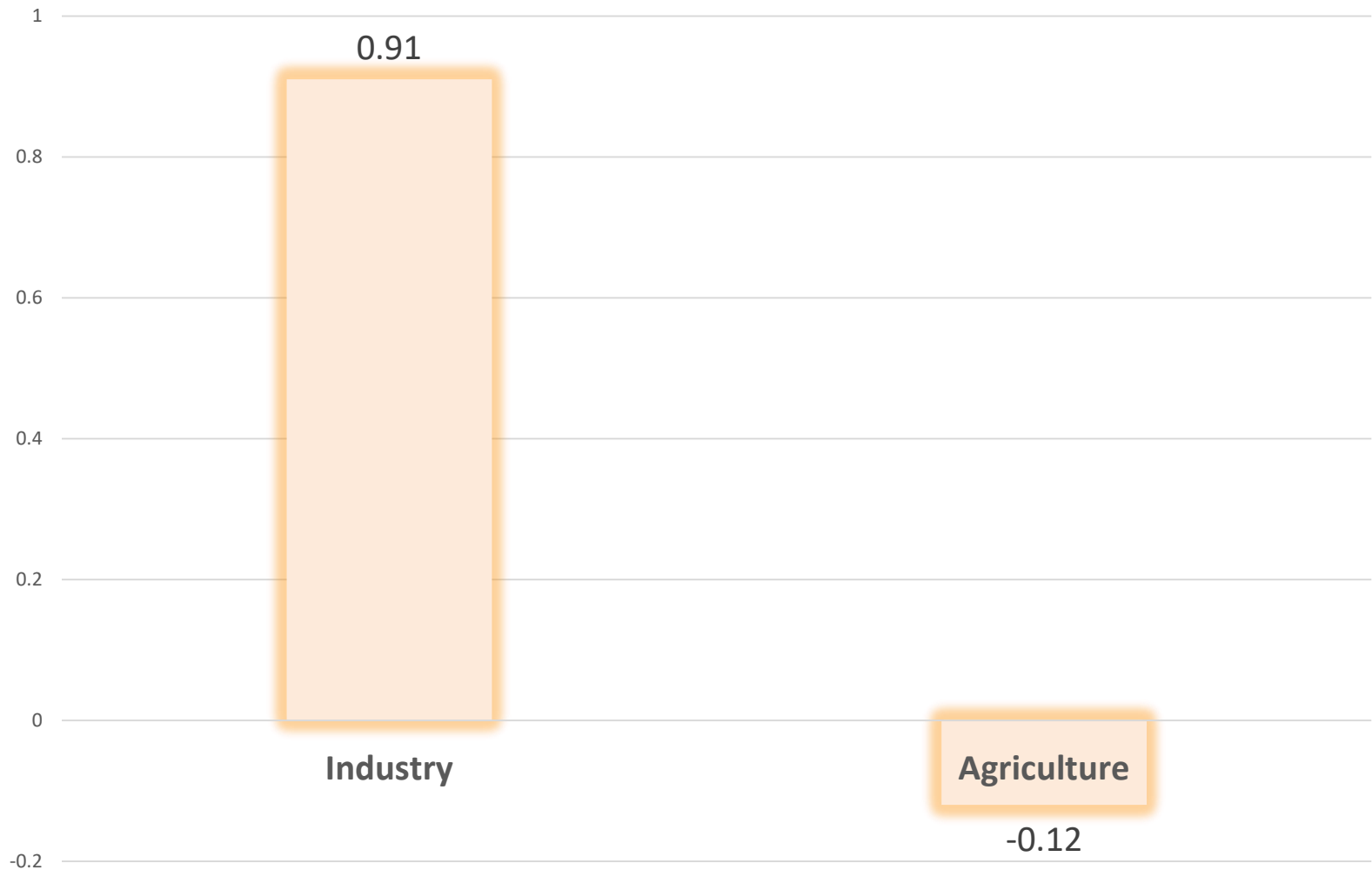
Average and Standard Deviation of Sectoral Growth: 1990-2007



Coefficients of Variations: SD-Mean Ratio



Correlates with the service sector's growth rate



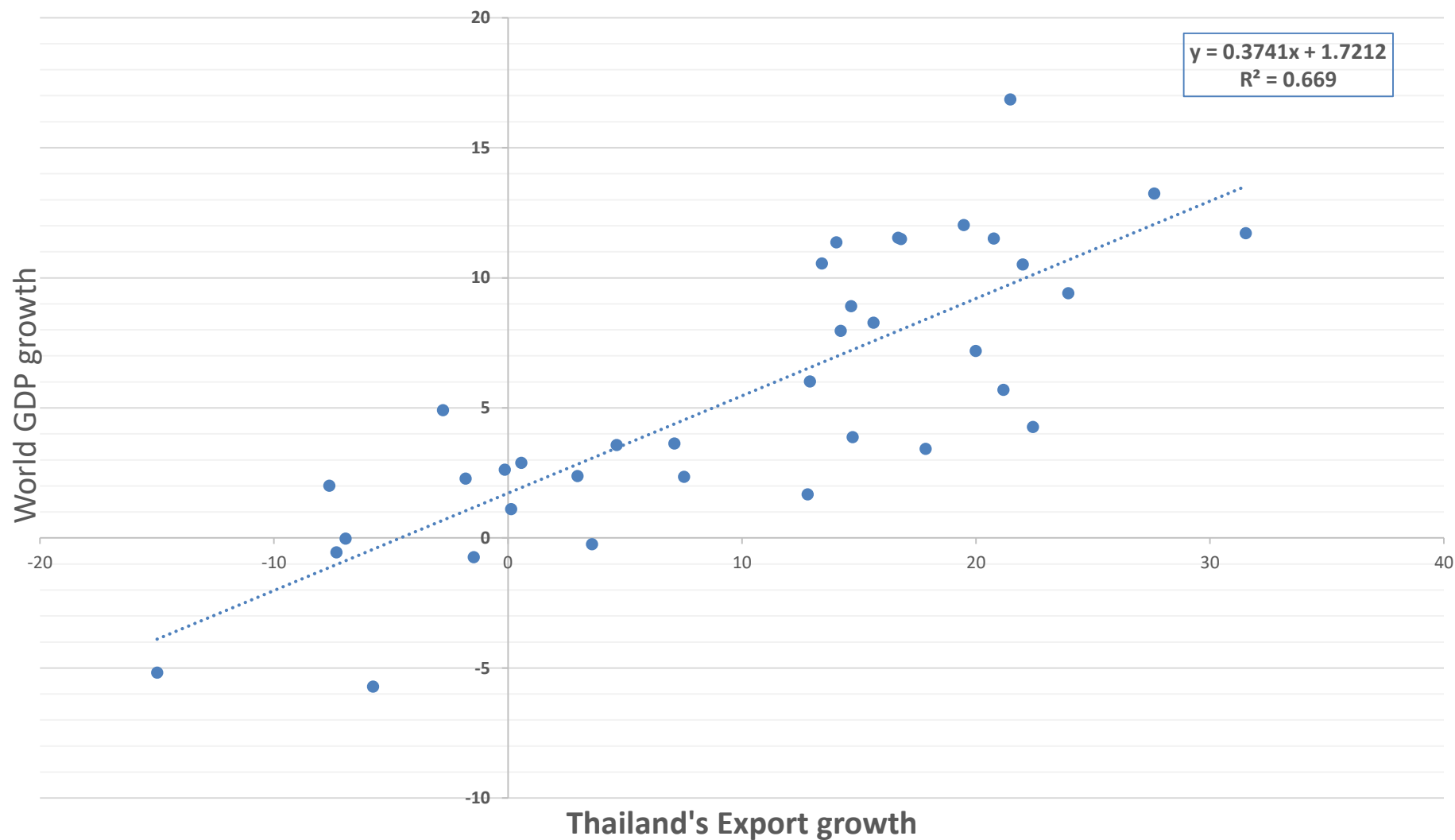
5. Trade Elasticities

- 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.

Expenditure changing vs. expenditure switching policy

- Expenditure change policy is conducted through fiscal and monetary policy to alter the level of aggregate demand to affect net exports
- Expenditure switching policy is conducted by changing the exchange rate, altering tariffs, import and export controls, substituting locally produced goods for imports, switching foreign producers' products for Thailand's products.

World Business Cycle and Thailand's exports 1980-2016



Export Demand Function

Substitution and Income effects

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

γ = income elasticity of demand for exports

β = price elasticity of demand

e = Baht/\$

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

Y_w = world 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

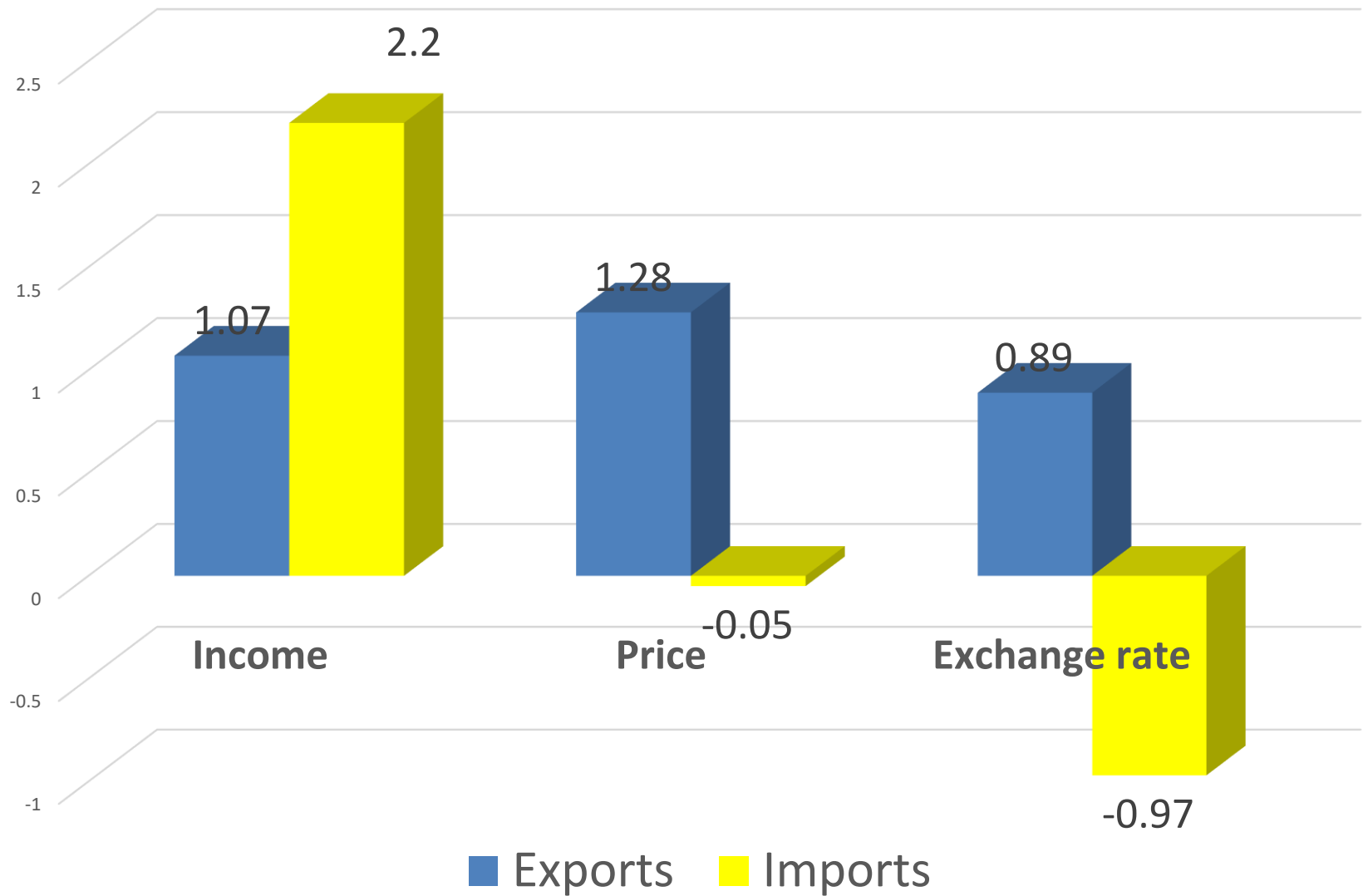
τ = Tariff rate

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

Trade Elasticities: 1980-2016



5. The roots of economic Crisis

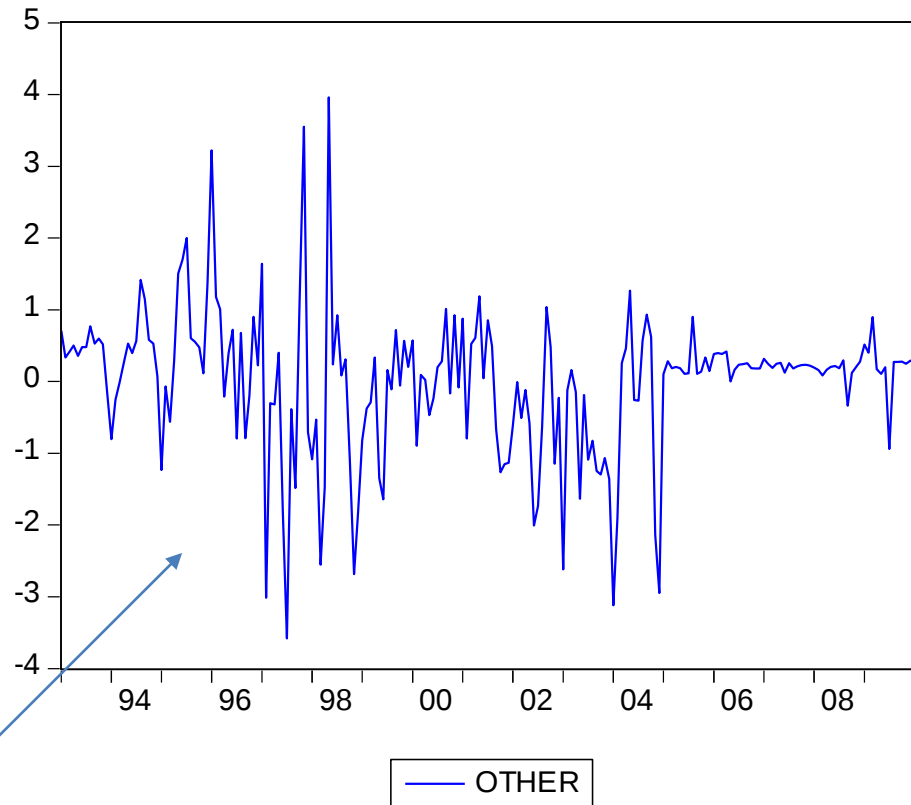
- A fixed exchange rate regime created an illusion of a zero foreign exchange rate risk.
- **Premature relaxation of capital controls** over borrowing in foreign currencies.
- The 1996 export shortfall 996 and widening current account deficit raised doubt about the sustainability of the baht currency 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.

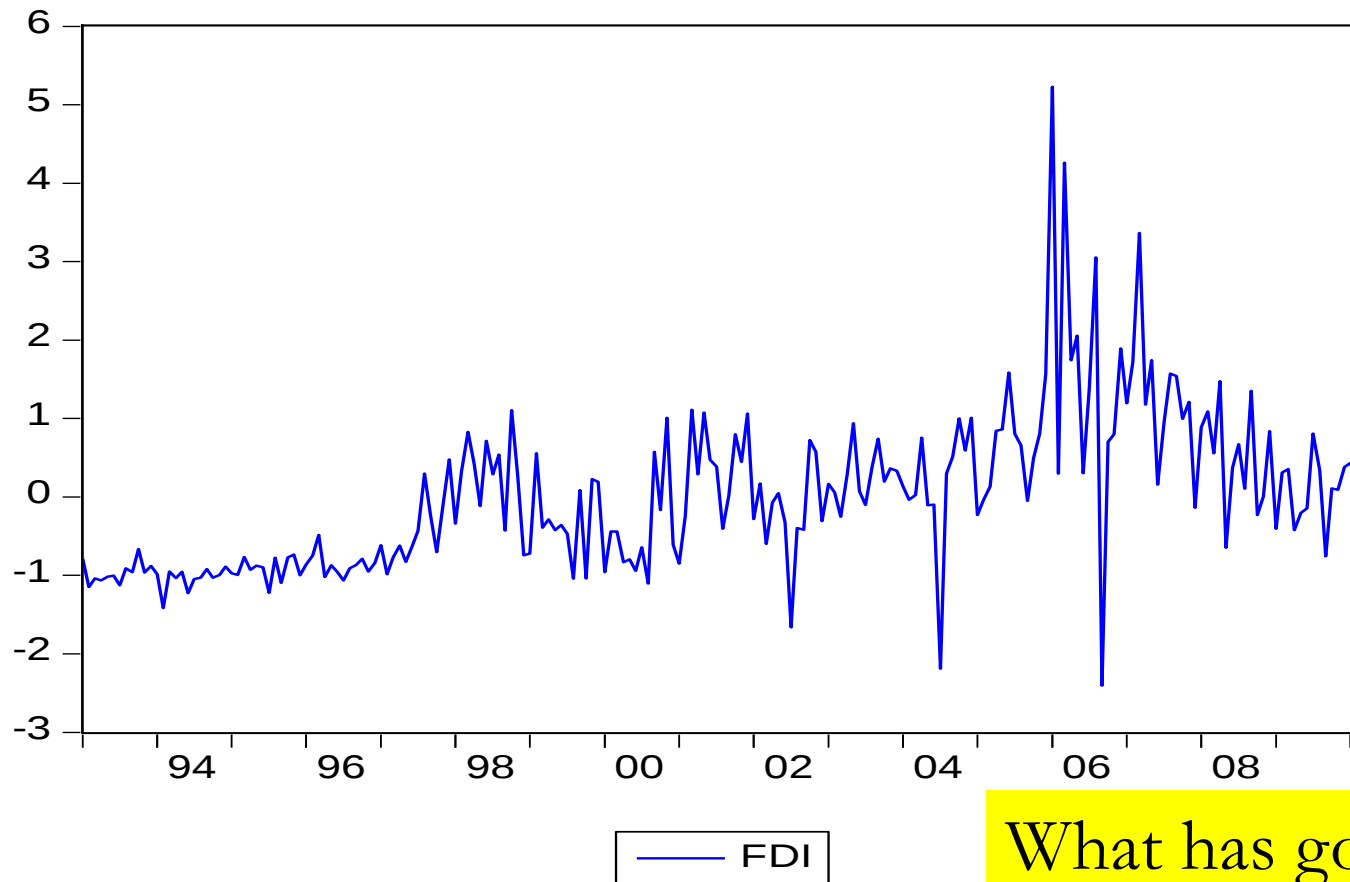
Volatility of other flows

(Nonresident baht account)



Intensifying
fear

FDI Volatility



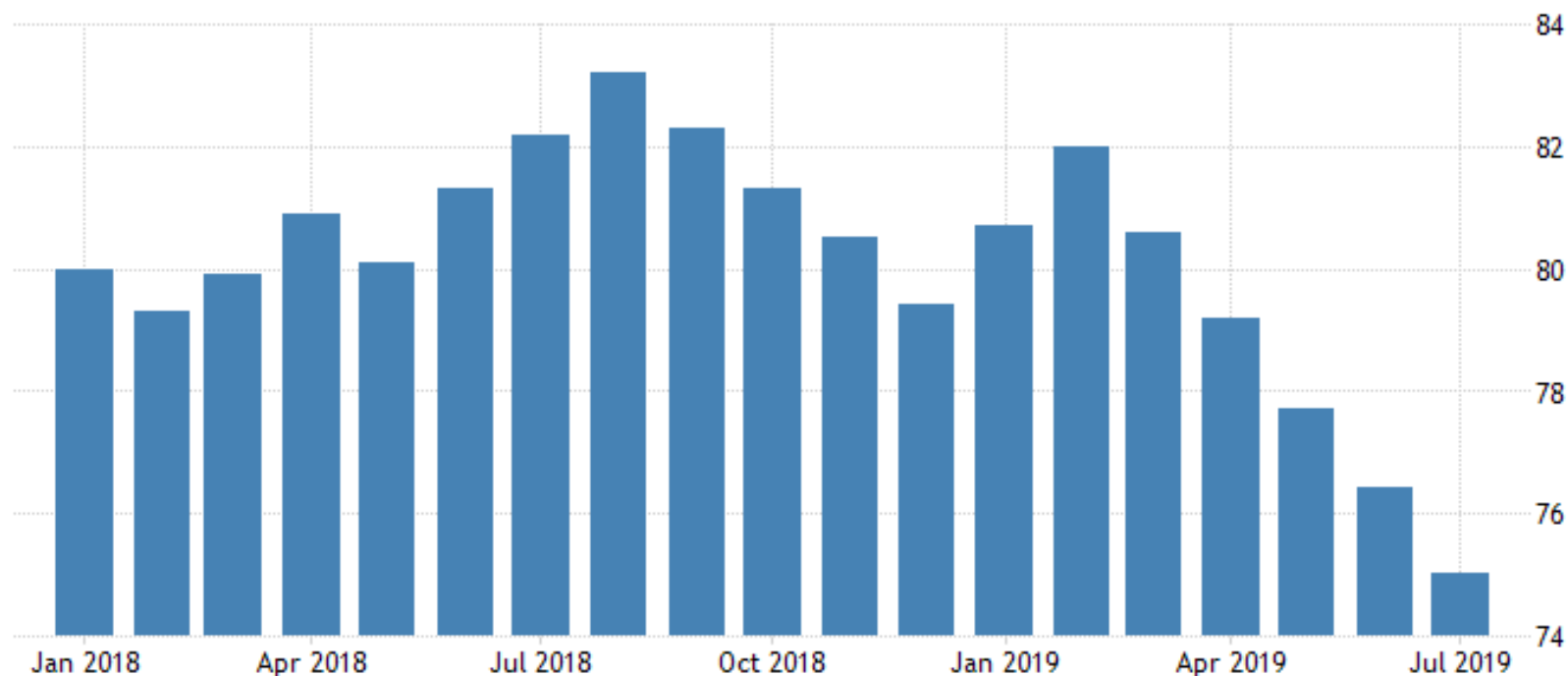
What has gone wrong?

Confidence matters

Investors' mood and consumer 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 would continue this debt-deflation episode.

The University of the Thai Chamber of Commerce's consumer confidence index



SOURCE: TRADINGECONOMICS.COM | UNIVERSITY OF THE THAI CHAMBER OF COMMERCE

Pigou's effect

$$C = f\left(\frac{\text{Net Wealth}}{P}\right)$$

Consumption rises when real net wealth increase.

In theory, as prices fall during recession, consumption would increase in response to increased real wealth, restoring full employment equilibrium.

In practice, prices do not fall large enough to stimulate consumption to move the economy out of recession.

Irving Fisher (1933)

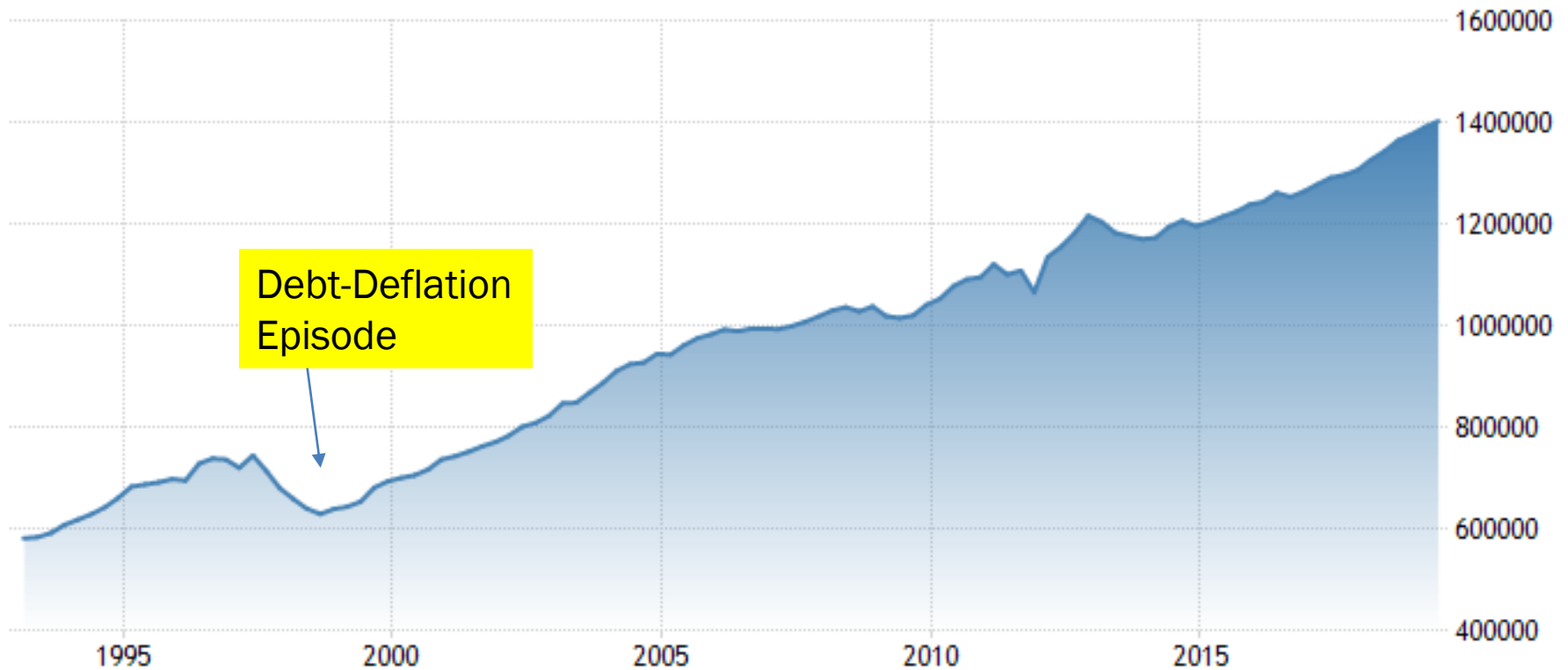
- Debt-deflation theory of great depressions, *Econometrica* (1) no.4
- When net wealth is negative because of rising debt or falling price can reduce private consumption.
- In 1997, debt increased in terms of baht because of massive devaluation, property price fell. The negative wealth effect caused private consumption declined.

Debt is negative wealth

- *Aggregate Demand* = $f(\text{Debt}/P)$
- Price deflation increases the real value of debt, leading to contraction in consumption, investment, and output.
- When household debt is high (80 % of income), it will take longer for the economy to gravitate back to recovery.

Debt deflation episode

(million baht)



SOURCE: TRADINGECONOMICS.COM | NESDB, THAILAND

Debt-deflation episode in Thailand

A fixed exchange rate regime can create an illusion of a zero-exchange rate risk, while premature relaxation of capital controls can encourage overborrowing in foreign currencies. Currency and maturity mismatching of Thai commercial banks generated their overexposure to external shocks. The export shortfall in 1996 and widening current account deficit raised doubts concerning the sustainability of the baht currency peg. With the baht succumbing to speculative attacks, the Bank of Thailand decided to float it on 2 July 1997. 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. 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.

Summary

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2. Disequilibrium adjustment mechanisms
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Review questions

- How did Thailand cope with the Global Financial Crisis (GFC) in 2009? In what way it was different from the AFC in 1998?
- Did Thailand learn any lessons from the past mistakes?
- How resilient is Thailand's industry when facing external shocks?

Review questions

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