Commercial Banks

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Outline

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2. What is commercial bank?
3. Financial Statement
4. Performance Measurement
5. Relevant Risks
6. BASEL and Internal Measurement
7. Financial Master Plan
8. Deposit Protection Agency (DPA)
9. Trend
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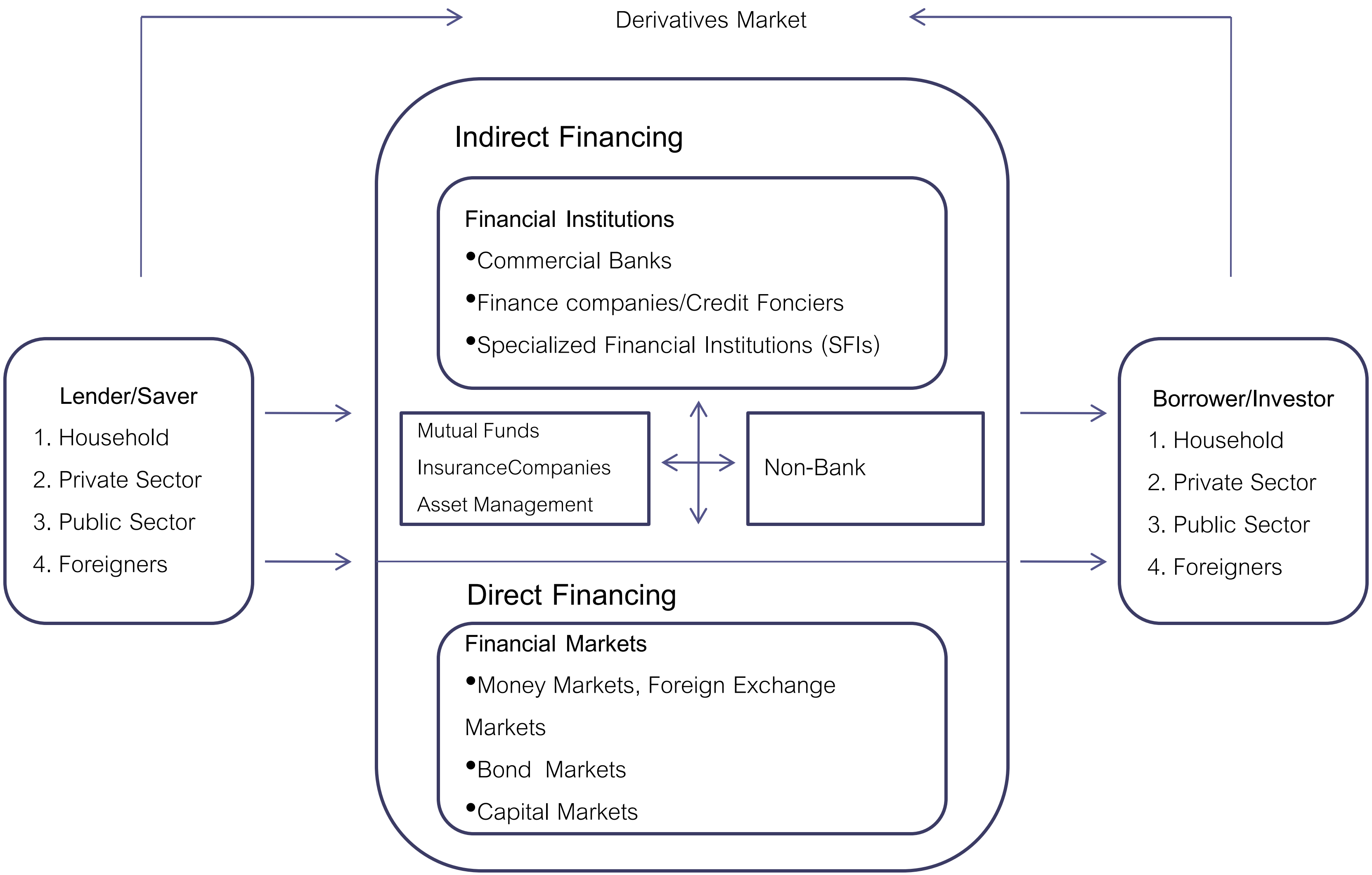
1.Introduction (1/2)

Thailand’s Financial System



1.Introduction (2/2)

Financial Safety Net

กระทรวงการคลัง
Ministry of Finance

Issue/Withdraw commercial banks' license

BANK OF THAILAND

- Prudential regulation and supervision for FIs
- Bank resolution and lender of last resort

DPA สถาบันคุ้มครองเงินฝาก
DEPOSIT PROTECTION AGENCY

- Repay deposits to depositors when the bank's license is withdrew (Deposits Guarantee)

2.What is Commercial Bank? (1/7)

- **What is commercial bank?**

  An institution which accepts deposits, makes business loans, and offers related services.

- **Credit Products Offered**

For Business Customers

•Working Capital Facilities (S/T)
•Term Loan (L/T)
•Trade Finance
•Guarantee Service
•Derivatives

For Retail Customers

•Mortgage
•Hire Purchase
•Auto cash loans
•Speedy Cash
•Speedy Loan
•Credit Card

2.What is Commercial Bank? (2/7)

- **Credit Products For Business Customers**
  - **Working Capital Facilities (S/T)**
    - **Overdraft (O/D)**
      - S/T financing to support working capital requirements.
    - **Promissory Note (P/N)**
      - S/T financing with flexible repayment terms to support working capital requirements which can be customized to suit business needs.
    - **Clean Bill Discount (CBD)**
      - S/T financing that customers sell Bill of Exchange at discount to the bank. The bank has the right to collect money from the payer as in the B/E at maturity.
    - **Invoice: Factoring**
      - Similar to CBD.
  - **Term Loan:** Credit line with a definite amount and repayment term for long term investment in fixed assets and business expansion, allowing business customers to effectively plan their future financial needs.

Source: www.scb.co.th

2.What is Commercial Bank? (3/7)

- **Credit Products For Business Customers (Continued)**

Trade Finance

- **Import Financing**
  - **Letter of Credit (L/C)**
    - The Bank can issue a Letter of Credit for customers to provide payment undertaking to a beneficiary against any obligation or commitment in compliance with documents as stated in the Letter of Credit. The service is available both domestically and internationally.
  - **Trust Receipt (T/R)**
    - Importers can apply for T/R financing from the Bank to obtain goods for sale and repay the Bank on the maturity date.
- **Export Financing**
  - **Export Bills under L/C (EBLC)**
    - After the customer as exporter submits all the documents and a payment commitment from the L/C issuing bank, the bank offers credit to the customer before the receipt of goods payment from importer.
  - **Packing Credit (P/C)**
    - Pre-export financing available to exporters to accommodate goods manufacturing.

Source: www.scb.co.th

2.What is Commercial Bank? (4/7)

- **Credit Products For Business Customers (Continued)**
  - **Guarantee Service**
    - **Letter of Guarantee (L/G)**
      - The Bank offers Bank Guarantees on behalf of financial institutions, companies, partnerships, and individuals who tender bids or enter into contracts with governmental agencies or other beneficiaries.
    - **AVAL/ACCEPTANCE**
      - The Bank offers acceptance/aval, or endorsement of Bills of Exchange, Promissory Notes, or cheques to guarantee payments per the specified terms therein.
    - **Standby Letter of Credit (SBLC)**
      - The bank issues L/C to the Beneficiary Bank abroad to support credit facilities for the Issuing bank's customer in the foreign country.

Source: www.scb.co.th

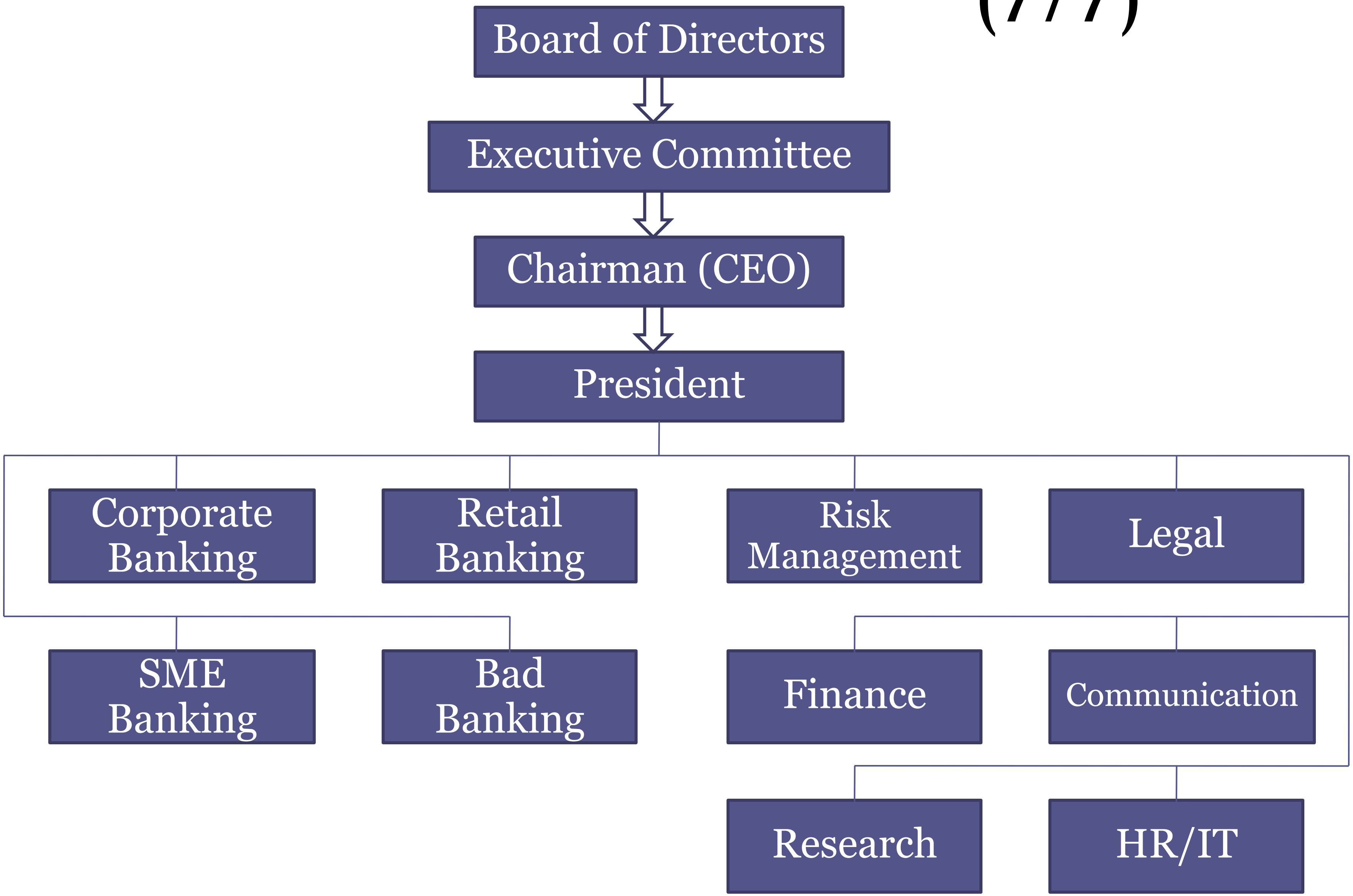
2.What is Commercial Bank? (5/7)

- **Credit Products For Business Customers (Continued)**
  - **Derivatives**
    - **Forward**
    - **SWAP**
    - **OPTIONS**
      - A **derivative** is a financial instrument which *derives* its value from the value of underlying entities such as an asset, index, or interest rate.
      - The main objective for customers is to hedge a customer's position .

2. What is Commercial Bank? (6/7)

- **Non-credit Products Offered**
  - Investment Banking
  - Payroll
  - Payment/Collection
  - Foreign Exchange
  - Money Transfer
  - Wealth Management
  - Investment
  - Insurance
  - Certificate of finance

- **Organization Chart** (7/7)



3.Financial Statement (1/4)

- **Balance Sheet/Statement of financial position**

Simple B/S

Uses of Funds			Sources of Funds
	Assets =100	Liabilities=90 Equity =10	

- **Liabilities:**
  - **Demand deposits (Current Accounts):** can be withdrawn at any time and pay little or no interest.
  - **Notice deposits (Saving Accounts):** are not used as a payment system, which is why they are categorized as nontransactional deposits and is also the reason why they pay more interest.
  - **Fixed-term deposits (Term/Time deposits):** have fixed term and must be repaid at maturity (3m, 6m, 9m, etc.) Banks pay either a fixed or a floating rate.

3.Financial Statement (2/4)

- **Liabilities (Continued):**
  - **Interbank and Money Market:**
    - Banks extend loans to one another for a specified term. Most interbank loans are for maturities of one week or less, the majority being overnight. Such loans are made at the **interbank rate** (also called the **overnight rate** if the term of the loan is overnight). Low transaction volume in this market was a major contributing factor to the financial crisis of 2007.
    - Banks that have excess liquid assets above and beyond the liquidity requirement will lend money in the interbank market to banks that have liquidity shortfall, receiving interest on the assets.
    - There is a wide range of published interbank rates, including the federal funds rate (USA), the LIBOR (UK), the Euribor (Eurozone), and the BIBOR (Thailand).
  - **Debt issued and borrowings:**
    - Subordinated unsecured debentures
    - Unsubordinated unsecured debentures
    - Bill of Exchange
    - Promissory Notes

3.Financial Statement (3/4)

- **Equity:** Most banks are highly leveraged. However, this is regulated by Central Banks to be capital buffer when there is crisis.
  - Tier 1, Tier 2, CAR

- **Assets:**
  - **Cash: Primary Reserve**
    - One of the major services of a bank is to supply cash on demand, whether it is a depositor withdrawing money or writing a check, or a bank customer drawing on a credit line. A bank also needs funds to pay bills, but while bills are predictable in both amount and timing, cash withdrawals by customers are not.
    - A bank must maintain a certain level of cash compared to its liabilities to maintain solvency. A bank must hold some cash as **reserves, which is the amount of money held in a bank's account at the Central Bank.**
  - **Interbank and money market**
  - **Investments: Secondary Reserve**
    - Government and state enterprise securities
    - Debt securities of private sector
    - Investments in subsidiaries
  - **Loans:**
    - Business Loans
    - Retail Loans

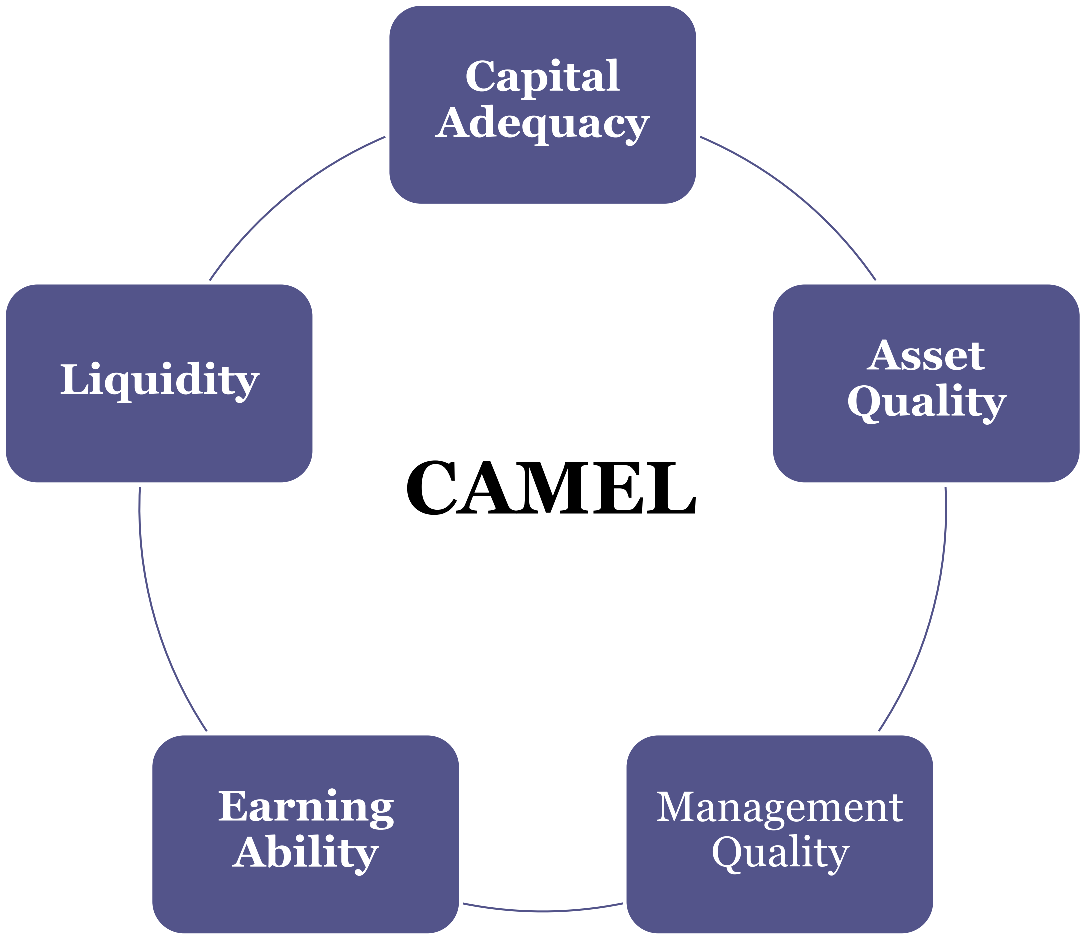
3.Financial Statement (4/4)

- **Income Statement**

+ Interest income
- Interest expenses
= Net Interest Income
+ Fees and service income
- Fees and service expenses
= Net Fees and Service Income
+/- Net gains/losses on tradings and Investments
+ Operating income
- Operating expenses
- Bad debt
= Profit before tax
- Income tax

= Net Profit

4.Performance Measurement (1/4)



4.Performance Measurement (2/4)

- **Capital Adequacy**
  - Total Capital Adequacy Ratio = $\frac{\text{Tier 1 + Tier 2 Capital}}{\text{Risk-Weighted Assets}} \geq 8.5\%$
  - Tier 1 Ratio = $\frac{\text{Tier 1}}{\text{Risk-Weighted Assets}} \geq 4.25\%$
  - Equity capital to total assets = $\frac{\text{Total Capital}}{\text{Total Assets}}$ ➡ 4-6%

Tier 1	Tier 2
•Issued and fully paid up share capital •Premium on share capital •Legal reserve •Retained earnings - unappropriated	•Subordinated long-term debentures •Reserve for loans classified as pass

Note: based on BASEL II

4.Performance Measurement (3/4)

- **Asset Quality**
  - NPLs to total loans = $\frac{\text{NPLs}}{\text{Total Loans}}$
  - NPLs to total equity = $\frac{\text{NPLs}}{\text{Total Equity}}$
  - LLR to NPLs = $\frac{\text{Loan Loss Reserve}}{\text{NPLs}}$

- **Management Quality**
  - Total asset growth rate
  - Loan growth rate
  - Earning growth rate

4.Performance Measurement (4/4)

- **Earning Ability**
  - Net Interest Income Margin (NIM) = $\dfrac{\text{Net Interest Income}}{\text{Average Total Assets}}$
  - Cost to Income Ratio = $\dfrac{\text{Operating Expenses}}{\text{Total Income}}$
  - Return on Average Assets (ROAA) = $\dfrac{\text{Net Income}}{\text{Average Total Assets}}$
  - Return on Average Equity (ROAE) = $\dfrac{\text{Net Income}}{\text{Average Total Equity}}$

- **Liquidity**
  - Loans to Deposits Ratio = $\dfrac{\text{Gross Loans}}{\text{Total Deposits}}$
  - Interbank Ratio = $\dfrac{\text{Deposits and advance to other banks}}{\text{Deposits and advance from other banks}}$

5.Relevant Risks (1/3)

- Credit Risk
- Market Risk
- Operational Risk
- Liquidity Risk
- Concentration Risk

5.Relevant Risks (2/3)

- **Credit Risk**
  - Credit risk is risk that a counterparty or borrower will be unable to meet their financial commitments under an agreement, causing them to be unable to make settlement of indebtedness to the Bank on the due date or to intentionally fail to make payments to the Bank in accordance with the agreement.
  - The Bank is exposed to credit risk primarily with respect to loans to customers and guarantees of loans and others.
- **Market Risk**
  - Market risk is defined as the degree of vulnerability to movements in securities market prices or interest rates, which may affect income or the capital funds of the Bank.
  - Market risk includes:
    - Interest rate risk, Foreign exchange risk, Commodity price risk, Derivatives price risk

5.Relevant Risks (3/3)

- **Operational Risk**
  - Risk of loss resulting from inadequate or failed internal processes, people and systems or from external events. (BASEL II definition)
- **Liquidity Risk**
  - Liquidity risk is the risk that the Bank may not be able to meet its obligations as they fall due, because of inabilities to realize assets or to cover funding requirements at an appropriate price, thus resulting in losses to the Bank.
- **Concentration Risk**
  - Probability of loss arising from heavily lopsided exposure to a particular group of counterparties.

6.BASEL and Internal Measurement (1/5)

- **What is BASEL?**
  - International banking regulations put forth by the Basel Committee on Bank Supervision, which regulates finance and banking internationally. BASEL focuses on risk management of FIs to have adequate capital to cover unexpected losses.

- **BASEL I (1988)**
  - Capital is 8% of risk weighted assets.
  - Minimum Capital Requirement = (Total Risk weighted assets)*8%
  - BIS Ratio = $\dfrac{\text{Total Capital (Tier 1+ Tier 2)}}{\text{Total Risk weighted assets}} \geq 8.5\%^{*}$

- **Weaknesses of BASEL I**
  - Inadequate differentiation of credit risks
  - Minimum capital requirement for "credit risk" only
  - Limited recognition of term structure effects (i.e. maturity)
  - Limited recognition of risk-mitigating techniques
  - Non-recognition of diversification effects

*Note: 8% according to BASEL but BoT adjusted to 8.5%.

6.BASEL and Internal Measurement (2/5)

- **BASEL II**

Pillar 1 Minimum Capital Requirement	Pillar 2 Supervisory Review Process	Pillar 3 Market Discipline
• Credit Risk • Operational Risk • Market Risk	• Types of risk uncovered under Pillar 1	• Guiding principles on disclosure requirements on capital adequacy, risk exposures and assessment
Bank	Bank + Regulator	Bank + Stakeholder

Source: Bank of Thailand

6.BASEL and Internal Measurement (3/5)

- **BASEL I VS BASEL II**

1. Introduction of Capital Requirement for operational risk
2. More approaches for risk assessment i.e. SA, FIRB, AIRB
3. Dealing with risk differentiation, term structure effects and risk-mitigation techniques

→ **Pillar 1**

4. Sound Risk management system (ICAAP, SRP)
5. Different capital levels among commercial banks depend on quality and ability in risk management.

→ **Pillar 2**

6. More information disclosure to the market

→ **Pillar 3**

Source: Bank of Thailand

6.BASEL and Internal Measurement (4/5)

- **BASEL III**
  - Increased **size** and **quality** of the **Tier 1** capital base.
  - Increased risk coverage, for example, OTC derivatives, securitization.
  - Introduced Leverage Ratio (non-risk base) = $\frac{\text{Tier 1 capital}}{\text{Total exposure}}$
  - Introduced Capital buffers:
    - Conservation Buffer = +2.5% of risk weighted assets
    - Countercyclical Buffer = 0-2.5% of risk weighted assets
  - Introduced funding liquidity:
    - Liquidity Coverage Ratio (LCR)
    - Net Stable Funding Ratio (NSFR)

6.BASEL and Internal Measurement (5/5)

- **Internal Measurement**
  - Return On Capital (ROC)
  - Risk Adjusted Return on Capital (RAROC)
    - For 1 unit of capital that a bank reserves, ROC/RAROC tell how much it can generate income.

$$\textbf{ROC} = \frac{\text{Income (Interest + Fee)} - \text{FTP} - \text{OPEX} - \text{EL} + \text{Capital Benefit}}{\text{SA Capital}}$$

$$\textbf{RAROC} = \frac{\text{Income (Interest + Fee)} - \text{FTP} - \text{OPEX} - \text{EL} + \text{Capital Benefit}}{\text{Economic Capital}}$$

  - A financial measurement that allows analysts to take into account the effect of risk when comparing profitability and performance across various businesses.
  - RAROC better reflects risk and return performance since economic capital is an internal estimate of capital required to cover unexpected loss.

7.Financial Master Plan (1/2)

- Financial Master Plan 1: 2004-2008

After implementation

- Mergers and acquisitions among medium and small FIs led to better capital stability, management, and risk management.
- Gap between financial services and households/small SMEs still exists.
- Inadequate risk management tools.

7.Financial Master Plan (2/2)

- Financial Master Plan 2: 2010-2014
  - **Objectives:**
    1. Low cost of financial services
    2. Resilient at all time FIs
    3. Universal banking
    4. Transparency

3 Pillars

Pillar 1	Pillar 2	Pillar 3
• Cost Reduction of FIs	• Competition encouragement and Financial Services accessibility	• Financial Infrastructure establishment especially mechanism of credit process

8.Deposit Protection Agency (1/5)

- **Role**
  - Deposit Protection Agency is a government organization established in B.E. 2551 under the Deposit Protection Agency Act B.E. 2551 in order to provide protection for depositors of Financial Institutions, especially small depositors, the majority of depositors, who may not have access to sufficient financial information. In case a particular insured financial institution fails, reimbursement shall be made to insured depositors under the stipulated amount of coverage within a certain period of time. Deposits exceeding the coverage amount shall be claimed from the liquidation process.

Source: Deposit Protection Agency

8. Deposit Protection Agency (2/5)

- **Main Responsibility**

1. To provide protection for depositors. Reimbursement shall be made to insured depositors within a certain period of time when a particular financial institution fails.

2. To remit premium from insured financial institutions into Deposit Protection Fund, in order to make reimbursement to insured depositors under the stipulated amount of coverage within a certain period of time when a particular financial institution fails.

3. To proceed with liquidation process and to make reimbursement to insured depositors in case the deposits exceed the amount of coverage.

Source: Deposit Protection Agency

8. Deposit Protection Agency (3/5)

- **Benefits of Deposit Protection System**

1. Benefits for depositors: Deposits placed in insured financial institutions are automatically protected according to this Act. Depositors shall neither hold concerns nor partake in any process pertinent to insured deposits when an insured financial institution's license is revoked. Reimbursement shall be made within a certain period of time. Access to financial information shall also be encouraged.

2. Benefits for financial system: Financial institutions shall be strengthened. Business competition shall be enabled in accordance with market mechanism, resulting in appropriate cost of capital.

3. Benefits for the government sector: Taxpayers' money remains unburdened in case of reimbursement.

Source: Deposit Protection Agency

8.Deposit Protection Agency (4/5)

- **Coverage of insured deposits**
  - The Coverage of insured deposits according to The Royal Decree on an extension of deposit coverage, is as follows:
  - Deposits exceeding the coverage amount could be claimed from the liquidation process.

Period	Coverage
11 Aug 2012 – 10 Aug 2015	Baht 50 million
11 Aug 2015 – 10 Aug 2016	Baht 25 million
11 Aug 2016 – Onwards	Baht 1 million

Source: Deposit Protection Agency

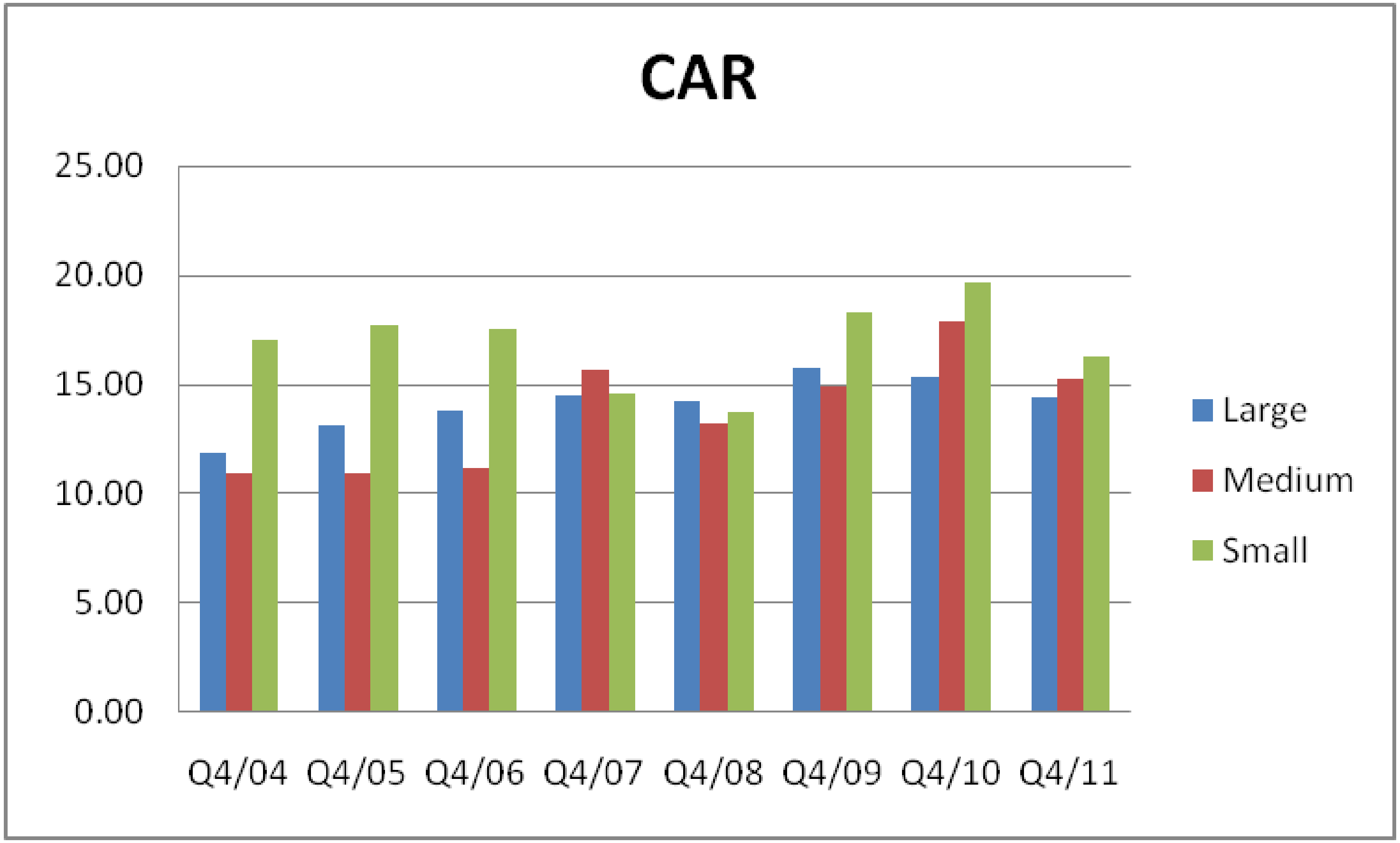
8.Deposit Protection Agency (5/5)

- **Royal Decree on Specification of Premiums Remittance Rate to Deposit Protection Fund B.E. 2555**
  - Financial institutions shall remit premiums to Deposit Protection Fund at the rate of ***0.01 percent per annum*** of average deposits of insured accounts ***since 27 January B.E. 2555 onward***.

Source: Deposit Protection Agency

9. Trend (1/8)

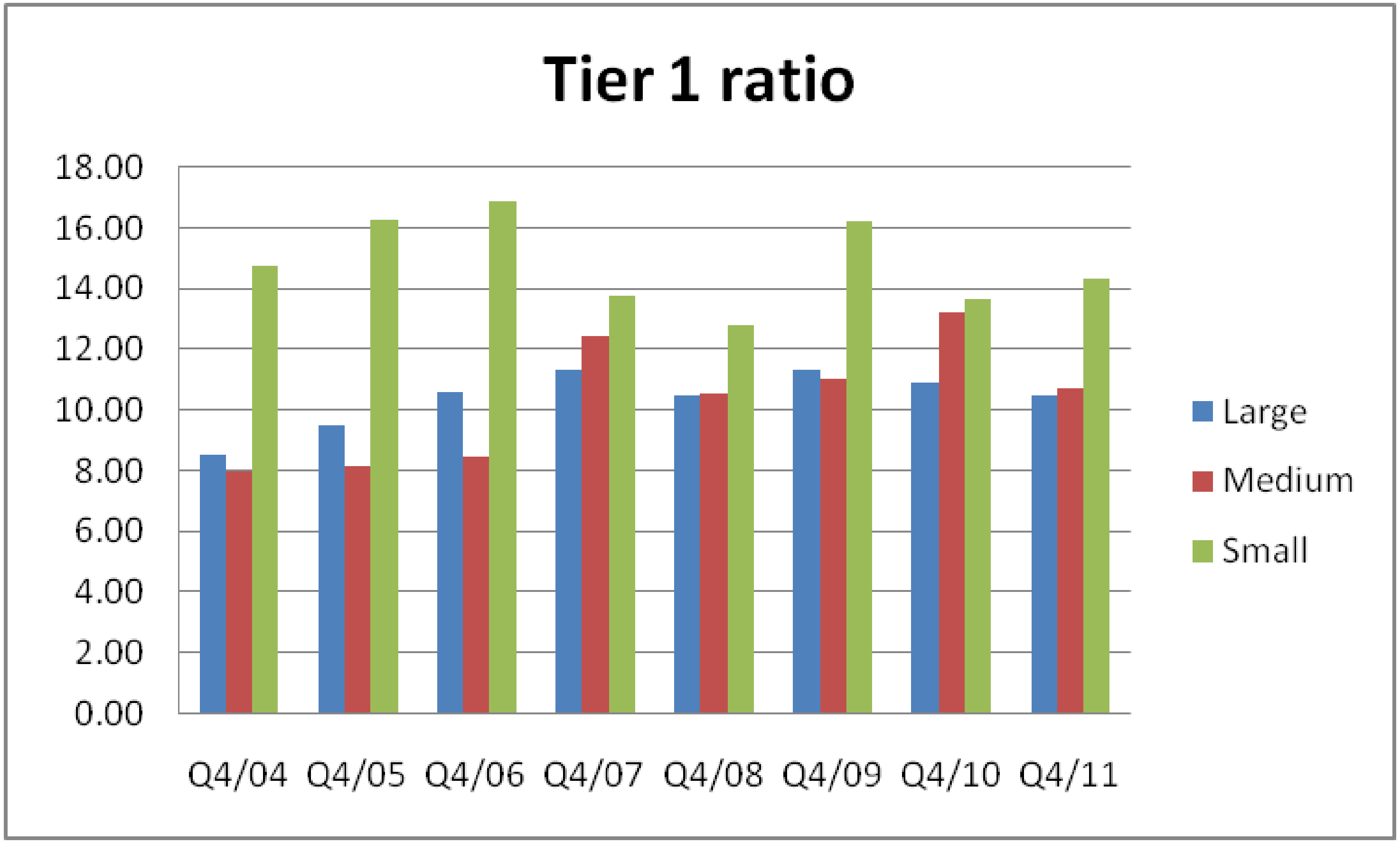
Capital Adequacy



Source: Bank of Thailand

9.Trend (2/8)

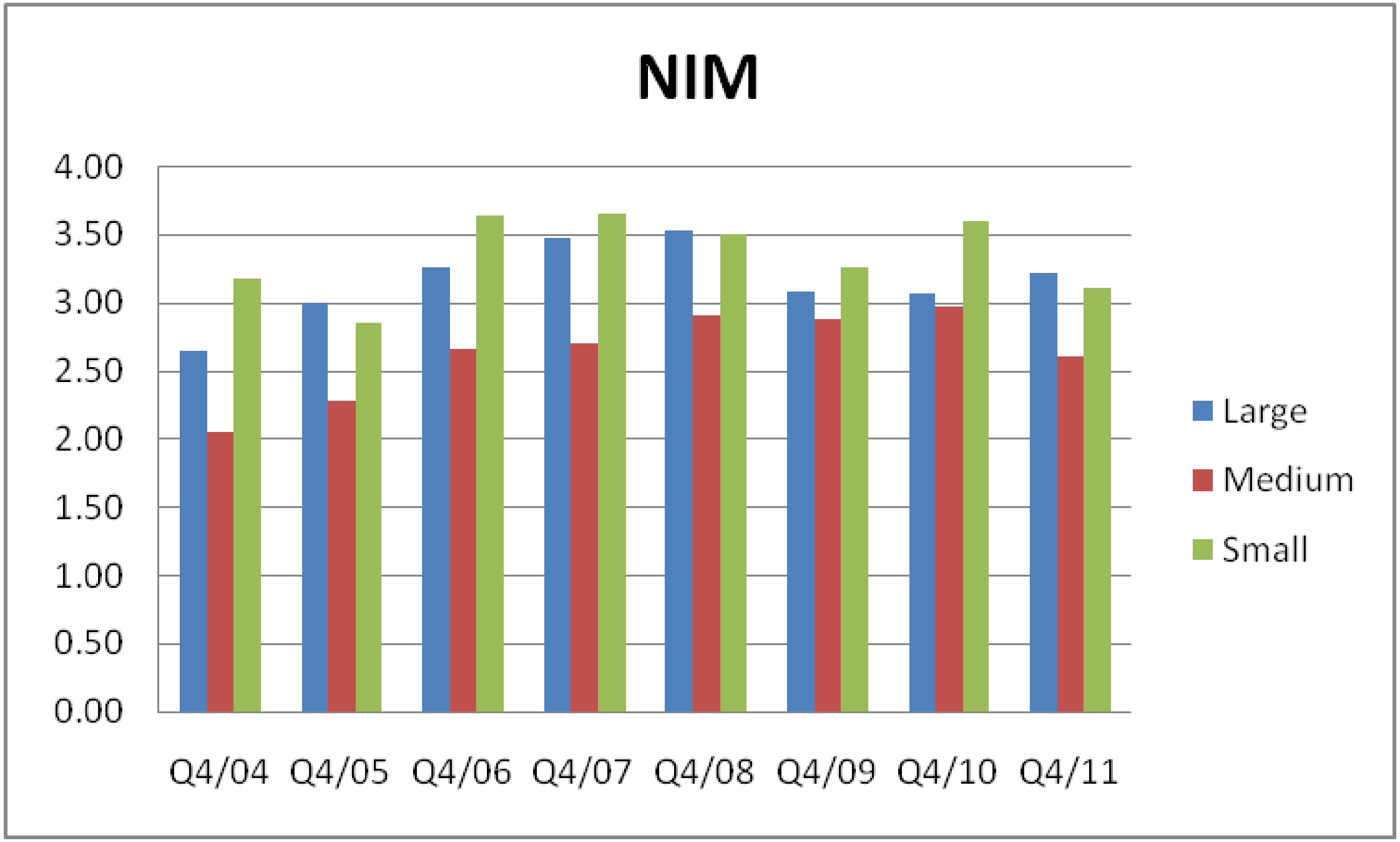
Capital Adequacy



Source: Bank of Thailand

9.Trend (3/8)

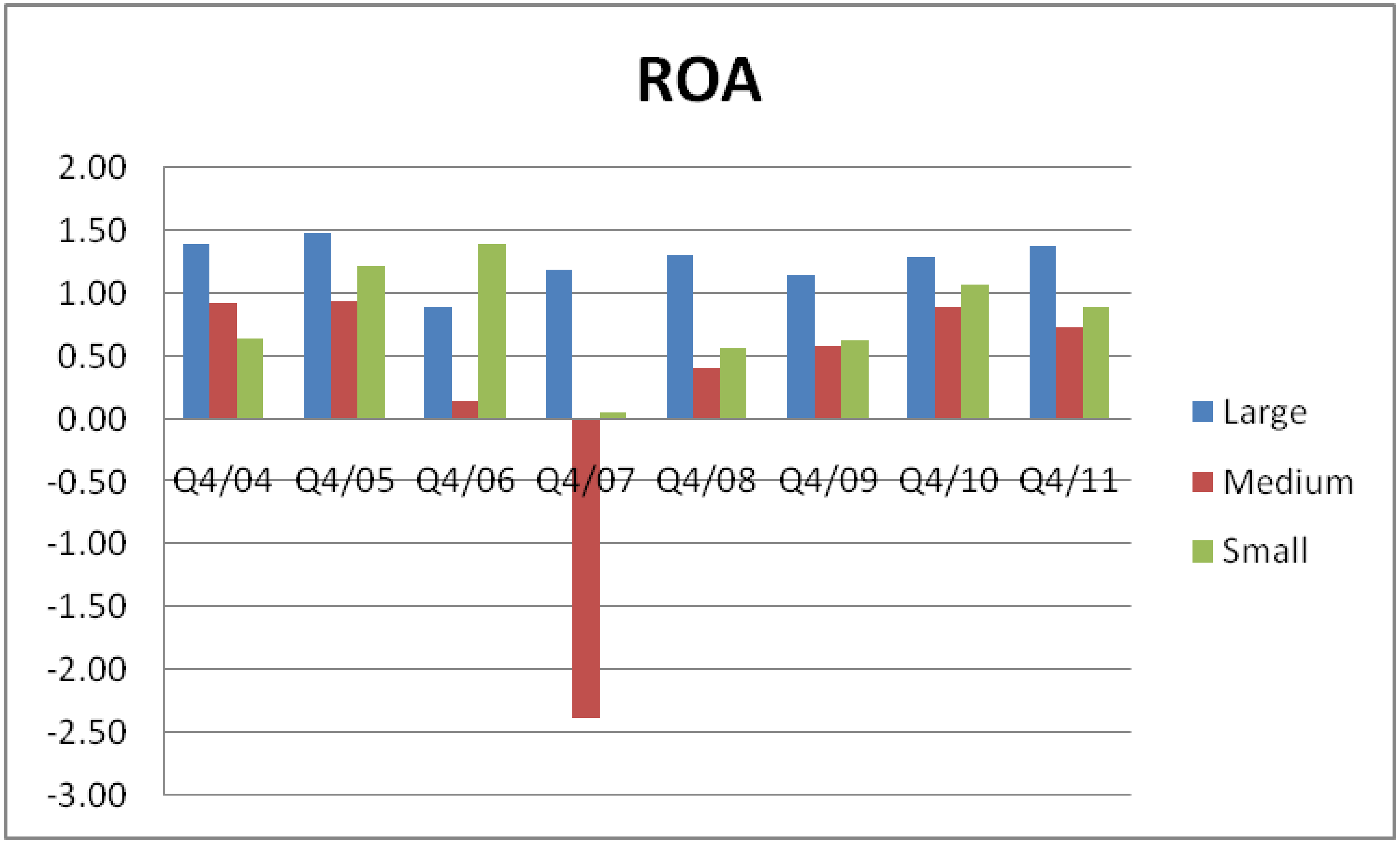
Earning Ability



Source: Bank of Thailand

9.Trend (4/8)

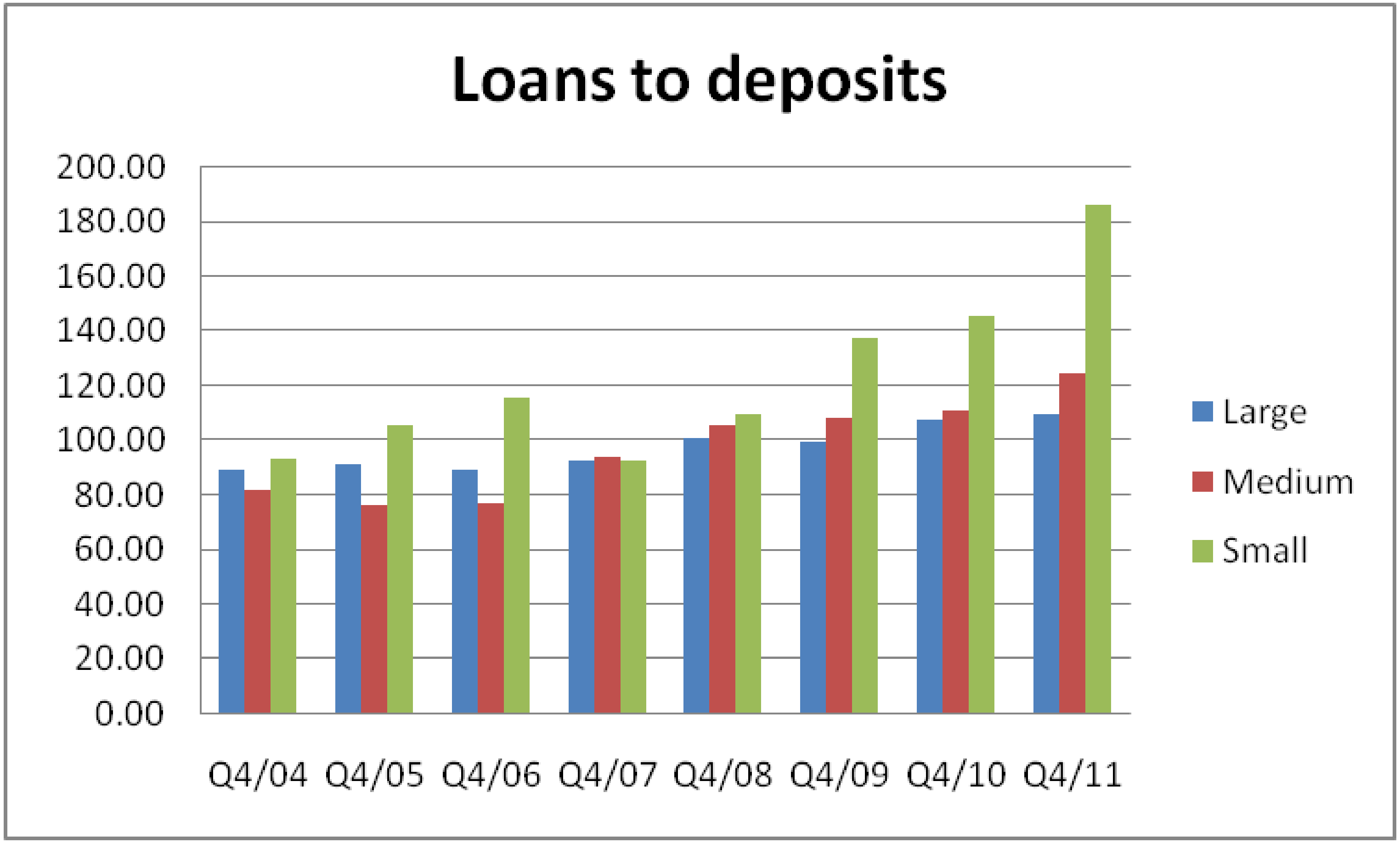
Earning Ability



Source: Bank of Thailand

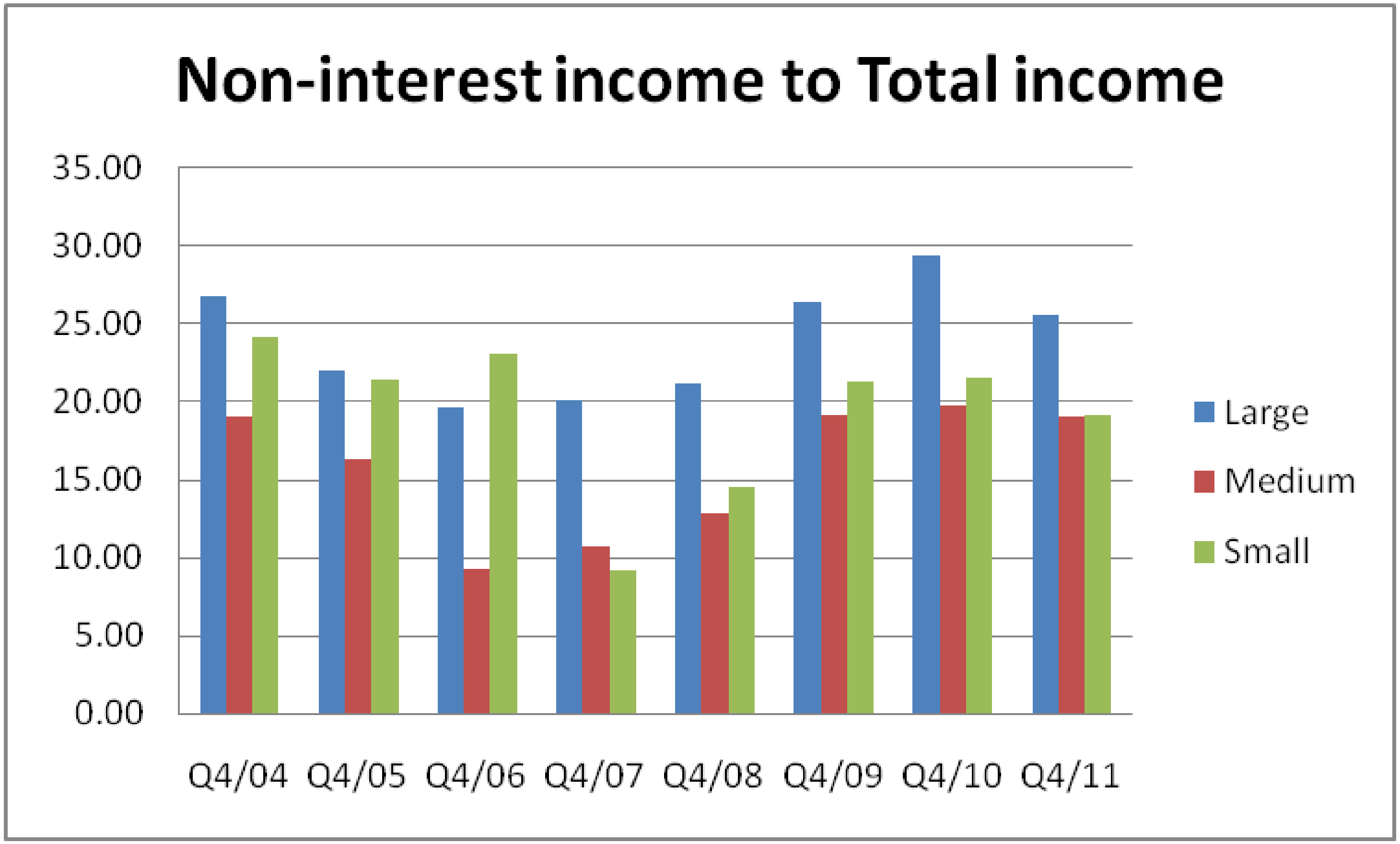
9. Trend (5/8)

Efficiency/Liquidity



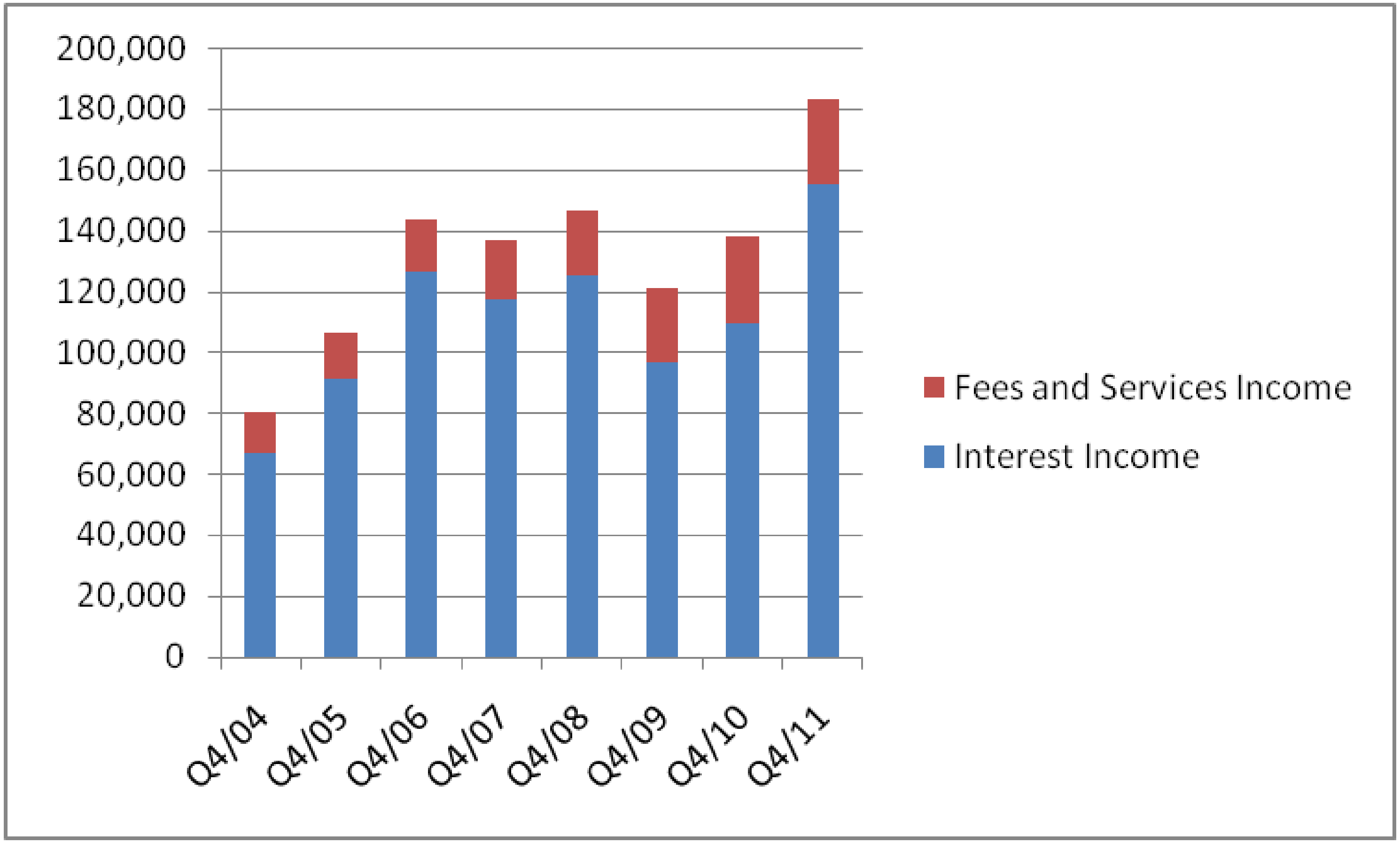
Source: Bank of Thailand

9.Trend (6/8)



Source: Bank of Thailand

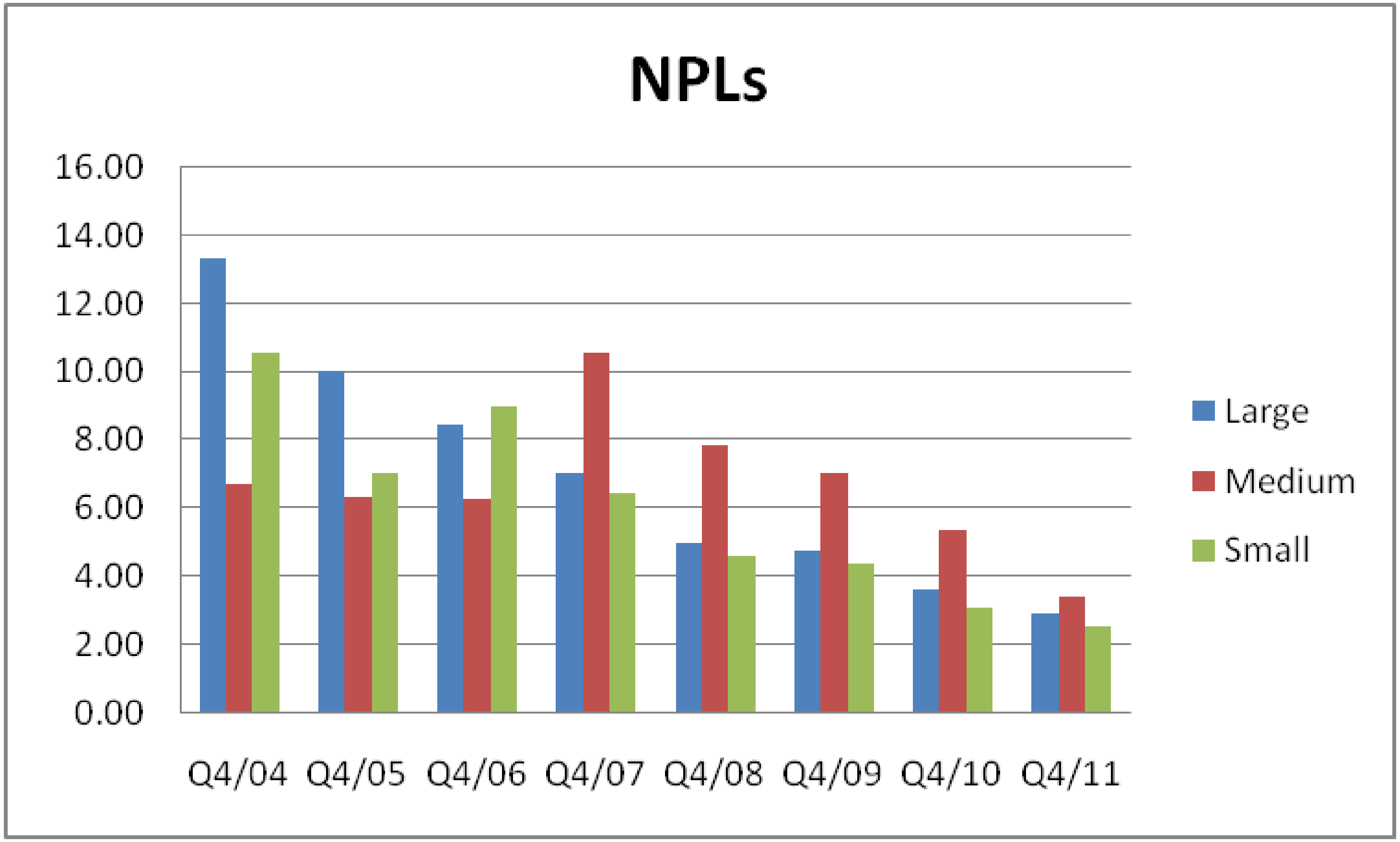
9. Trend (7/8)



Source: Bank of Thailand

9. Trend (8/8)

Asset Quality



Source: Bank of Thailand

10.Group Discussion and Sharing

1. Key Features of the Deposit Protection Agency Act
2. Bank run
3. Too big to fail
4. Who is afraid of BASEL III?