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Bank Rating Methodology

A credit rating reflects both the ability and willingness of a bank to repay its debts, including principal and interest, within the specified time period. The credit rating assigned is the opinion of the credit rating agency regarding the credit risk of the entity based on both quantitative and qualitative assessments. The rating will try to cover the risks faced by the bank over a full business cycle (rate “through the cycle”) not at a point in time. Therefore, it is necessary to have a projection of the bank’s future operating performance over the next 3-5 years. However, the assigned rating might be changed when the business environment such as laws and regulations, business model, or capital structure shift substantially from the original expectations.

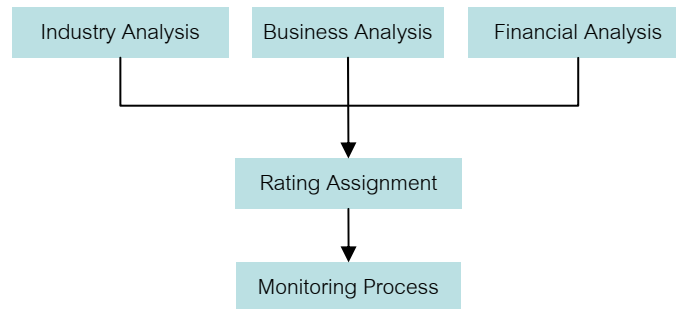
Bank Rating Criteria

In a credit rating assessment for a bank, TRIS Rating evaluates three analytical areas: industry, business and finances. Key rating factors are both quantitative and qualitative. There is no exact system of weighting, as each bank is evaluated based on the specific nature of its business, the overall operating environment, the supervisory and regulatory regimes, the bank’s status (stated-owned or private), and recent developments at a certain point in time. TRIS Rating evaluates the bank’s business information and financial performance – past, present and future. In addition, data about business plans gathered from management interviews is an important part of the evaluation process. This process will establish a fundamental through which we are able to evaluate a commercial bank’s future financial status and its debt service ability.

Business risk analysis is more qualitative than quantitative. The analytical process includes conducting interview with the bank at both the departmental and management levels as well as comparing the company with its peer. The financial risk analysis includes reviews of relevant financial ratios and financial projections. In general, banks with strong business fundamentals are capable of taking higher financial risks than companies with risky business profiles. Thus, they receive the same rating.

In addition, banks with similar business and financial profiles in the medium- to long- term might receive different ratings due to other risk elements. Some banks might face short-term liquidity concerns or litigation risk that could negatively impact operations or financial performance. Several risk evaluations are more qualitative and require careful considerations from both the lead analyst and the rating committee

Chart 1: Credit Rating Process



1. Industry Analysis

The operating environment is a key macro factor that influences both the business and financial performance of banks. TRIS Rating analyses the following key rating factors to determine the banking industry risk:

1.1. Business Potential and Prospects in Banking Industry

TRIS Rating considers industry structure, key industry drivers, and sensitivity of demand and supply in relation to relevant factors that affect the direction and growth of banks. These factors are the economic system and economic environment, interest rates, and the role of banks as financial intermediaries for economic activities of the country. TRIS Rating also takes into account the banking business cycle and financial activity dynamism.

1.2. Competition

TRIS Rating closely examines the competitive environment both among banks themselves and between banks and other types of non-bank financial institutions. The analysis also covers competitive tools implemented by players and the degree to which there are barriers to entry in terms of regulations, technology, and capital requirements.

1.3. Regulatory Framework

The analysis covers various areas, such as regulations, legal practices, and supervisory guidelines by relevant authorities, both in terms of quantitative and qualitative factors. The authorities' policies and practices to protect and respond to financial system problems are also critical. TRIS Rating also considers the future direction of the supervisory and regulatory

framework relating to banking operations, key elements of related economic laws, as well as government practices related to liquidity and capital injections to support ailing banks to ensure the stability of the country's financial system.

2. Business Analysis

TRIS Rating evaluates a bank's fundamental business factors in terms of strengths, weaknesses, and limitations that influence its business profile. Major rating factors are:

2.1. Business Strategies

The analysis assesses the bank's business strategies in its core businesses and the possibility of success based on its available resources and operating environment. It also includes the bank's ability to achieve synergies through strategic alliances to reach the maximum efficiency of resource utilization.

2.2. Management, Transparency and Organization Structure

TRIS Rating considers the bank's organization and management structure, i.e. whether it is centralized or decentralized. Internal controls and audit systems, as well as corporate governance of the bank, are also important factors to determine the bank's rating. In addition, the analysis considers management's capabilities, its experience in the bank's core business, its vision, and the continuity of the management team. The rating takes into account the bank's planning quality, target achievement, and dynamic management policy to determine how it copes with changes to the business environment. [TRIS Rating also asks for audit committee reports and interviews the audit committee to help determine the transparency of company's management.](#)

2.3. Franchise Value

TRIS Rating analyzes the strength of a bank's franchise value, which enhances its steady growth of earnings and helps the bank maintain its market position. Key factors to consider are service quality standards, operating efficiency of the bank's network, its reputation with depositors, borrowers and clients, utilization of branch network and alliances, and group synergy.

2.4. Ownership/Group Support

TRIS Rating evaluates the advantages and disadvantages of the bank's ownership structure, as well as the effect of shareholders and related companies on the rated bank, in terms of both financial and business support. Some of the various factors to be considered include the group's organizational structure, the relationship among companies within the group, the level of ownership and management control, the willingness of shareholders to provide support, and the

financial strength of key shareholders. The evaluation also considers government ownership in the rated banks and/or its significance in terms of being an arm of the government to implement government policy. TRIS Rating considers the level of historical support, particularly in a stress period during which the bank was impacted by a financial crisis or the bank itself faced financial difficulty, to be good evidence to determine the level of support from shareholders or government.

2.5. Competitive Position

In evaluating a bank's competitive position, TRIS Rating compares the status of the bank to the overall financial system, in terms of its size and market share. The status of the bank covers various aspects including its role under special governmental purposes and its position in deposit mobilization. A bank's competitive position can be determined from examining its position as a price leader, its service quality, and its specialization or services offered to create niche markets. To ensure that the rating reflects the medium and long term fundamental of the bank, TRIS Rating also considers the possibility that such advantages may be weakened under fierce competition or changing operating environment.

2.6. Business Diversification

In analyzing the benefits from business diversification, TRIS Rating considers the magnitude of business diversification in terms of types of financial services, customer types, and geographical diversification of the bank's customer base. Good business diversification in business areas, where the bank has expertise, increases the diversity of sources of revenue, which helps to mitigate business risks. However, business diversification into areas that the bank has less of a competitive edge, or has no experience, may negatively affect the bank's business risk profile, depending on the degree to which the bank is exposed to such businesses, compared to its overall business activities.

2.7. Risk Management

TRIS Rating considers risk management in terms of whether the risk management policy is appropriate for the bank. TRIS Rating also assesses the quality of implementing such policy. There are many areas to cover in risk management of the bank, including credit risks, liquidity risks, market risks (securities market price volatility), strategic risks, operational risks (both from system error and human error), and appropriate capital allocations for each different risk activity.

2.8. Asset Quality

TRIS Rating evaluates asset quality in three major areas.

2.8.1. Quality of Loan Portfolios and Securities Investment Portfolios

TRIS Rating's analysis covers growth rates and composition of both loans and securities investments. To evaluate loan and investment portfolio quality, it is necessary to classify loans by type of business sector of the borrower, geography of the borrower, maturity and currency. In addition, TRIS Rating considers the bank's size and level of problem loans compared with its equities. Delinquencies in its loan portfolio, types and level of non-performing loans, details of and concentration on large customers, top-20 largest problem loans, contingency and investment in related companies, outstanding amount of troubled debt restructuring and foreclosed properties, as well as level of write-offs and write-off recovery are also factors to be considered during this part of the evaluation.

2.8.2. Quality of Credit Risk Management

Key factors to be covered by the analyst are credit policy and investment policy of the bank, underwriting guidelines and processes, credit approval authority, collateral appraisal criteria, and monitoring system after approval, i.e. loan disbursement, loan monitoring and follow-up, separating authority for loan collection and loan restructuring, problem loan management policy, and roles and efficiency of internal audit and internal control activities.

2.8.3. Allowance for Loan Losses

TRIS Rating considers the bank's loan loss provisioning policy to determine if it is sufficient to cover problem loans and loan losses, and how much higher the loss allowance is than minimum regulatory requirements.

The rapid expansion of bank loans and investments is often a major cause of deterioration in asset quality, as a result of the relaxation in the loan underwriting process and investment decisions, incomplete loan follow-up procedures and controls, insufficient information for credit analysis, and targeting lower risk profile customers in portfolio due to pressure from intensifying market competition and negative attraction, i.e. sustainable large market share strategy. In addition, a highly concentrated loan and investment portfolio in a certain business segment or customer type may expose the rated bank to vulnerability and the possibility it may weaken the bank's financial performance.

3. Financial Analysis

TRIS Rating evaluates a bank's financial profile by considering many of the financial ratios. Details of major ratios used by TRIS Rating to determine financial profile of financial institutions are in the last part of this report. The following are key financial factors:

3.1. Profitability

Profitability measures a bank's success in management and operation and is one of major factors that enhance a bank's capital base. In the analysis, TRIS Rating evaluates details of a bank's revenue base, including net interest income as a core revenue of the bank, as well as the diversity and stability of its non-interest income. Examples of non-interest income are service fees, income from foreign exchange activities and securities trading, and gains from sales of assets. TRIS Rating also considers profitability in terms of interest spreads and operating profits, which are the result of cost management. Major costs for a bank generally include interest expenses, provisioning expenses, and operating expenses, as well as investments in human resource development and information technology systems. Some of these expenses might enhance the bank's long-term profitability, but create extraordinary losses for the bank in the short term. The rating takes into consideration the bank's earnings prospects under major assumptions and medium- to long-term business plans. TRIS Rating gives more weight to revenue diversification and stability, rather than simply the profit figures.

3.2. Capitalization

Capitalization is a key measurement factor in analyzing a bank's ability to survive during periods where it faces a high loss burden and business operating risks. TRIS Rating, therefore, considers the composition and quality of the bank's capital funds. Common shares are regarded as high quality capital, while lower quality capital includes preferred shares, hybrid debts, subordinated debentures, convertible debentures, and assets revaluation surplus. TRIS Rating focuses on high quality capital rather than lower quality capital. The analysis in this category also includes the level of capital funds compared to the risk-weighted assets according to the minimum capital requirements of the BASEL II and the Bank of Thailand. The bank with stronger capital will be more capable and flexible to expand its businesses. Other rating factors are dividend payout policy, internal growth of capital from operating earnings, size of capital fund to absorb effects from asset quality deterioration, accessibility to sources of capital, as well as management policy on capital management.

3.3. Funding and Liquidity

In analyzing funding and liquidity of a bank, TRIS Rating gives priority to the bank's ability to raise funds from reliable sources to support its business growth. The funding structure should match with the bank's assets. TRIS Rating pays particular to the ability to service debt and maintain sufficient liquidity under tight market conditions. Key factors to be considered as we evaluate funding and liquidity of the banks are:

- Structure and diversification of funding sources
- Deposit base, classified by type, size, tenor and stability
- Level of liquid assets, including cash, deposits, short-term securities and marketable securities
- Level of collateralized assets
- Ability to sell or securitize assets
- External liquidity sources, e.g. liquidity support from the Bank of Thailand
- Management philosophy relating to liquidity management and adequacy of liquidity contingency plan (to maintain the bank's liquidity in an emergency)
- Asset and liability management policy
- Risk exposure to asset and liability mismatch structure in terms of duration, interest rates, and currency
- Risk mitigation management and policy

In addition, TRIS Rating evaluates a bank's financial flexibility and ability to find funding as needs arise from losses or unexpected changes. TRIS Rating will consider the bank's ability to access sources of funds, both in the money market and the capital market, during times of stress, as well as unrealized gains from investment portfolios, and financial support from shareholders and business allies.

4. Rating Assignment

After a thorough analysis of all the business and financial risks, the analyst then presents the results to the rating committee. The rating committee will consider all the risks, make recommendations, and assign the rating by majority vote.

5. Monitoring Process

Once the rating is assigned, TRIS Rating reviews the operating performance and financial profile of the bank, and conducts a full-scale review at least once a year to ensure that the rating reflects the credit quality of the bank. A full review is warranted if there are any sudden or significant changes in the business or financial profile of the bank during the reviewing cycle.

Differences Between Company Rating and Issue Rating

Generally, the company rating will be equal to the rating of bank's long-term bonds (bonds that have an initial maturity of more than one year). However, it is not unusual for the issue rating to be different from the company rating (or issuer rating) because differences in the debt structure and/or the priority of debt repayment will cause differences in the seniority of each issue. Debentures may receive a rating below the company rating if debentures are structured to be subordinated debentures. In contrast, senior secured debentures may get a higher rating than the company due to the higher recovery than other debts. The rating of senior guaranteed debentures is based on the rating of the guarantor, whose rating is usually higher than the issuer. For partially guaranteed debentures, the rating will lie between the company rating of the bank and the rating of the guarantor; though not proportionately as the default rate tends to rise quickly in the event of a declining credit rating of the issuer. A partially guaranteed rating of an issuer whose rating is far below the guarantor will be closer to the issuer's rating. In addition, the rating will also depend on the guaranteed portion.

Key Financial Ratios

Profitability

Net Interest Income / Average Assets (%)	=	$\frac{\text{Interest and Dividend Income} - \text{Interest Expenses}}{\text{Average Assets}}$
Non Interest Income / Average Assets (%)	=	$\frac{\text{Fees and Services Income} + \text{Gain (Loss) from Foreign Exchange} + \text{Other Income}}{\text{Average Assets}}$
Operating Expenses / Total Income (%)	=	$\frac{\text{Non-interest Expenses}}{\text{Interest and Dividend Income} + \text{Non Interest Income}}$

Operating profits / Average Assets (%)	=	$\frac{\text{Interest and Dividend Income} + \text{Non Interest Income} - \text{Loan Loss Provisioning Expenses} - \text{Operating Expenses}}{\text{Average Assets}}$
Return on Average Assets (%)	=	$\frac{\text{Net Profits}}{\text{Average Assets}}$
Return on Average Shareholders' Equities (%)	=	$\frac{\text{Net Profits}}{\text{Average Shareholders' Equities}}$

Asset Quality

Non-performing Loans / Average Loans (%)	=	$\frac{\text{Non-performing Loans (According to BOT definition)}}{\text{Average Loans and Accrued Interest Receivables}}$
Loan Loss Provisioning Expenses / Average Loans (%)	=	$\frac{\text{Loan Loss Provisioning Expenses}}{\text{Average Loans and Accrued Interest Receivables}}$
Allowance for Loan Losses / Total Loans (%)	=	$\frac{\text{Allowance for Loan Losses (In Balance Sheet)}}{\text{Loans and Accrued Interest Receivables}}$
Bad Debt Write-offs / Average Loans (%)	=	$\frac{\text{Bad Debt Write-offs}}{\text{Average Loans and Accrued Interest Receivables}}$
Non-performing Assets / Capital Fund and Allowance for Loan Losses (time)	=	$\frac{\text{Non-performing Loans} + \text{Outstanding Amount of Restructured Loans} + \text{Properties Foreclosed}}{\text{Capital Funds} + \text{Allowance for Loan Losses}}$

Capital Structure

Shareholders' Equities / Total Assets (%)	=	$\frac{\text{Shareholders' Equities}}{\text{Total Assets}}$
Shareholders' Equities / Total Loans (%)	=	$\frac{\text{Shareholders' Equities}}{\text{Loans and Accrued Interest Receivables}}$
Total Liabilities / Total Liabilities and Shareholders' Equities (%)	=	$\frac{\text{Total Liabilities}}{\text{Total Liabilities} + \text{Shareholders' Equities}}$

$$\text{Capital Fund / Risk Weighted Assets (\%)} = \frac{\text{Tier-1 and Tier-2 Capital}}{\text{Risk Weighted Assets}}$$

Liquidity

$$\text{Total Loans / Total Deposits (\%)} = \frac{\text{Loans and Accrued Interest Receivables}}{\text{Total Deposits}}$$

$$\text{Total Deposits / Total Liabilities (\%)} = \frac{\text{Total Deposits}}{\text{Total Liabilities}}$$

$$\text{Total Loans / Total Assets(\%)} = \frac{\text{Loans and Accrued Interest Receivables}}{\text{Total Assets}}$$

$$\text{Liquid Assets / Total Assets (\%)} = \frac{\text{Cash + Assets in Interbank and Money Market Items + Securities under Resale Agreement + Securities Held for Trading + Securities Held for Legal Liquidity Requirement}}{\text{Total Assets}}$$
