Thailand's financial sector

Bhanupong

Lecture 23

Mark Twain

- “It ain't what you don't know that gets you into trouble.
- It's what you know for sure that just ain't so.”

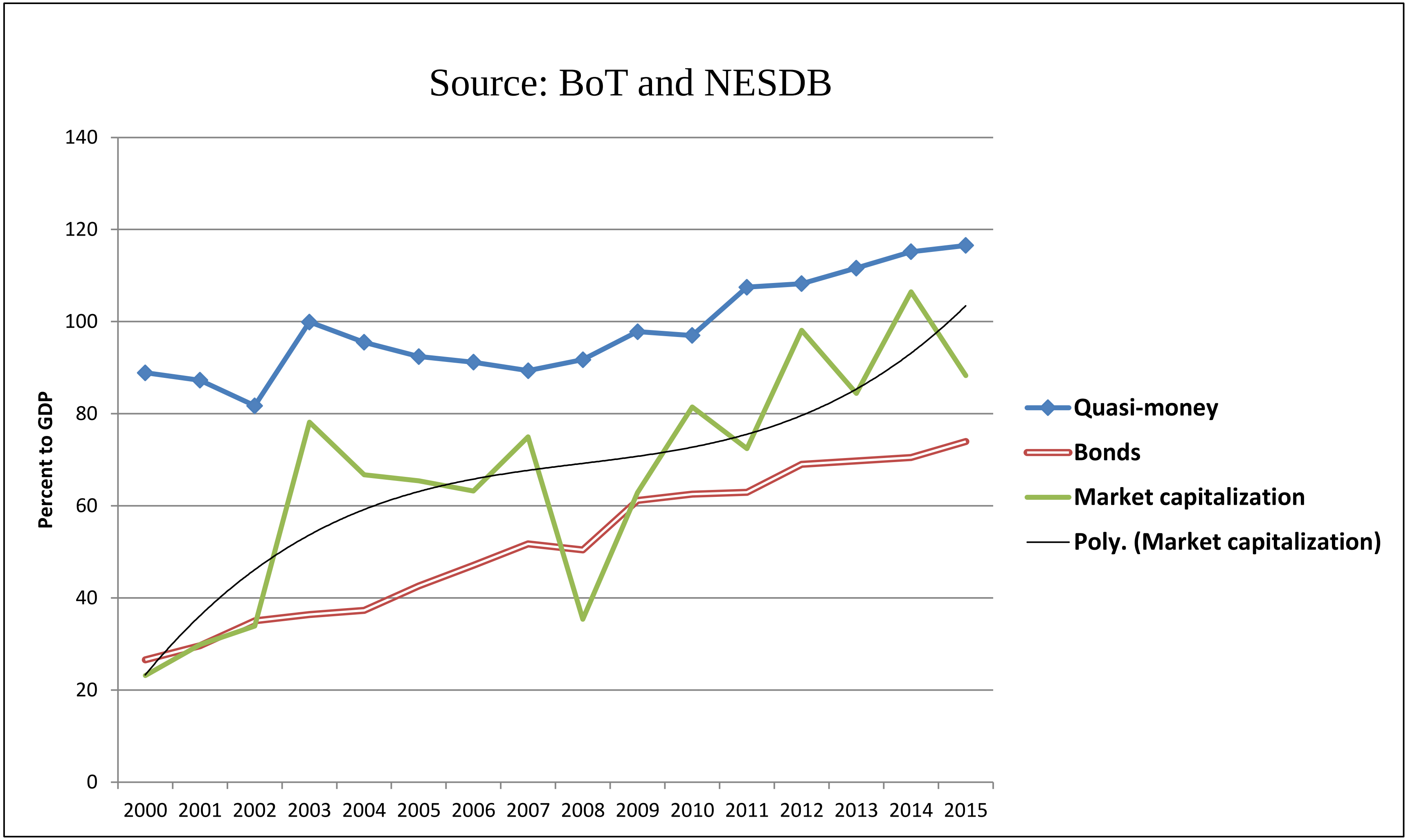
Course Syllabus
Lecture 23: Financial Sector

- We examine the performance of Thailand's financial institutions. The Thai financial sector emerged from the 1998 crisis, has become stronger and resilient, thanks to foreign capital injection, good governance, and strengthened financial regulations.
- What are the consequences of banking consolidation and penetration of foreign banks?
- What factors are responsible for the resilience of Thai banks during the subprime mortgage crisis and the subsequent global recession?

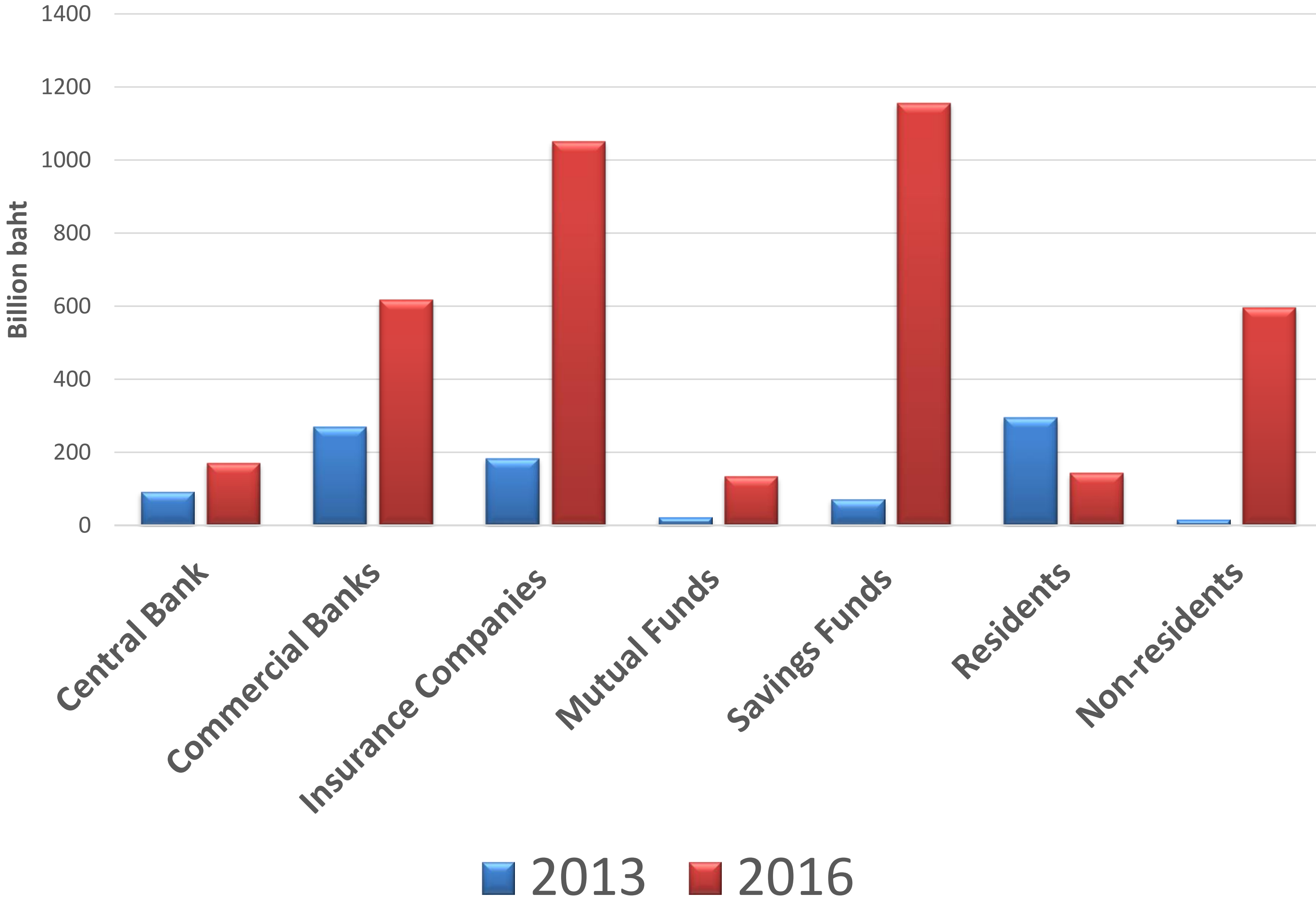
Outline

1. Modes of savings and financing
2. Stock market and commercial banks
3. Good and bad bankers
4. Resilience of the Thai banks
5. Foreign ownership and capital injection
6. Soundness of financial institutions

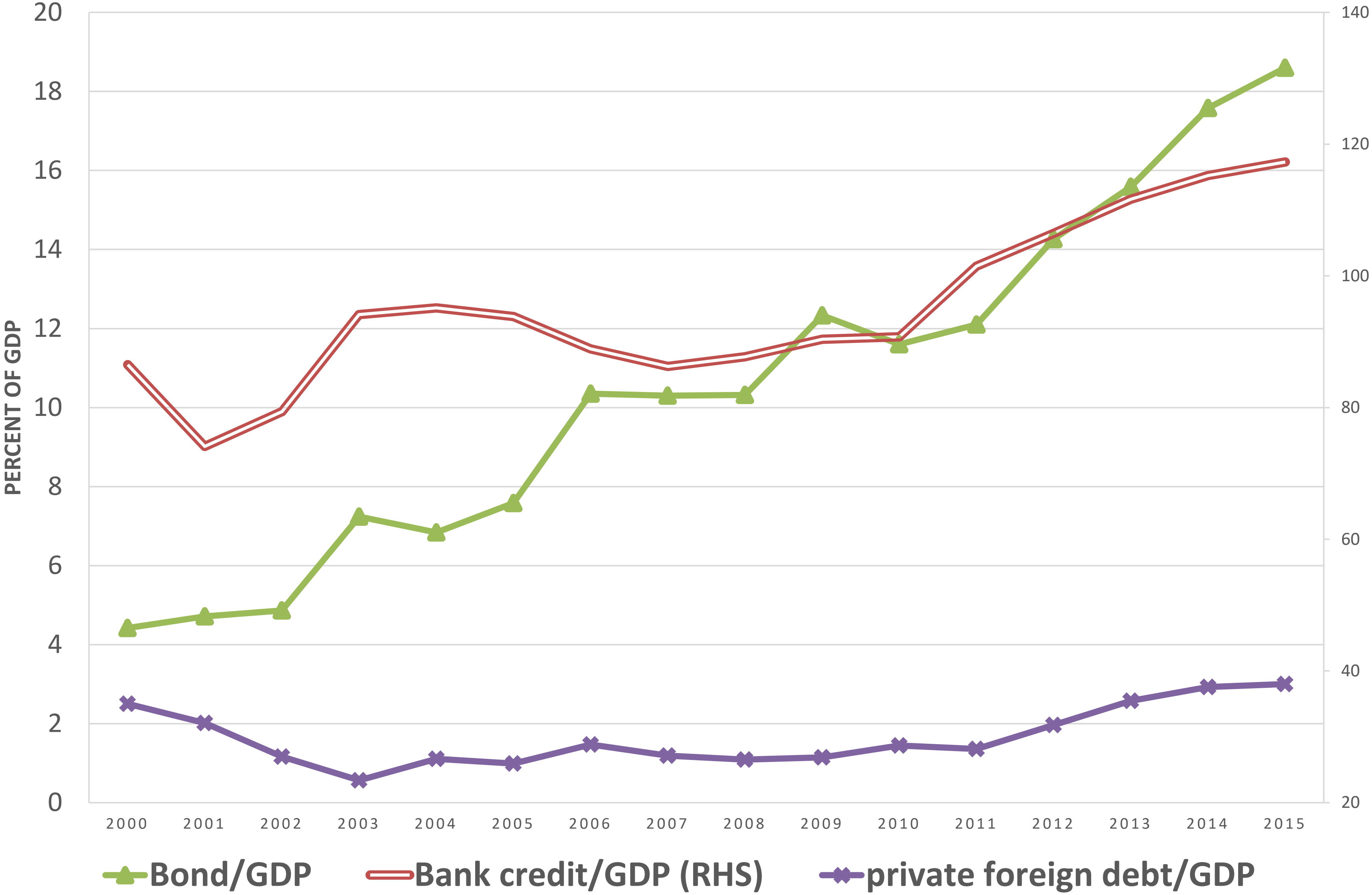
1. Mode of Savings



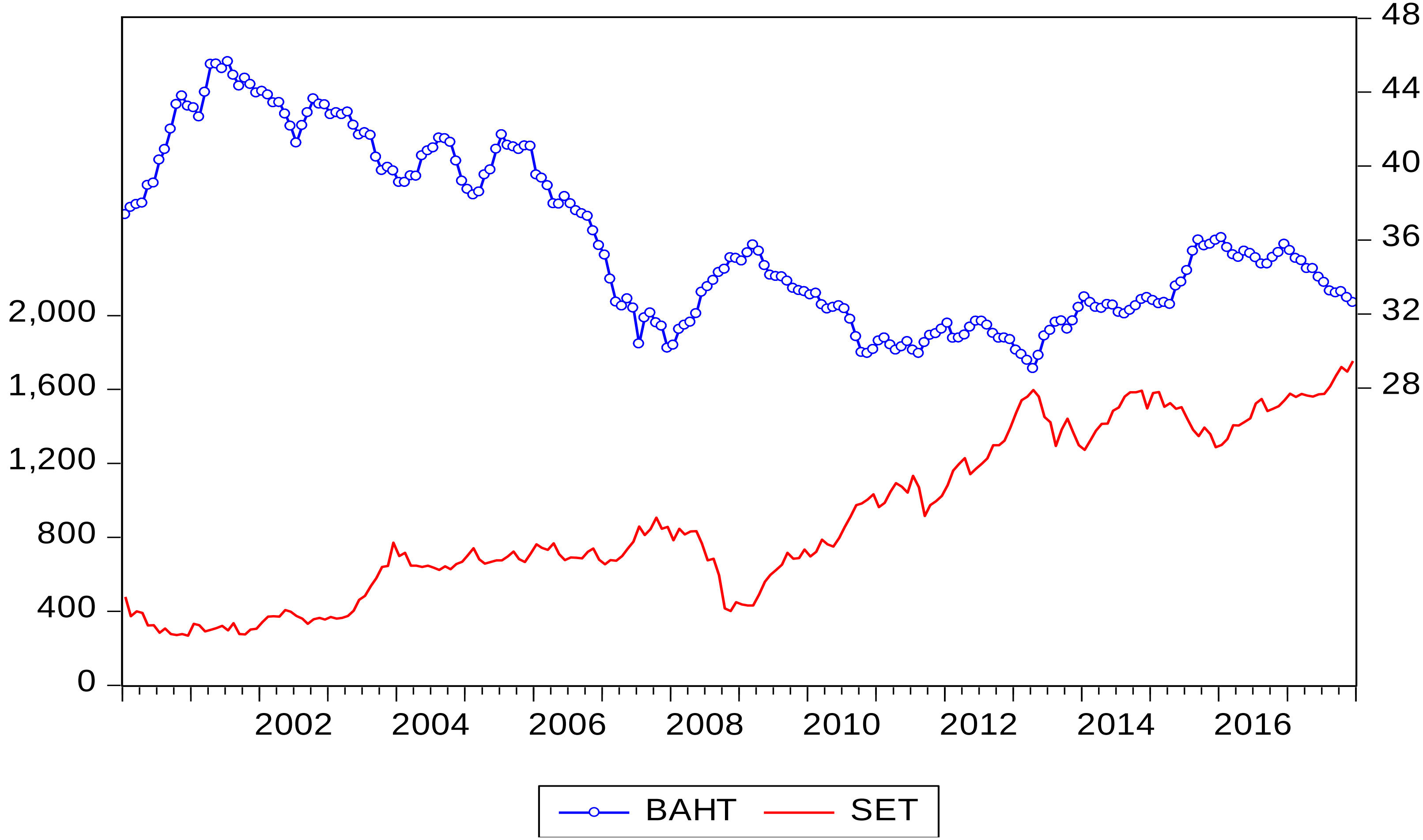
Profile of Thai government bonds' holders



Mode of Financing
Source: Bank of Thailand and Stock Exchange of Thailand



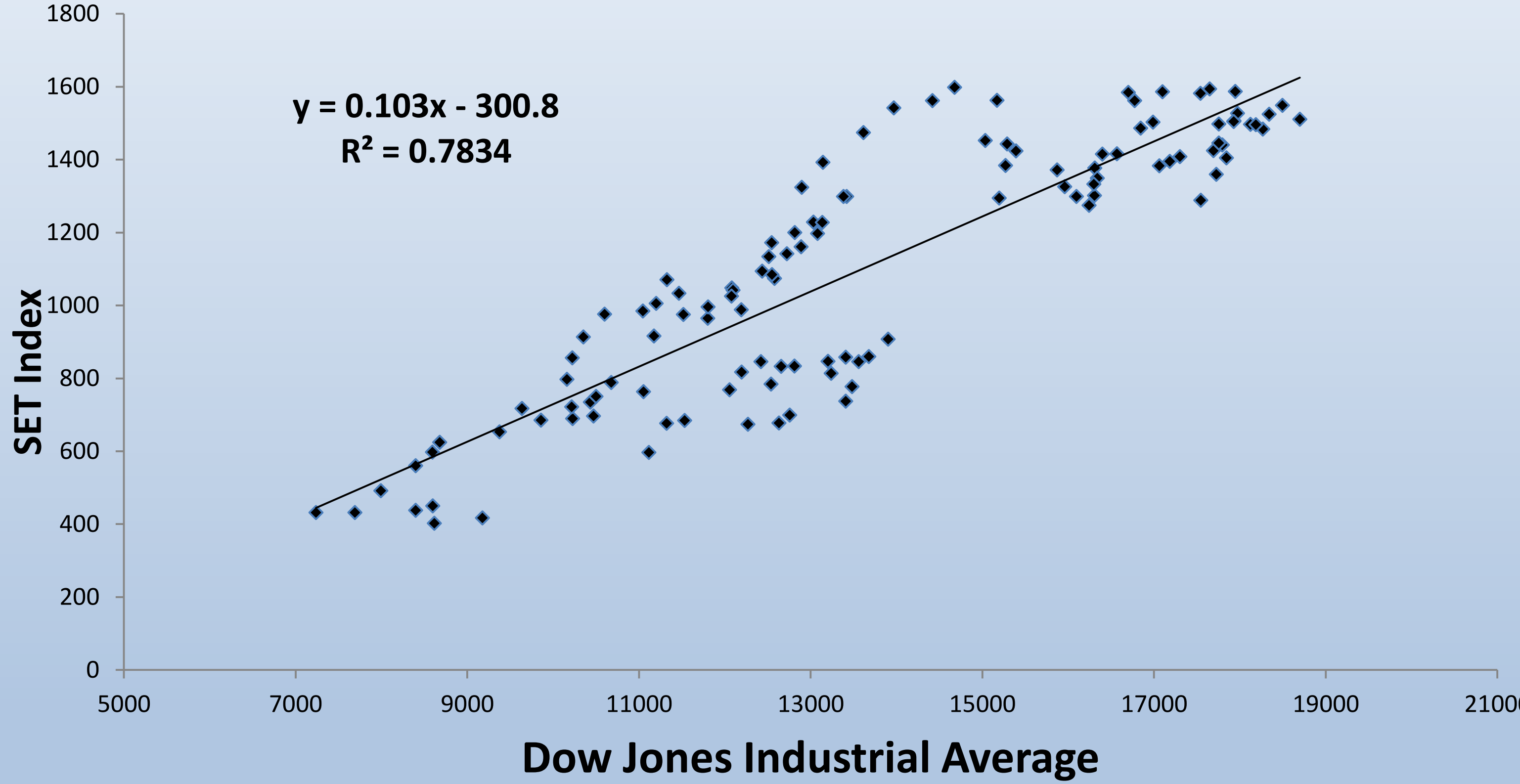
2. Stock market
Stock Price Index and Baht/USD



SET v. DJIA

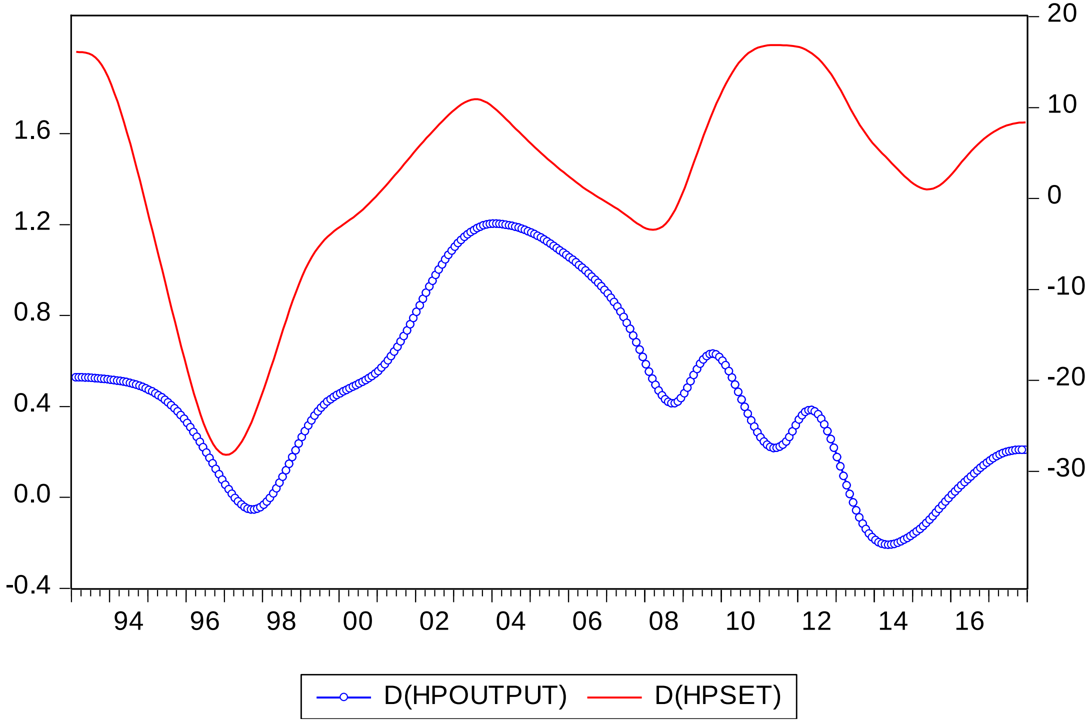
2007-2016

Source: Bank of Thailand and Federal Reserve Board



Lurking variables?

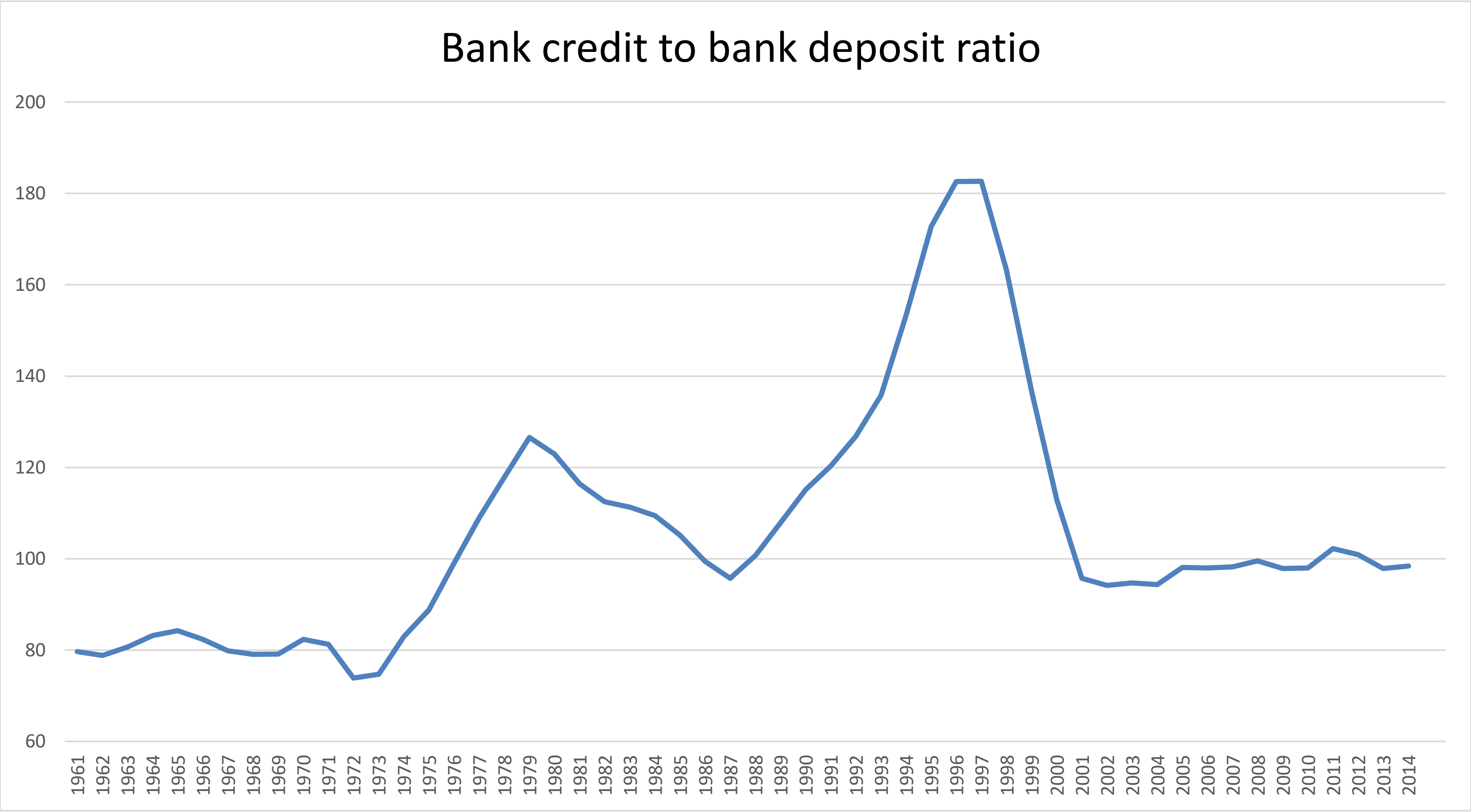
Figure 5.5 Stock prices and manufacturing output (cyclically adjusted)



Dichotomy no more: Inseparable sectors

- In the classical world, the real economy is separated from the financial sector in the sense that the money supply does not affect the real sector.
- The only function of the money supply is to determine the price level but has no impact on output and employment.
- A dichotomy between the real and monetary sectors exists in the classical world, where prices and wages are flexible. In the Keynesian world, the two sectors are connected via the interest rate.
- The empirical evidence provided in this chapter indicates that there is also another channel through which the real and monetary sectors are inseparable.
- The stock market is another channel that links the financial and real sector.

Financial Instability Hypothesis
Hyman Minsky



3. Good bankers become bad in four stages

- There are **three roots** of financial distress: macroeconomic conditions, industrial and financial policy, and debtor/credit behaviors.
- The better-managed banks succeed in remaining solvent during difficult times.
- The **quality of management** is an essential difference between sound and unsound banks.
- Four types of mismanagement commonly occur in **the absence of effective regulation** and supervision:

(1) Technical mismanagement

- Inadequate credit analysis
- Political pressures
- Excessive ***risk concentration***

  (The Single Lending Limit regulation can correct that problem)
- ***Insider*** Lending
- ***Mismatching*** assets and liabilities regarding currencies, interest rates, or maturities

(2) Cosmetic management

(Trying to hide past and current losses)

- Bankers may keep ***dividends*** constant despite poor earrings.
- Retain smaller share of income ***for provisions against loan loss***, thereby sacrificing capital adequacy.
- Resort to increase net profits on paper (even if the bank must pay more taxes)
- Classify bad loans as good assets to avoid making loss provisions.
- **Recording** future income now and postpone recoding current expenditure (**Creative accounting**).

(3) Desperate management

- When losses are too significant to be concealed by accounting gimmicks, the bad bankers start
- Lending to risky projects at higher loan rates
- Speculating in stocks and real estate markets
- However, the higher risk may lead to further losses and cash flow problem.
- Offering high deposit rates to attract new deposits to avoid a liquidity crisis.
- The higher cost of funds eventually compounds the problems.

(4) Fraud

- Fraudulent behavior maybe rare and sometimes causes initial losses, but once illiquidity appears inevitable, fraud becomes common.
- As the end approaches, bankers grant themselves loans that they are unlikely to repay
- “Swinging ownership” of companies partly owned by banks or bankers.
- If a company is profitable, the evil banker will arrange to buy it from the bank at a low price,
- If the company is unprofitable, the bad banker will sell it to the bank at a high price.
- In essence, the lousy banker just robbed the bank.

Bangkok Bank of Commerce (BBC)

Former BBC (Bangkok Bank of Commerce) boss was jailed for 155 years for fraudulent behaviors.

More recently, we heave learned about ***Panama Papers***, which were the results of journalist investigations on offshore companies set up by Mossack Fonseca, a law firm in Panama.

4. Vulnerable and resilient sector

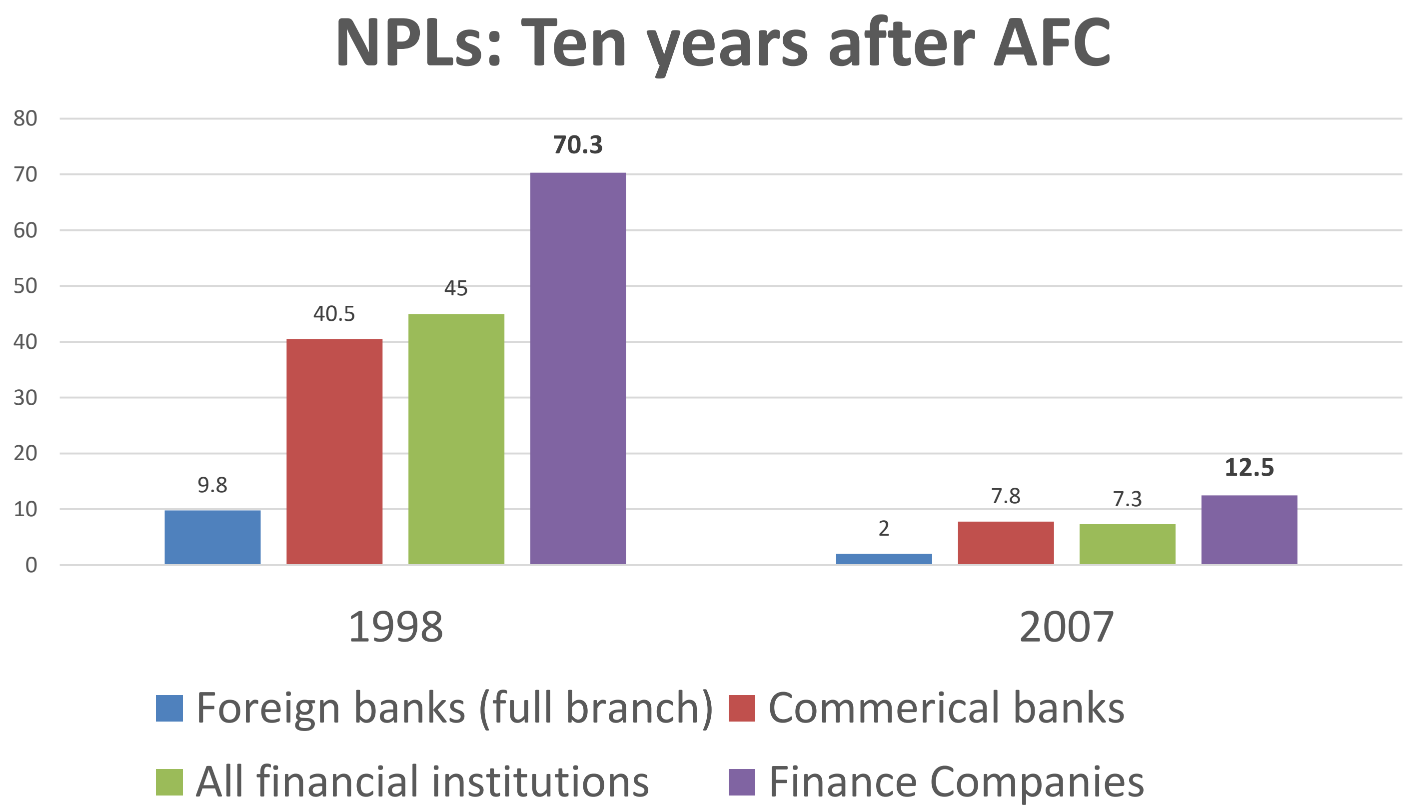
- The Thai financial sector was vulnerable and weak in the late 1990s.
- The lack of prudential regulations and sufficient capital funds made capital control relaxation in the early 1990s premature liberalization.
- The ensuing fast and large capital inflows led to subsequent financial turmoil.

4. Vulnerable and resilient sector

- Since the 1997 financial crisis, the Thai economy has tightly integrated into the world economy through international trade and capital flows.
- As such, it cannot wholly shield itself from external shocks.
- The Thai financial sector has emerged from the 1998 crisis and become stronger and more resilient, thanks to foreign capital injection, good governance, strengthened financial rules, and economic recovery.
- By opening up the financial sector to foreign participation, the financial sector has become more efficient, taking the benefit from competition effect and technology adaptation.

Stronger and more resilient

- The strong performance of the corporate sector enabled banks to reduce Non-Performing Loans (NPL) further.



Thai Financial Sector and the GFC

- The global financial crisis during 2007–2009 led to the export collapse and output contraction in 2009.
- The debacle of the world's financial institutions and stock market crashes in 2008 had *a negative impact on the Thai stock market*.
- ***The rapid economic recovery***, despite the political turmoil in 2010, provided opportunities for banks to ***expand credit and enjoy the benefits from rising interest rates***.

Banks before the GFC

- The Bank of Thailand established prudential rules and regulations before the eruption of the GFC in 2008.
- With low exposure to export sector, commercial banks invested little in collateral debt obligations (CDOs) backed by the US subprime loans.
- Thai banks has remained healthy and did not suffer from the GFC.
- ***Thai banks, large and small, have received foreign capital injections*.**

Conclusions

The Global Financial Crisis and Resilience of the Thai Banking Sector

BHANUPONG NIDHIPRABHA

The Thai economy is vulnerable to external shocks because of its high exposure to trade and capital flows. Despite its adverse consequences on the real sector of the Thai economy in 2009, the global financial crisis had little impact on the Thai financial sector. The healthy performance and resilience of Thai financial institutions can be attributed to the financial reforms undertaken after the Asian financial crisis and the favorable macroeconomic environment.

JEL classification: G01, G21, G28

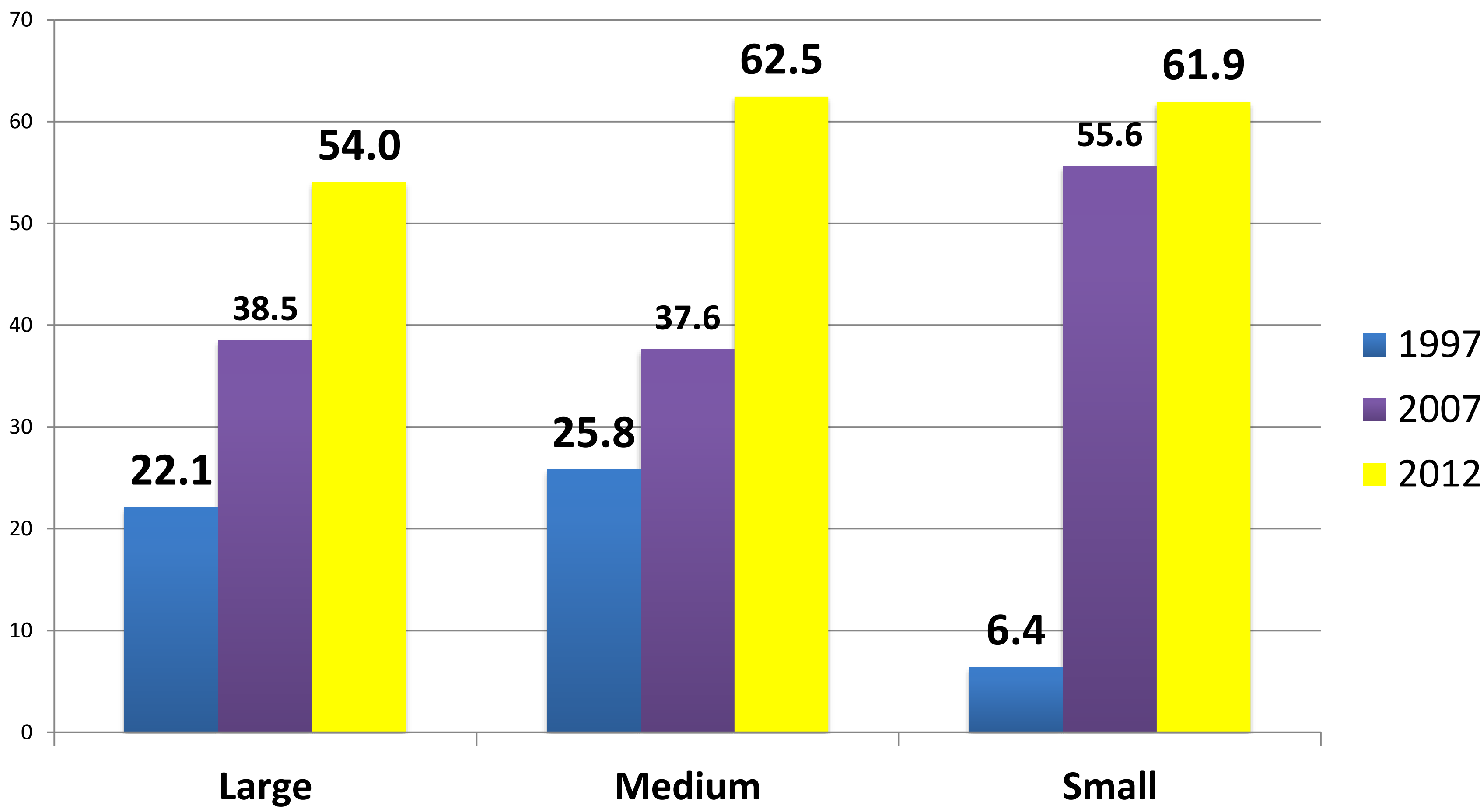
5. Benefits from globalization (foreign penetration)

- Financial institutions and their regulators cannot resist the global trend of foreign penetration.
- By opening up the financial sector to foreign participation, the financial sector has become more efficient, benefiting from competition and technology adaptation.

5. Benefits from globalization (foreign penetration)

- Financial restructuring would be impossible without allowing foreign banks to acquire shares of less efficient private and public-owned financial institutions.
- With foreign capital injection, monetary authorities can maintain **system solvency** while lessening the burden of financial bailouts, although the enormous burden from FIDF's bailouts are still looming large until today.
- Financial Institutions Development Fund (***FIDF***)

Foreign ownership in Thai banks
(% total equity)



Ready for the next banking crisis?

- The exploitation of **economies of scale and scope** improved efficiency in their operation.
- All of these factors are the result of financial reforms undertaken after experiencing the financial crisis in 1997.
- Thai banks have been well prepared for the global financial crisis as they have learned a valuable lesson on ***being conservative*** and ***observing stringent prudential rules*** and regulations.

When are banks too big to fail?

- In the future, there would always be some banks that fail because of ***the vulnerable nature of financial firms***; the monetary authorities must distance themselves from the too-big-to-fail syndrome.
- It takes time for depositors to learn to protect themselves and realize that **deposit insurance** program does not prevent them from any losses caused by future failure of financial institutions.

6. Soundness of financial institutions and their measurements

(1) Profitability (ROE, ROA) and Efficiency

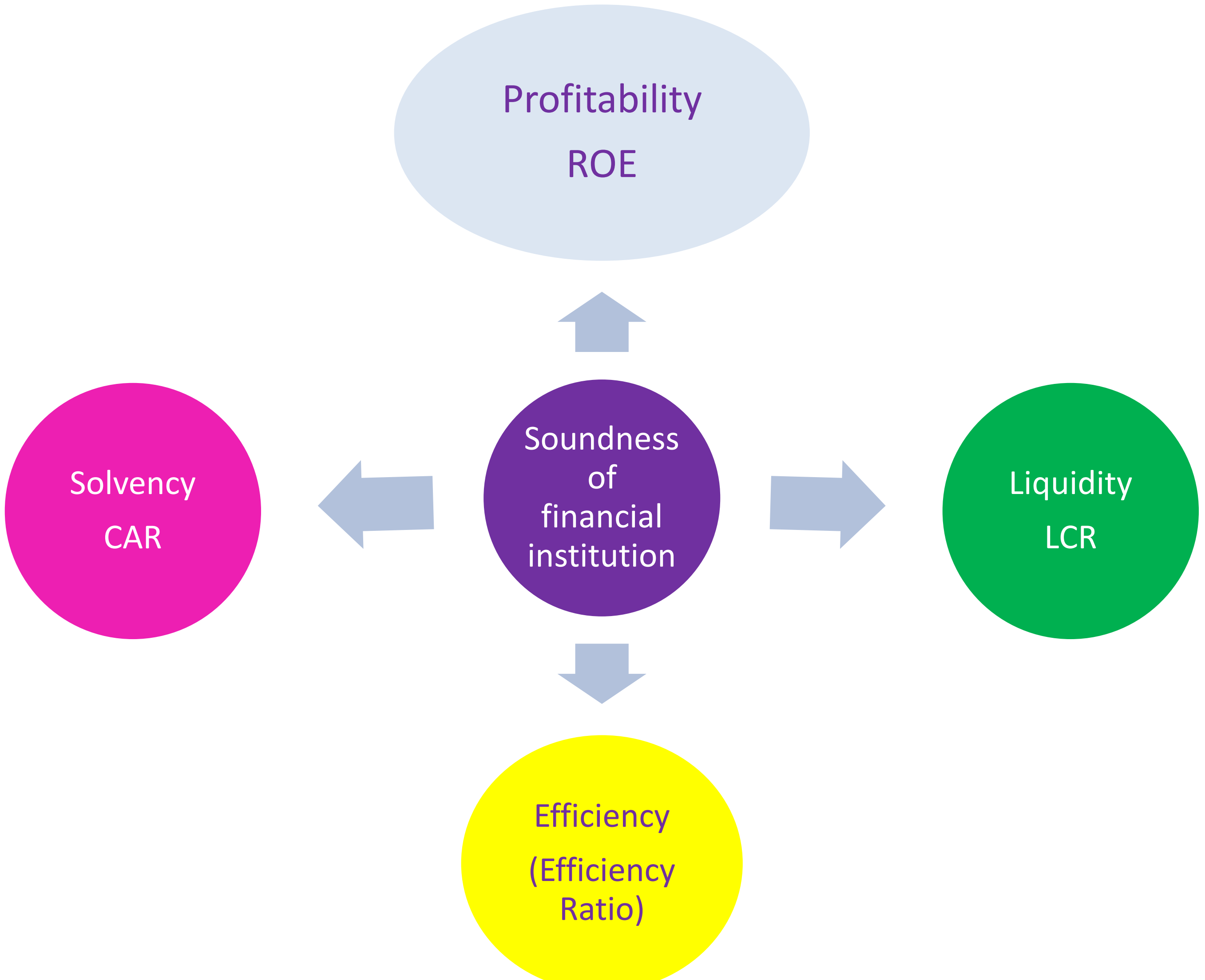
Return on Equity and Assets depends on, among others, interest margins, NPLs, and loan growth rate.

(2) Liquidity (Liquid assets to short-term liabilities)

(3) Solvency (Capital Adequacy Ratio: CAR)

(4) Efficiency (Efficiency ratio)

Soundness of financial institutions



(1) Determinants of bank profitability

- Banks receive interest and non-interest incomes, the latter must be raised to offset interest income decline during the economic slump.
- The major components of bank cost are interests from deposits and bank borrowings, plus operating costs, loan lost provision and bad debt write-off.
- Banks exploit ***economies of scale and scope*** to ***reduce the cost*** of providing services.

A measurement of profitability

- The **large interest margin** between lending and deposit rates bodes well for the monopoly rent of commercial banks.
- The transfer of wealth from consumers to banks can be reduced by allowing foreign entry in line with liberalization of the services sector.

Return on Assets (ROA) and Return on Equity (ROE) are measurements of profitability

$$ROE = \frac{profit}{Equity} = \frac{profit / Assets}{Equity / Assets}$$

$$\mathrm{ROE} = \frac{\mathrm{Return\ to\ Assets}}{Capital / Assets}$$

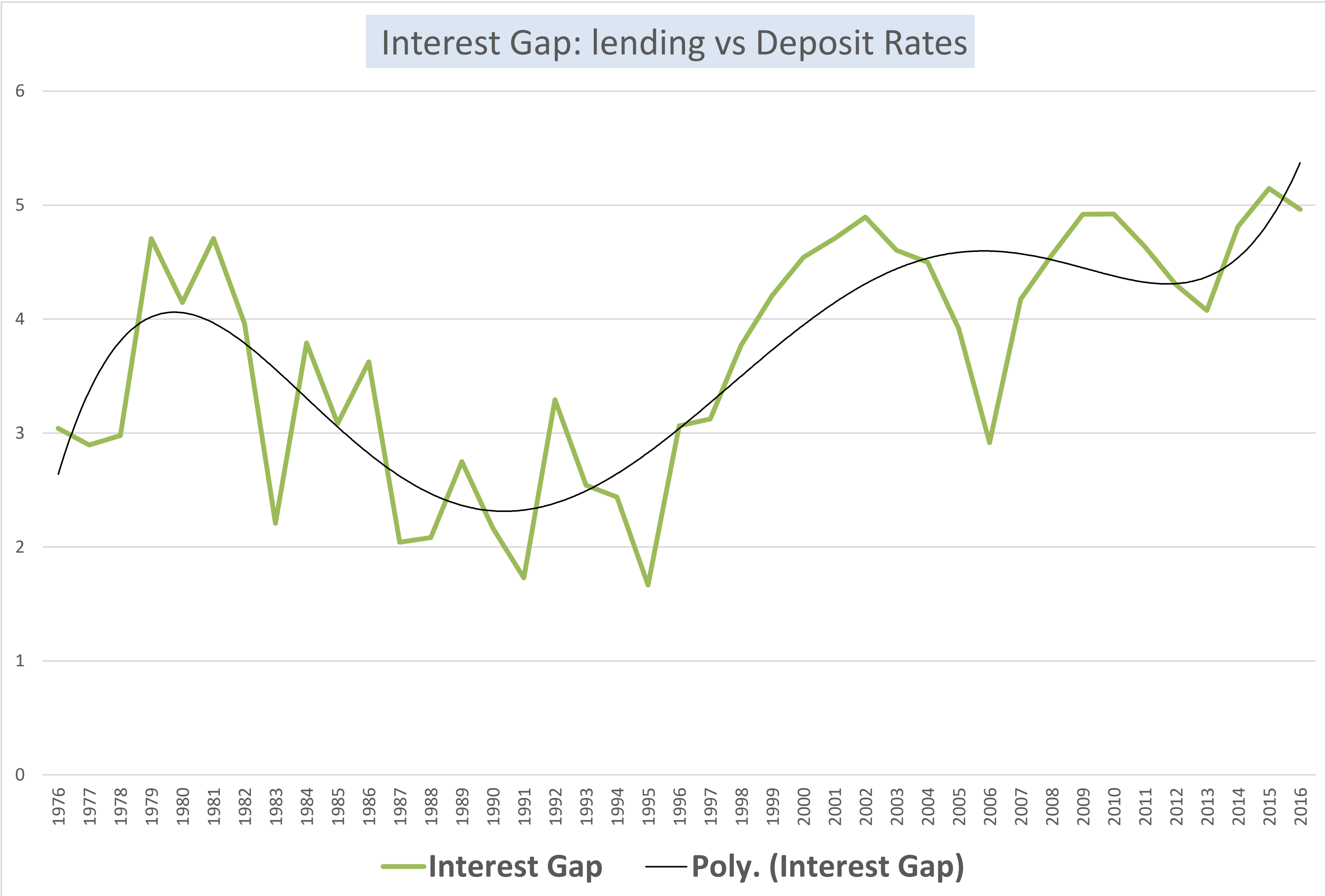
$$\mathrm{ROE} = \frac{ROA}{Capital / Assets}$$

Profit and interest spreads

- The large interest spread between lending and deposit rates bodes well for the monopoly rent of commercial banks.
- The transfer of wealth from consumers to banks can be reduced via allowing foreign entry in line with liberalization of the service sectors.

Interest Gap ($r_L - r_D$)

- Interest rate spread is the interest rate charged by banks on loans to private sector customers minus the interest rate paid by commercial or similar banks for demand, time, or savings deposits.
- The terms and conditions attached to these rates differ by country, however, limiting their comparability.


Interest Gap: lending vs Deposit Rates
6
5
4
3
2
1
0
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
1989
1990
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2004
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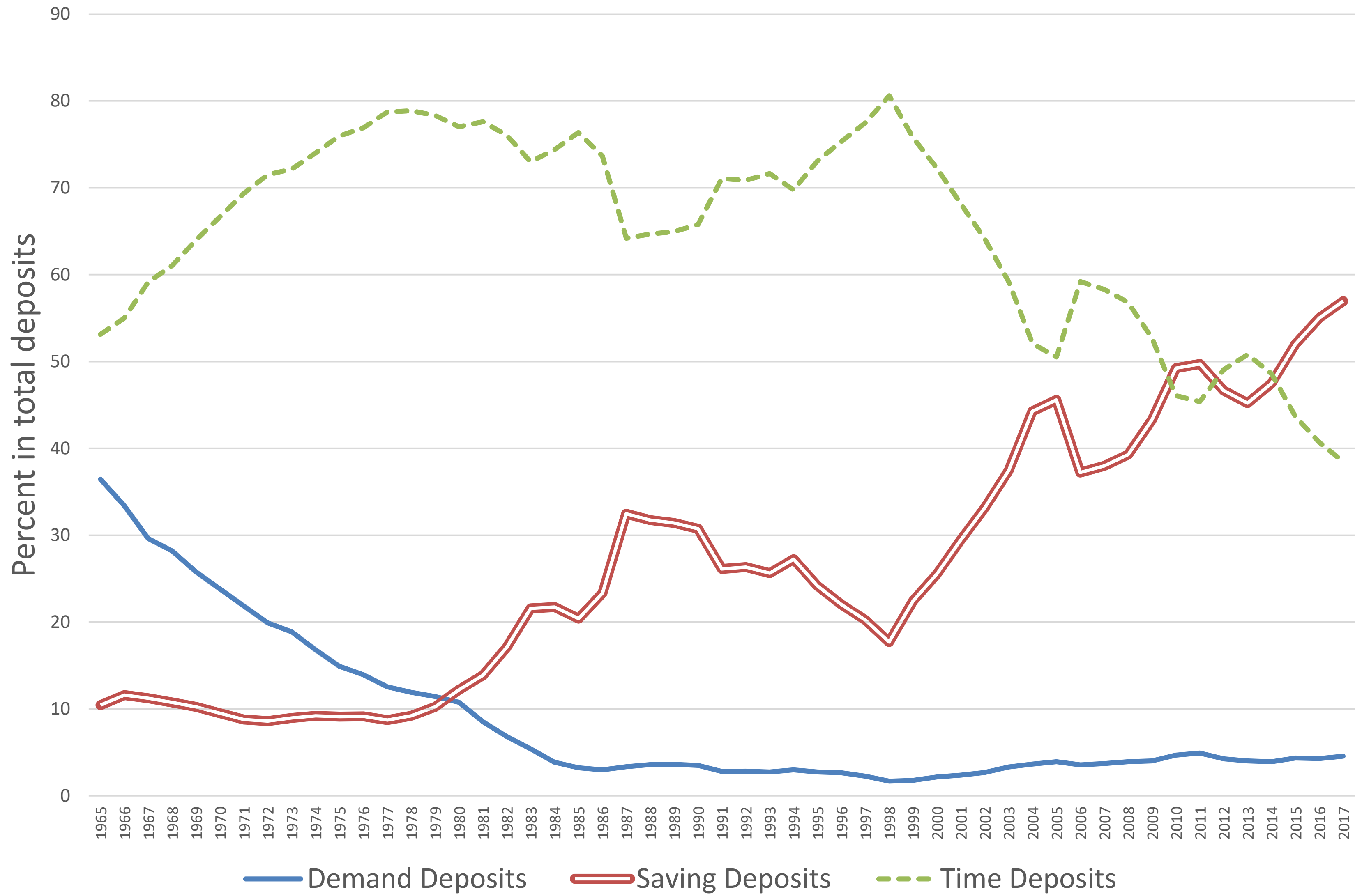
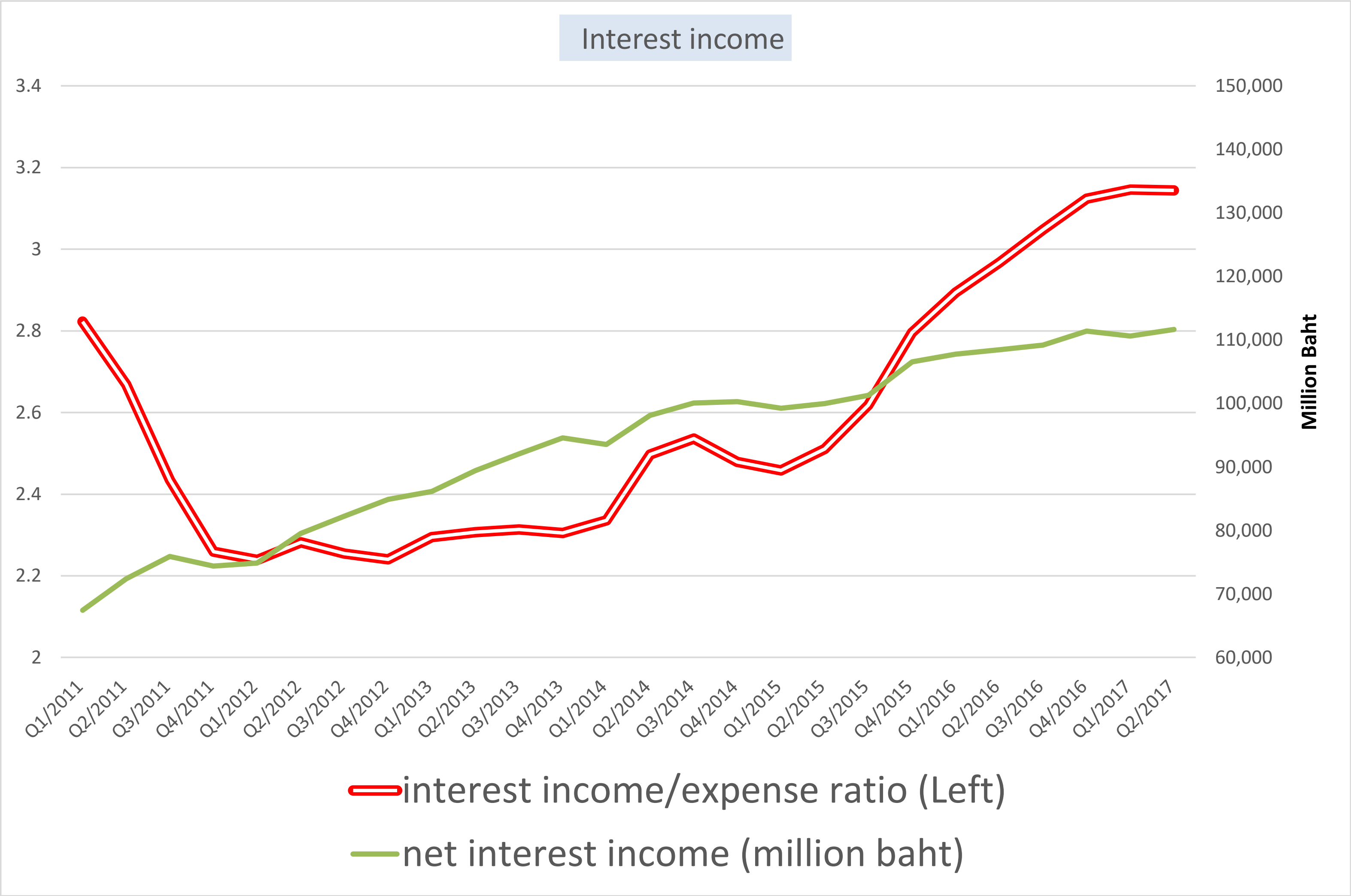
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
Interest Gap
Poly. (Interest Gap)

Structural Change in Bank Deposits

Source: Bank of Thailand



Interest income rises steadily despite the slowdown of loan growth, thanks to widening interest gap.



KTB admits lending growth target miss

Bangkok Post, November 1, 2018

Krungthai Bank (KTB), the country's fourth-largest lender by assets, estimates its loans outstanding will grow less than 2% this year, missing its 5-7% target, as a major portion of lending borrowed by credit cooperatives was refinanced to other banks.

Around 50 billion baht worth of loans extended to credit cooperatives was refinanced, leaving the bank's credit cooperatives loans outstanding at 70 billion, said president Payong Srivanich.

The bank's policy to halt new loan extension to rice millers following the sector's high non-performing loans (NPLs) also deterred KTB from reaching the lending target, he said.

The bank's loans outstanding for rice mill business amounts to 70 billion baht.

KTB plans to focus on rice millers' debt-servicing discipline and will offer debt rescheduling if it is necessary, said Mr Payong.

At the end of September, KTB's loans outstanding rose 2.2% from the end of 2017 to 1.98 trillion baht. Of the total, large corporate loans accounted for 33.2%, government and state enterprise loans represented 9.3%, small and medium-sized enterprise loans were 17.7% and retail loans made up the rest.

He said KTB aims to lower its bad loans to below 100 billion baht this year, keeping its NPL ratio at 4.2% or below next year.

To bring down NPLs, the bank wants to concentrate on debt restructuring before loans turn sour.

Bad loan disposal is also an option, said Mr Payong.

Its gross NPLs totalled 110 billion baht, representing 4.2% of total loans, at the end of September.

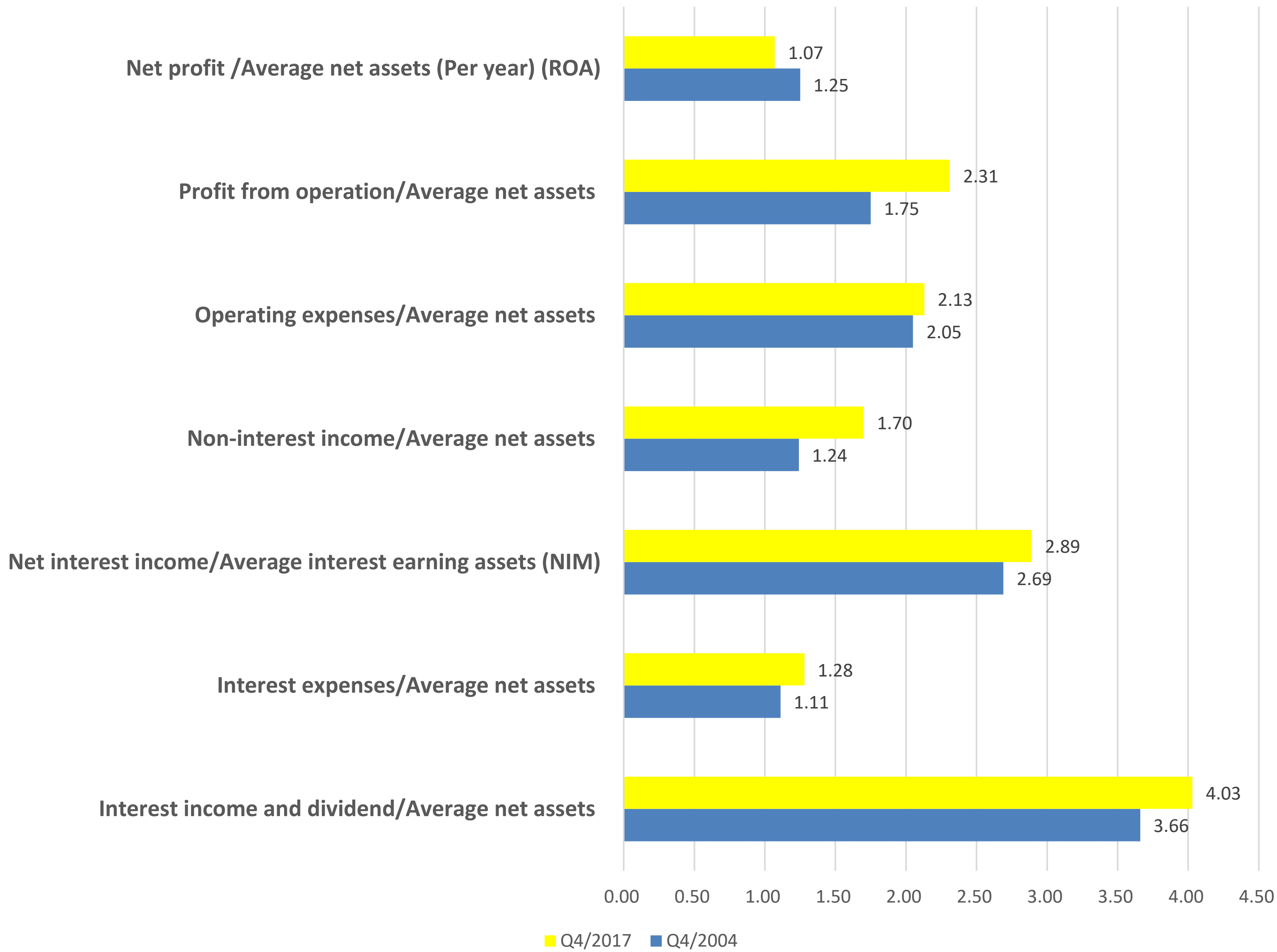
The bank expects to set a 5% loan growth target for 2019 based on Thai economic growth of 4.3%, he said. Retail and large corporate loans are its focus.

KTB plans to adopt technology to support loan extension, increasing its access to consumers and reducing operating costs.

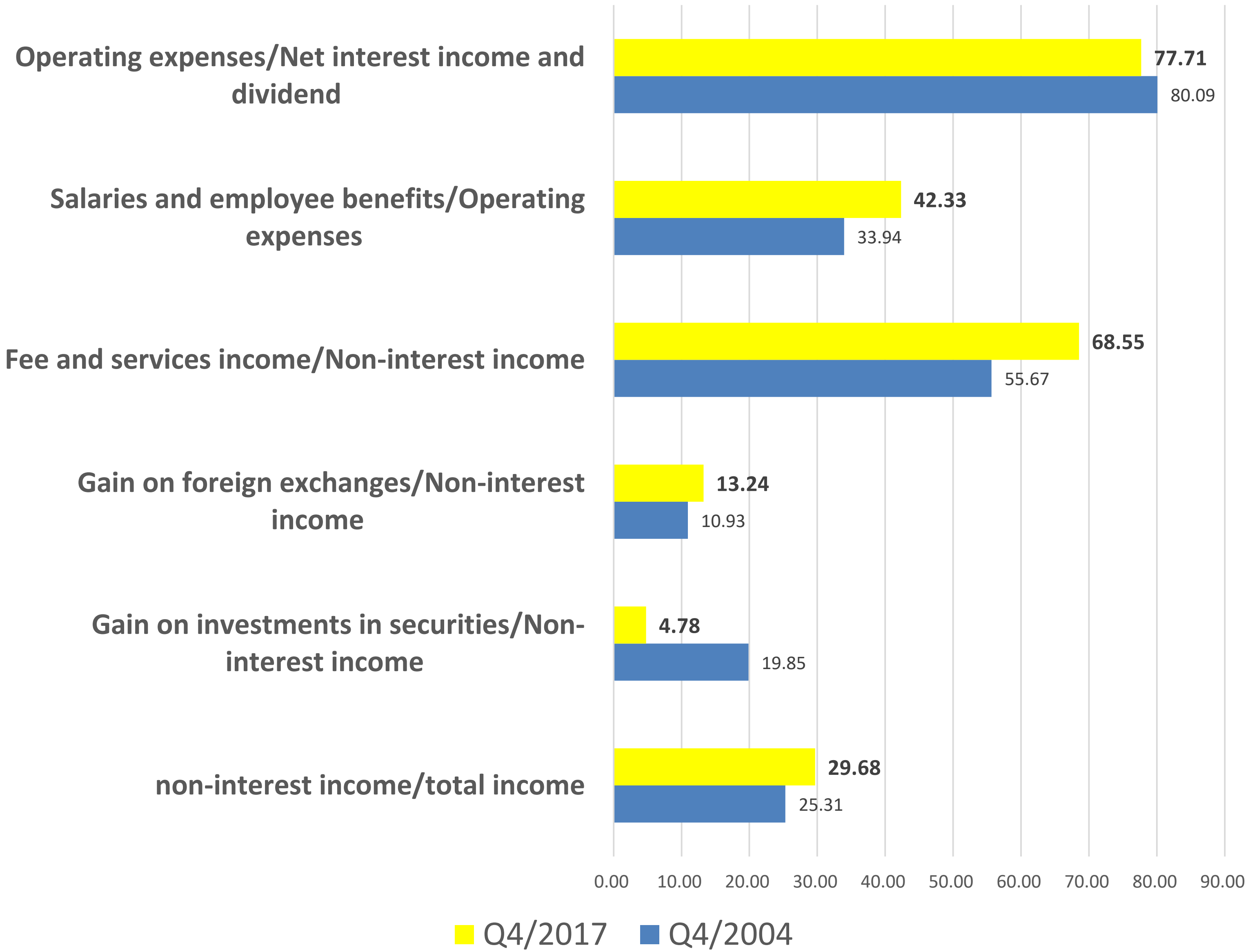
The bank's first-quarter net profit jumped 33.5% to 7.84 billion baht, driven by a 38.7% drop in impairment costs for loan losses to 6.08 billion baht.

Gross NPLs rose to 4.42% of loans outstanding at the end of September from 4.19% at the end of last year.

Bank Profitability
Source: Bank of Thailand



Banks' structure of Income and Expenses
Source: Bank of Thailand

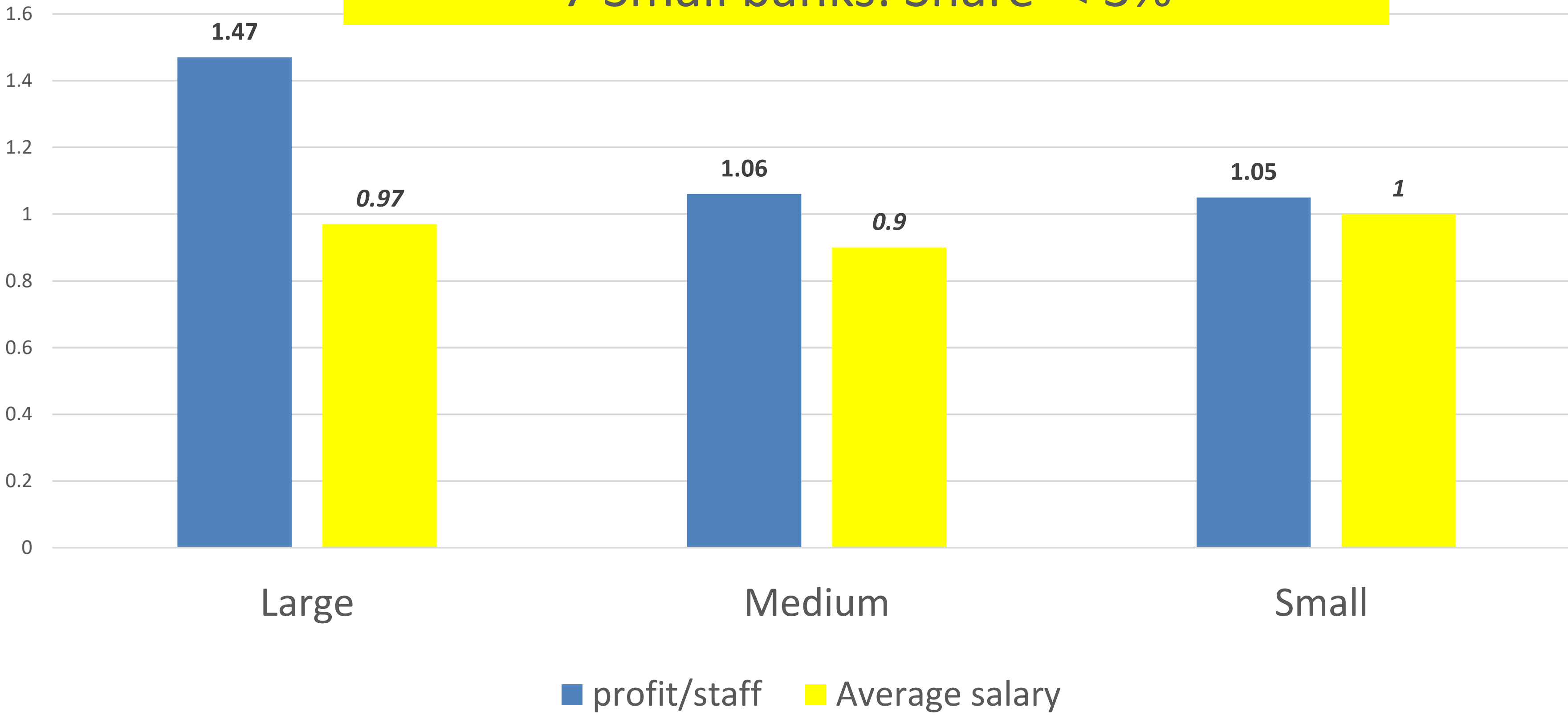


(2) Efficiency Ratio: Average Productivity Thai banks in 2016 (million baht)

4 Large banks: Share (S) of Total Assets >10%

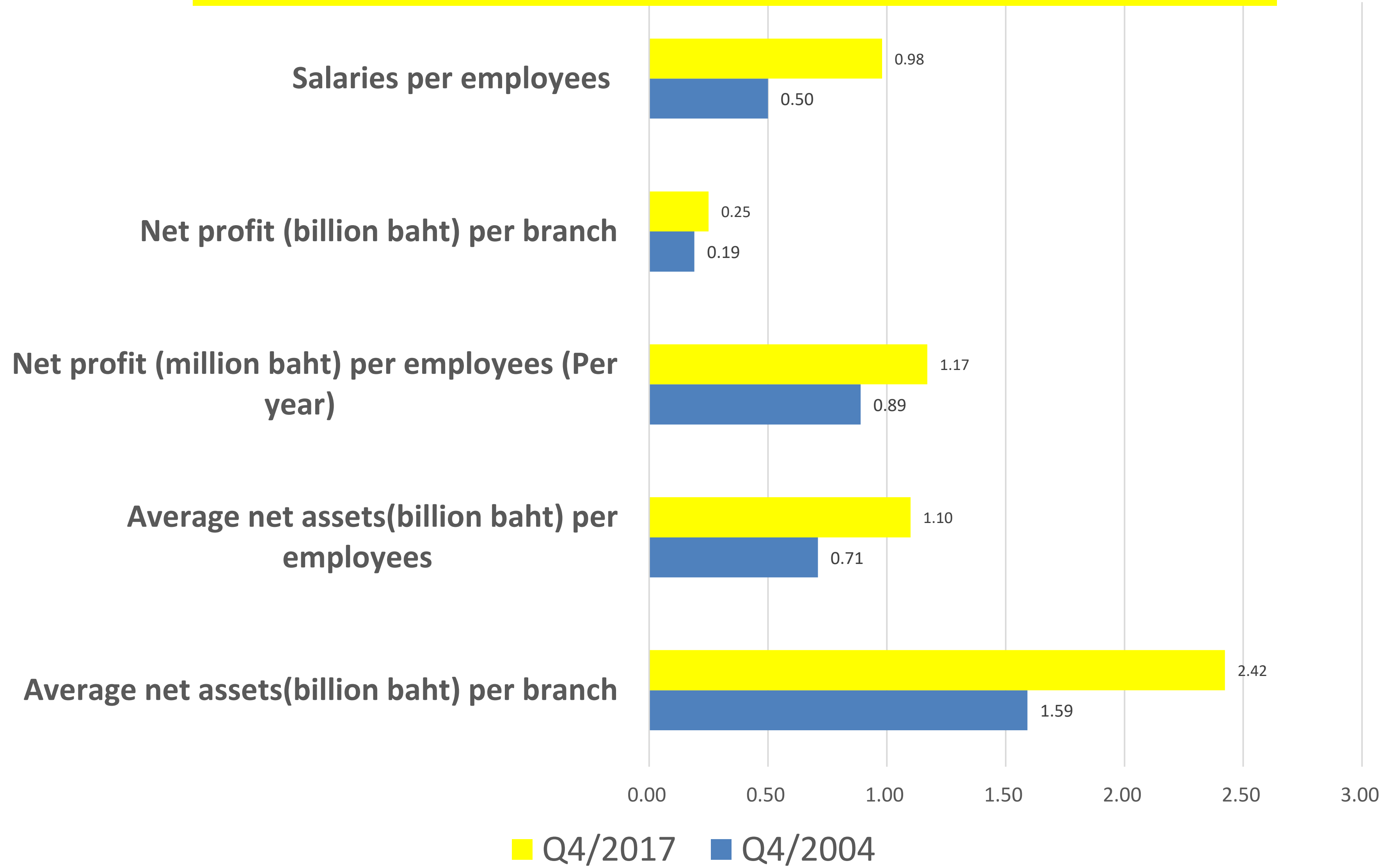
3 Medium banks: 3% < Share <10%

7 Small banks: Share < 3%



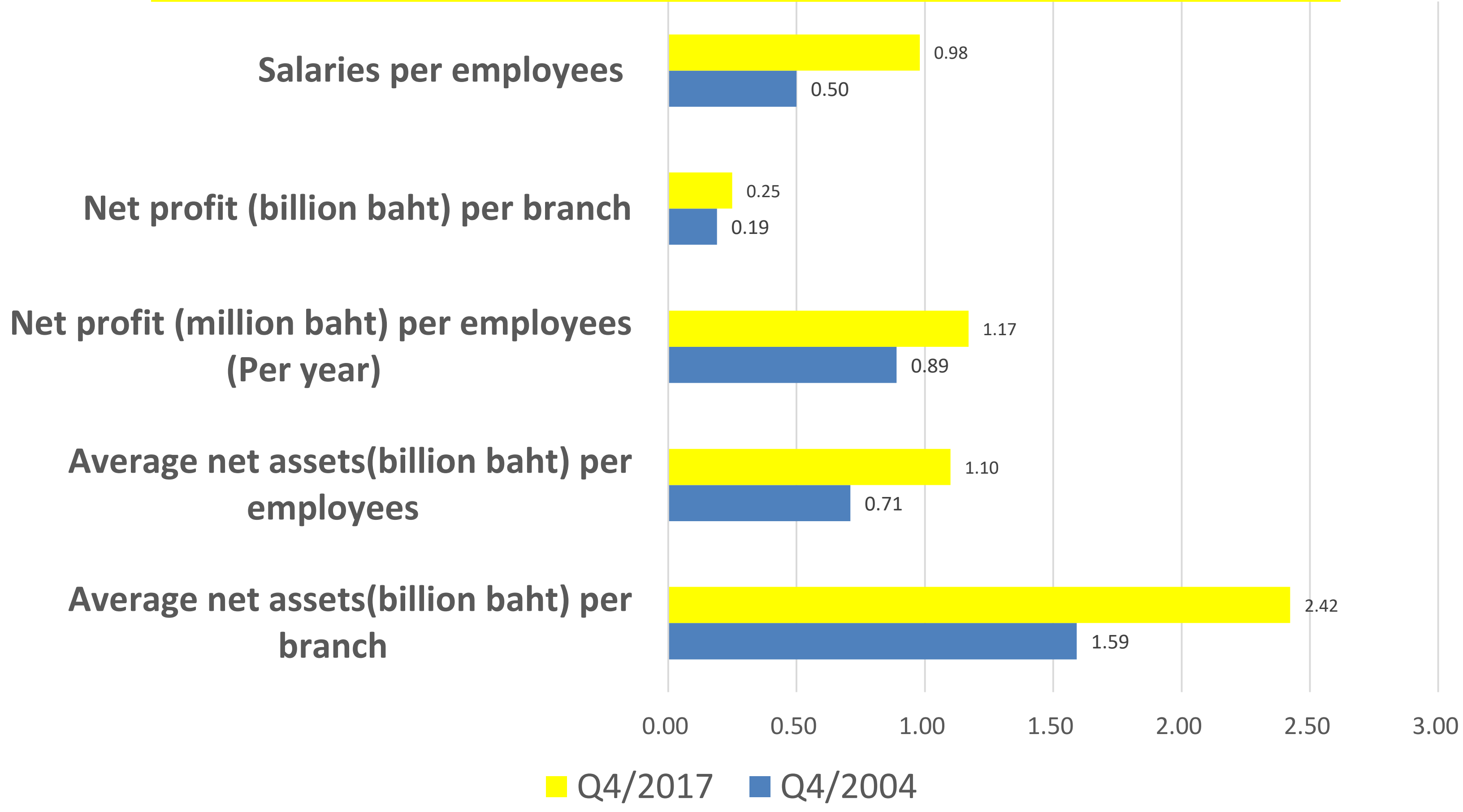
Bank Efficiency: Average Staff (Branch) Productivity

Source: Bank of Thailand



Bank Efficiency: Average Productivity of Staff and Branch

Source: Bank of Thailand



(3) Solvency: Quality of Bank Assets and NPLs

- A nonperforming loan (NPL) is the sum of borrowed money upon which the debtor ***has not made his scheduled payments for at least 90 days.***
- A nonperforming loan is either in default or close to being in default.
- Once a loan is nonperforming, ***the odds*** that it will be ***repaid in full*** are considered to be substantially lower.
- They inevitably will have to be written off or restructured (haircuts or payments extended)

Possibility to recover the principal or foreclosure the collaterals

- Once a loan is considered nonperforming, banks may have the opportunity to recover the principal:
- In particular, loans backed by specific assets, such as a home loan or vehicle loan.
- In these instances, the bank may begin the process of foreclosure, on a home, or move to seize the property, such as with a vehicle.

Pace hopes to emerge from massive debts

On the average, 84 million Baht a unit

SET-listed developer Pace Development Corporation Plc looks set to continue sales of the remaining residential units worth around 5 billion baht at MahaNakhon tower to reduce debts.

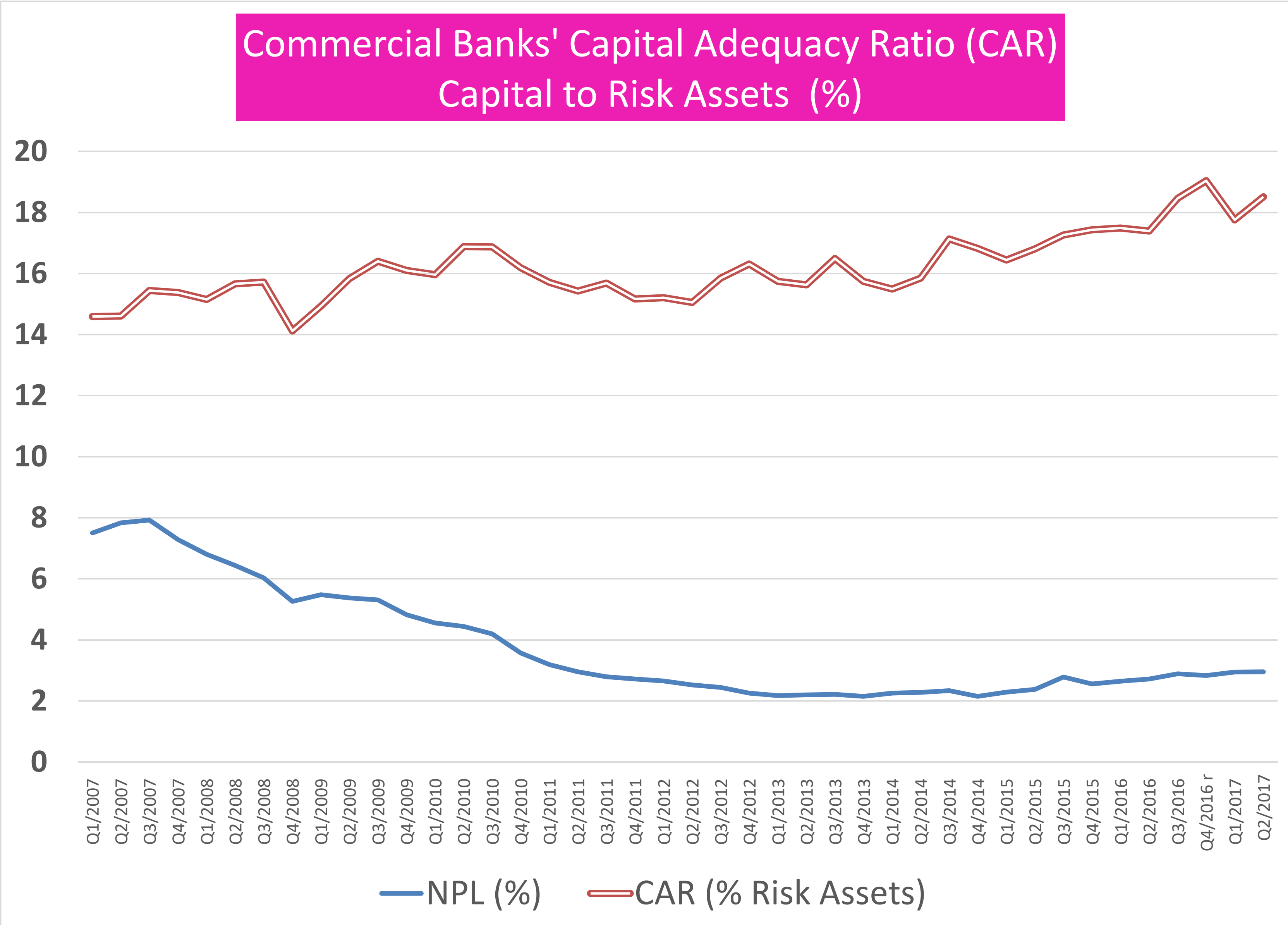
Chief executive Sorapoj Techakraisri said the company's total debts will fall below 10 billion baht by the middle of the year from 15 billion at present after securing 14 billion from the sale of assets at the country's highest building, MahaNakhon, to duty-free retailer King Power International Group.

Capital Adequacy

- Equity (E) + Liabilities (L) = Assets (A)
- Liabilities = Deposits + Borrowings
- If borrowing is in USD, a massive devaluation would make net equity negative: technical bankruptcy
- Net Equity = Assets – Liabilities
- Despite negative equity, technically bankrupt, banks can still operate as long as they have sufficiently large liquidity to prevent ***bank runs***.
- The central bank performs the role of " the lender of last resort."

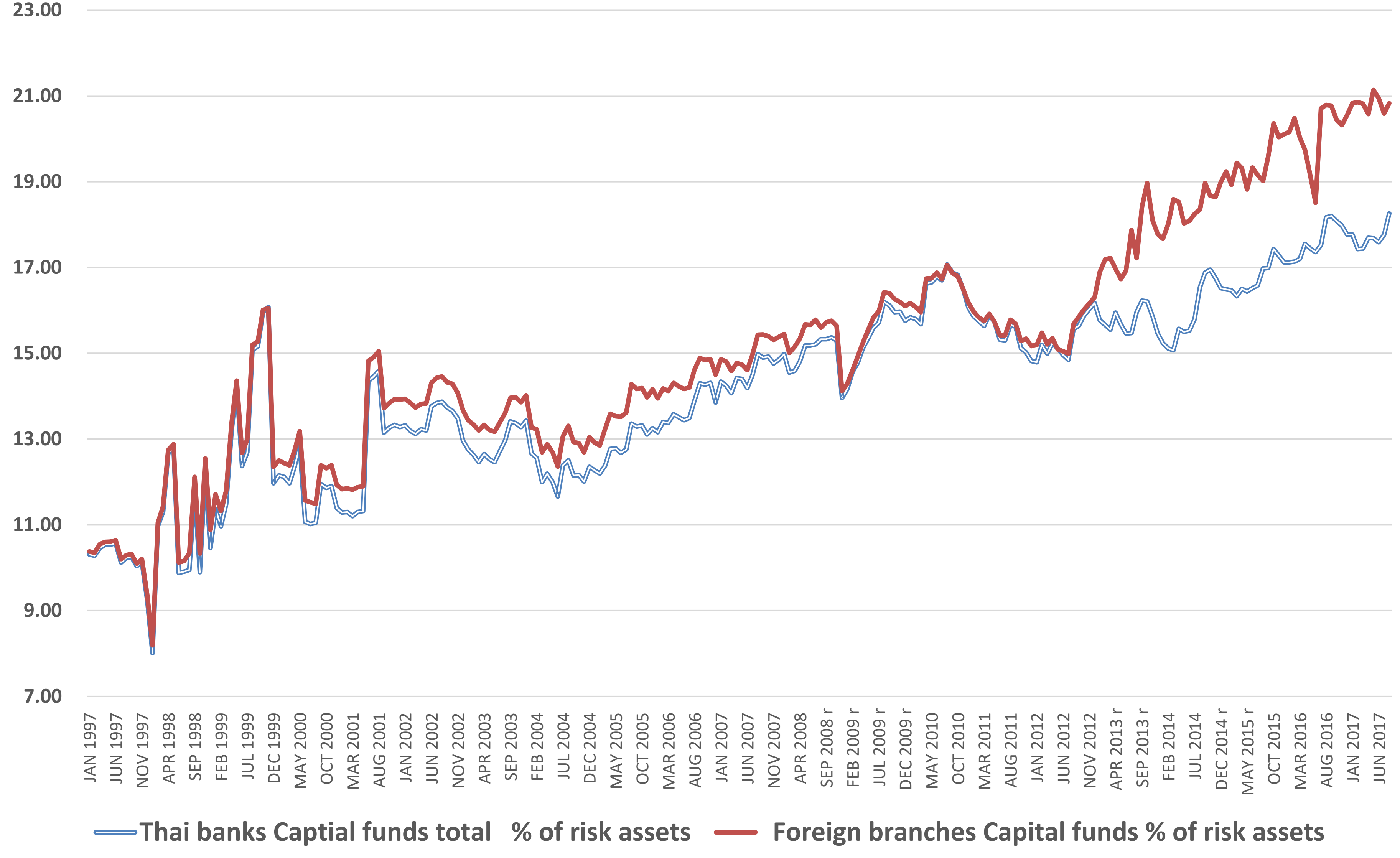
Capital Adequacy Ratio: (Equity/Risk Assets)

- When Assets (loans) turn into NPLs or bad loans, Net Equity can become negative as value of asset declines.
- When writing off bad assets, equity (E) must be written off at the same time.
- If E is not large enough, net equity can become negative (banks are technically bankrupt).
- The higher the ratio of equity to **risk assets**, the safer the deposits when banks have troubles with bad lending.
- That is why capital injection by government (FIDF) or foreign banks can bail out troubled banks by enhancing the capital adequacy.



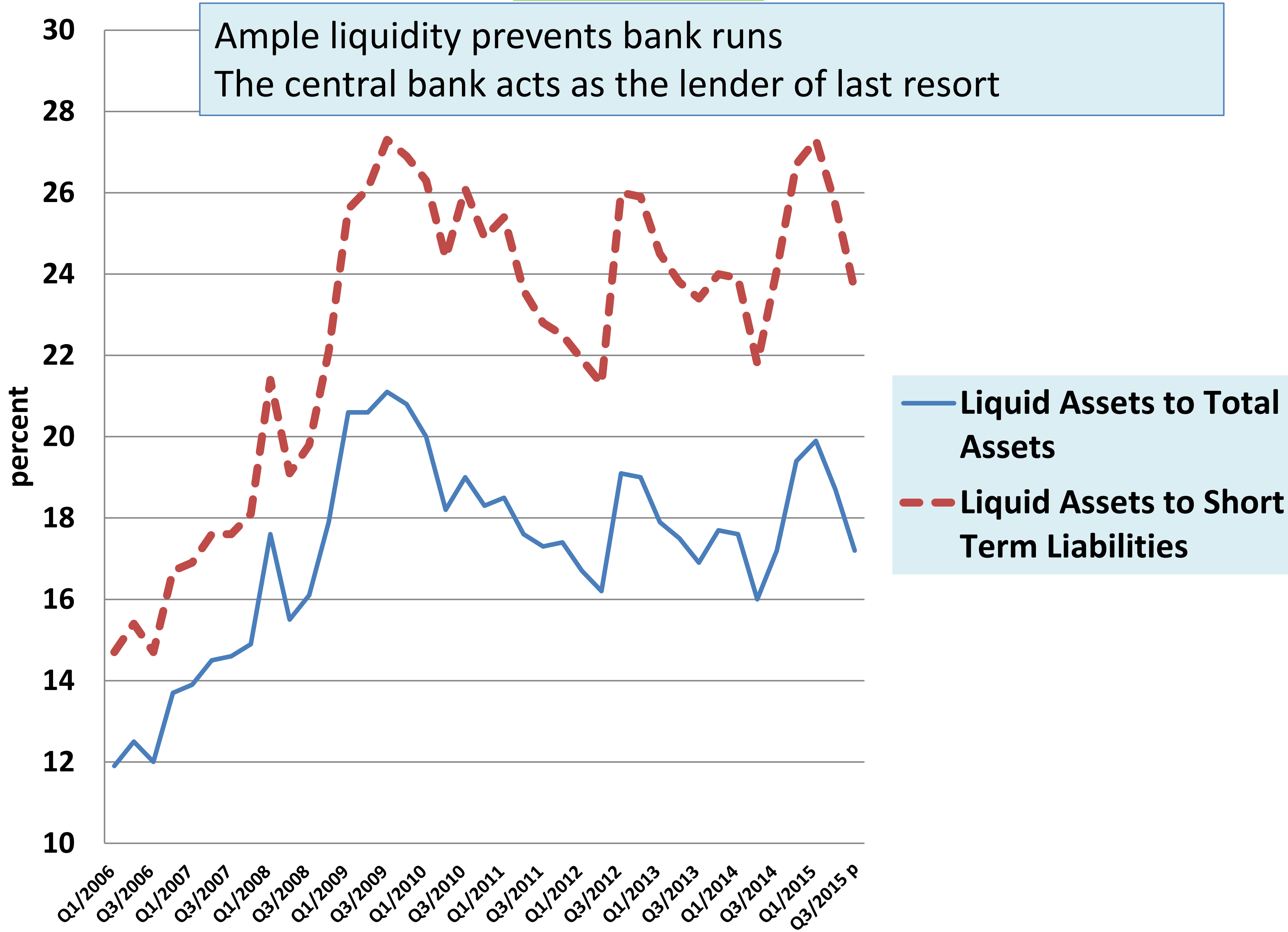
Commercial Banks' Capital Adequacy Ratio (CAR)
Capital to Risk Assets (%)
20
18
16
14
12
10
8
6
4
2
0
Q1/2007
Q2/2007
Q3/2007
Q4/2007
Q1/2008
Q2/2008
Q3/2008
Q4/2008
Q1/2009
Q2/2009
Q3/2009
Q4/2009
Q1/2010
Q2/2010
Q3/2010
Q4/2010
Q1/2011
Q2/2011
Q3/2011
Q4/2011
Q1/2012
Q2/2012
Q3/2012
Q4/2012
Q1/2013
Q2/2013
Q3/2013
Q4/2013
Q1/2014
Q2/2014
Q3/2014
Q4/2014
Q1/2015
Q2/2015
Q3/2015
Q4/2015
Q1/2016
Q2/2016
Q3/2016
Q4/2016 r
Q1/2017
Q2/2017
NPL (%)
CAR (% Risk Assets)

Capital Adequacy: Thai vs. foreign bank branches



(4) Liquidity

Ample liquidity prevents bank runs
The central bank acts as the lender of last resort



Basil III: Rule Change from legal reserve (liquidity) requirement to LCR

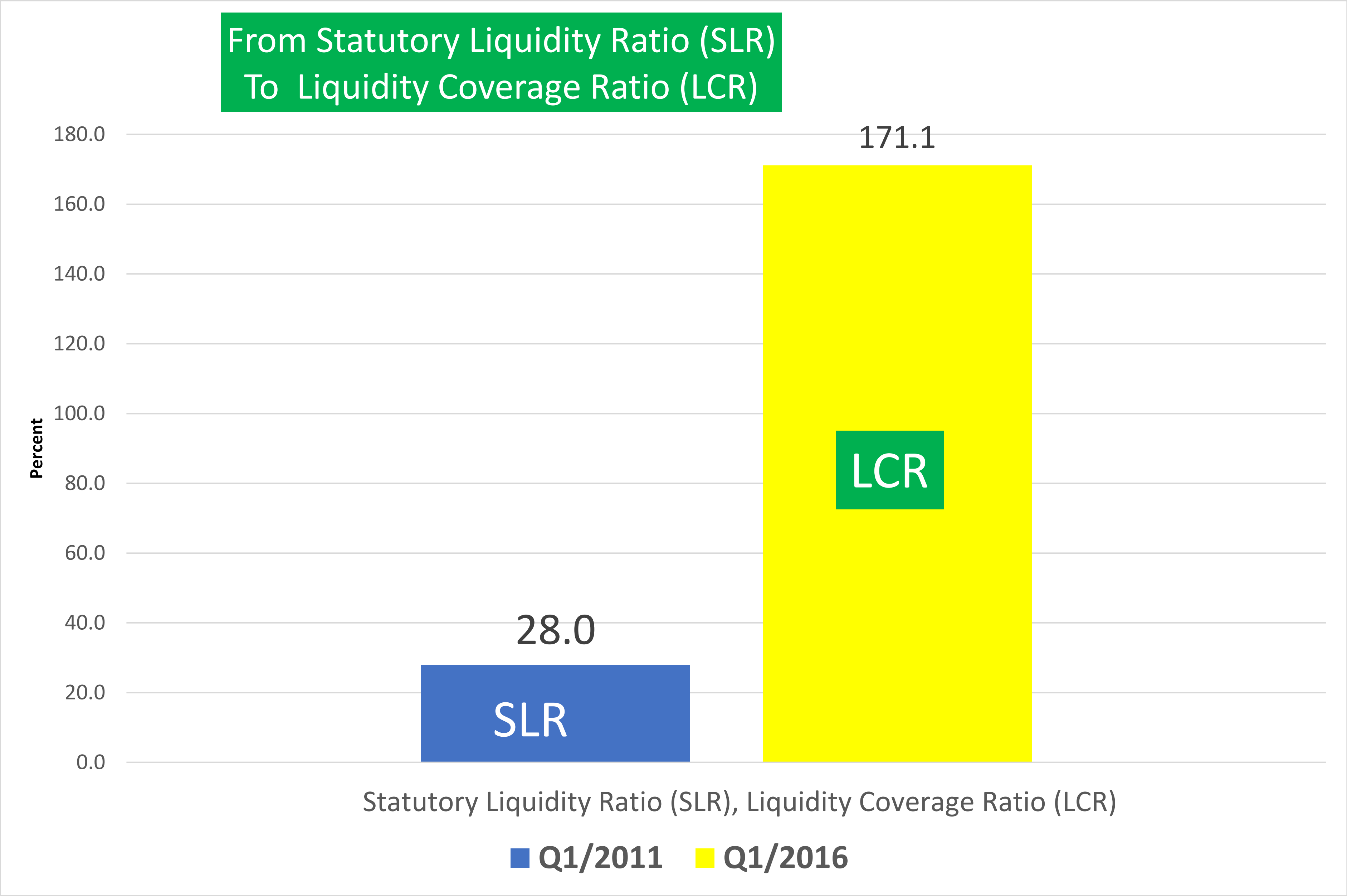
- The liquidity coverage ratio (LCR) refers to highly liquid assets held by financial institutions to meet short-term obligations.
- The ratio is a generic stress test that aims to anticipate market-wide shocks.
- The LCR assures that financial institutions have the necessary assets on hand to ride out any short-term liquidity disruptions.

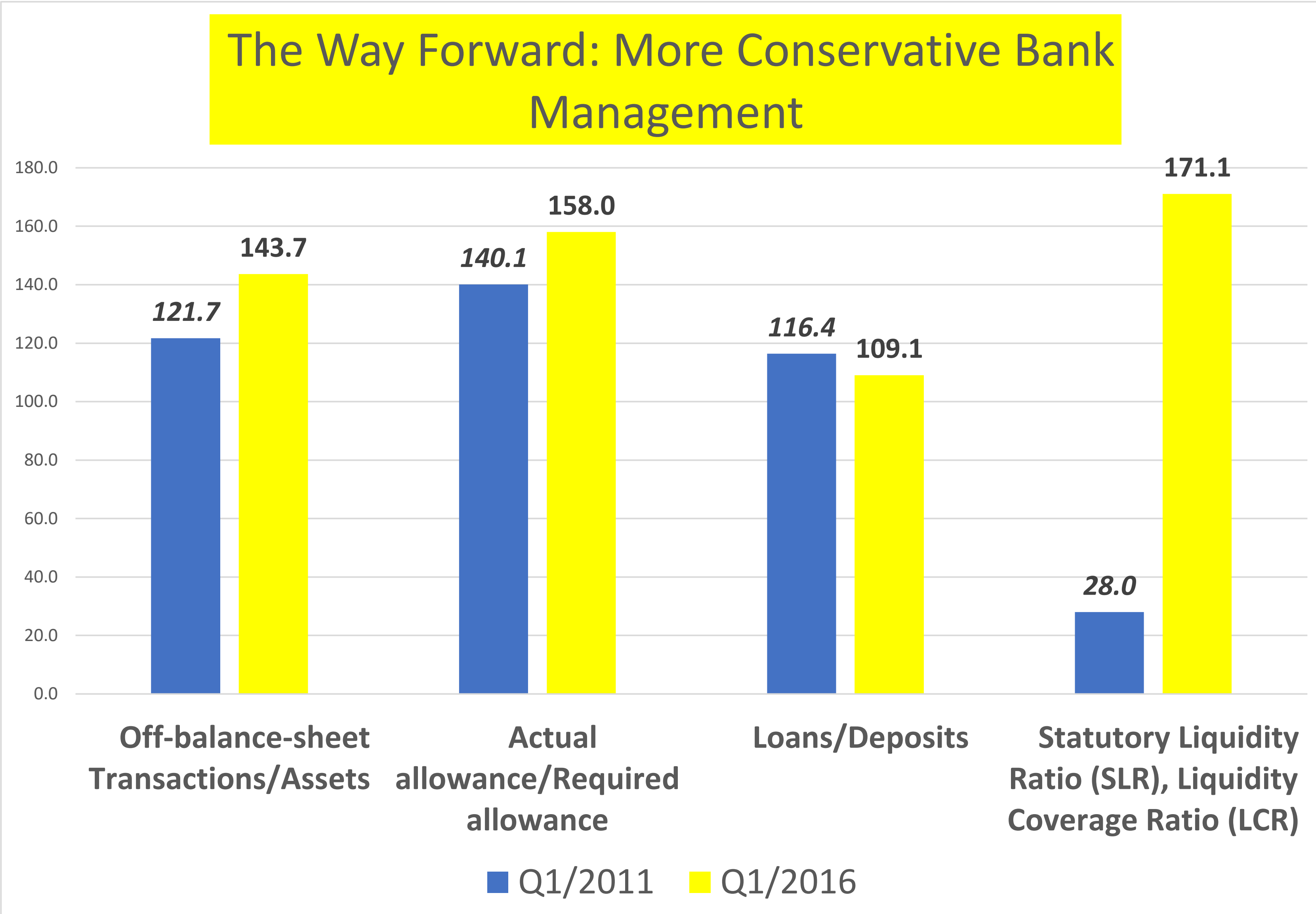
LCR must be above 100%

- Banks are required to have a 100% LCR, which means holding an amount of highly liquid assets that are ***equal*** to or greater than its net cash flow over a 30-day stress period.
- Highly liquid assets can include cash, Treasury bonds or corporate debt.

How to calculate LCR

- The LCR is calculated by dividing a bank's ***high-quality liquid assets*** by its total ***net cash flows over a 30-day stress period***.
- Assume bank ABC has high-quality liquid assets worth B55 million and B35 million in anticipated net cash flows over a 30-day stress period.
- Therefore, bank ABC has an LCR of 1.57, or 157%, which meets the requirement under Basel III.


From Statutory Liquidity Ratio (SLR)
To Liquidity Coverage Ratio (LCR)
Percent
180.0
160.0
140.0
120.0
100.0
80.0
60.0
40.0
20.0
0.0
171.1
LCR
28.0
SLR
Statutory Liquidity Ratio (SLR), Liquidity Coverage Ratio (LCR)
Q1/2011
Q1/2016


The Way Forward: More Conservative Bank Management
180.0
160.0
140.0
120.0
100.0
80.0
60.0
40.0
20.0
0.0
121.7
143.7
140.1
158.0
116.4
109.1
28.0
171.1
Off-balance-sheet Transactions/Assets
Actual allowance/Required allowance
Loans/Deposits
Statutory Liquidity Ratio (SLR), Liquidity Coverage Ratio (LCR)
Q1/2011
Q1/2016