Rating Methodology



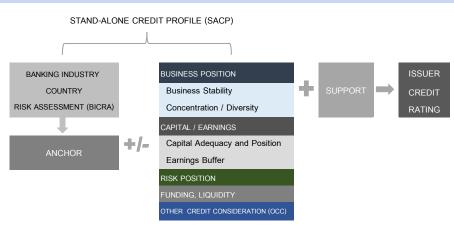
Bank Rating Methodology

This criteria is an update of the Bank Rating Methodology with details on how TRIS Rating assesses banks' capital and earnings. This criteria supersedes the "Bank Rating Methodology" published by TRIS Rating dated 3 March 2020.

SCOPE OF THE CRITERIA

The criteria apply to commercial banks, finance companies, depository specialized financial institutions (SFIs), and other types of lending financial institutions (FIs) that are under the same or similar regulatory supervision as banks.

METHODOLOGY



TRIS Rating's banks rating methodology focuses on the assessment of a bank's standalone credit profile (SACP).

To derive an issuer's SACP, we start with a bank anchor rating, which takes into consideration the economic and banking industry risk profile of the issuer's country of domicile, which we refer to as Banking Industry Country and Risk Assessment (BICRA). The anchor rating is then adjusted by various credit factors including business position, capital and earnings, risk position, and funding and liquidity to determine the SACP or stand-alone rating.

The SACP may be adjusted with other credit considerations (OCC) afterwards, if we are of the view that there are any relevant factors that could impact the issuer's credit profile. Examples of OCC include issues related to management and governance. Lastly, we may also incorporate a potential rating enhancement from extraordinary support provided by a bank's parent or the government (in the case where the bank is a government-related entity) before we finalize the Issuer Credit Rating (ICR).

20 March 2023

Narumol Charnchanavivat narumol@trisrating.com

Pawin Thachasongtham pawin@trisrating.com

Jantana Taveeratanasilp jantana@trisrating.com

Thiti Karoonyanont, Ph.D., CFA thiti@trisrating.com

Annop Supachayanont, CFA annop@trisrating.com





ECONOMIC AND BANKING INDUSTRY RISK ASSESSMENT (BICRA)

BICRA consists of two main aspects of assessment: economic risk and banking industry risk.

Economic risk:

The economic environment of the country in which a bank operates tends to impact the financial health of the bank. The economic risk is assessed based on three sub-factors:

• Economic resilience

Economic resilience refers to a country's economic structure and stability, flexibility of macroeconomic policy and political risk. These are qualitative factors which are assessed based on available data. One quantitative metric that can be used is GDP per capita.

• Economic imbalance

Economic imbalance evaluation considers system credit expansion, property and capital markets and current account. The typical economic imbalances detected in an economy include excessive credit expansion, overheating property markets, signs of stock market speculation, consistent current account deficits, or high levels of external debt.

• Credit risk in the economy

Credit risk in the economy refers to the private-sector debt level and leverage of an economy which is indicated by the level of private-sector debt or household debt relative to GDP. The assessment also includes observations on credit underwriting and lending standards, payment culture, and legal environment such as legal claims over collateral.

Banking industry risk:

Banking industry risk is assessed based on three subfactors:

• Institutional framework

A country's institutional framework is assessed based on i) whether its banking laws and regulations are in line with international standards; ii) the strength and effectiveness of supervision by the regulatory body; and iii) track record of crisis management during past stressed periods and crisis preventive measures.

• Competitive dynamics

This refers to the intensity of competition within the industry. Barriers to entry are key factors that influence the competitive landscape of a country's banking industry. The stages of industry development, product sophistication, and consumer behavior also have considerable influences on the competitive landscape. Highly competitive markets typically lead to margin compression, declining profitability, cost rationalization, and eventually consolidation among industry players.

• System-wide funding

System-wide funding assessment focuses on the stability of funding in a banking system. Customer deposits are typically the core funding source with the highest degree of stability in a banking system. Wholesale funding in the form of borrowings or debt securities issuances as well as offshore borrowings are seen as less stable and susceptible to changes in market sentiment and external market disruptions.

Once all these factors are considered, the scores of economic and industry risk factors are combined to derive the average economic and industry risk score. The score is then translated into an anchor rating, after which we would make further adjustments based on business position, capital and earnings, risk position, and funding and liquidity.



Business Position

A bank's business position vis-à-vis its peers in the industry is assessed through the evaluation of its standings in two key aspects: business stability, and concentration and diversity.

Business stability

We determine a bank's business stability by its revenue stability, market share, and customer base. Revenue stability is assessed based on a bank's revenue sensitivity to changes in market conditions, which are impacted by the mix of its business lines. Business lines that contribute recurring income are of a more stable nature compared to trading activities, for example. A bank that has a strong and stable market position is assessed to have high business stability. The last indicator of business stability is the solidity of a bank's customer base. A bank that has a core group of customers with long-standing relationships is less susceptible to potentially costly competition for customer retention and is hence seen to possess strong business stability.

Concentration and diversity

A bank that has strengths in a variety of products is viewed to be less susceptible to adverse market conditions than a bank that concentrates on a narrow mix of products. A strong market position is also associated with a balanced mix of corporate and retail banking businesses targeting a wide range of customer segments. We view a bank that has sizeable revenue contributions from non-credit fee-based businesses positively as it is likely to be less susceptible to volatile economic environments particularly in the highly competitive credit markets where asset yields are under pressure.

Capital Adequacy, Capital Position and Earnings Capacity

Capital essentially indicates a bank's ability to absorb losses. The assessment focuses on its capital adequacy measured against regulatory requirements and capital position based on our projected average capital ratio. Earnings capacity to absorb losses is also determined by using an earnings buffer metric.

For capital adequacy, we measure a bank's core equity Tier 1 (CET1) capital ratio against the regulatory requirement. The next step is to assess the bank's capital position based on our projected CET1 ratio by using an average ratio of the current year and the next two years. For a financial group, we assess the capital strength of the group based on the consolidated CET1 ratio of the financial holding company. Lastly, we assess the bank's earnings buffer, which is the ratio of operating profit less normalized loan loss provisions to average risk-weighted assets.

Risk Position

In assessing a bank's risk position, we evaluate key risk characteristics that provide some indication of whether a bank has a riskier position relative to its peers. The key indicators include growth strategy and exposure, risk concentrations, complexity, and loss experience in comparison with peers.

Growth and changes in exposure. Higher growth in loan portfolio and trading book relative to the industry or notable changes in risk exposure may imply that the bank has taken a riskier growth strategy relative to the industry. However, high growth is not automatically linked to a riskier position. It all depends on the management's ability to manage risks and changes in exposure.

Risk concentrations and diversification. Risk concentrations refer to concentrations of exposure to individual debtors, counterparties, customer segments, industries or sectors. A bank that has materially high-risk concentration of any type is viewed as having a riskier position compared to other banks that have relatively diversified risk profiles.

Complexity. Complexity itself is not necessarily a negative factor with respect to a bank's risk position. The focus is on a bank's ability to manage risks associated with the complexity of products, business lines, and organizational structure. Derivatives and structured capital market products are examples of high-complexity products. Investment banking activities, if

Rating Methodology



contributing to a large proportion of revenue, may also indicate a certain degree of complexity. However, a lack of complexity alone does not always mean that the risk position can be viewed positively.

Loss experience. A bank's recent loss experience and projected loss relative to peers are indicators of its risk position relative to the industry. A bank's loss experience is mainly measured by credit costs or loan loss provisions and trading losses from investment portfolio. Lower losses compared to peers in the same measuring period may indicate a stronger risk position. Other types of loss experience may include legal expenses and regulatory fines.

Interest rate and currency risk. We also assess interest rate risk management in relation to asset-liability management (ALM) and currency risk when assets and funding are in different currencies. A few indicators include asset-liability maturity and repricing gap.

Funding and Liquidity

Funding. The strength of a bank's funding position is assessed based on the composition of its funding structure and sources. A bank that sources funding mainly from retail depositors, especially from retail current accounts and savings accounts (CASA) is considered to have a strong funding position as these are viewed as sticky deposits. If the bank's proportion of CASA is lower than major peers, we would expect that at least its funding maturity profile should be appropriate for its asset maturity profile. Conversely, a bank that relies heavily on short-term wholesale funding, particularly that from inter-bank markets, is viewed to have a relatively weak funding position.

The metrics that we monitor include loan-to-deposit ratio, deposits to liabilities, or equity to assets. The cost of deposit funding relative to the industry will also need to be analyzed to assess whether the strength in deposits is built on a strong customer base or above-market pricing strategies which may not be sustainable in the long term. Our assessment of funding position is mostly based on comparison among peers.

Liquidity. Liquidity assessment focuses on a bank's ability to meet its payment obligations under stressed scenarios. Liquidity is typically measured by the amount of available liquid assets relative to wholesale funding, deposits, and short-term debt obligations. Another practical measurement of a bank's liquidity position is the Liquidity Coverage Ratio (LCR) under the Basel III regulatory framework reported by banks as it incorporates the impacts of stressed scenarios.

OTHER CREDIT CONSIDERATIONS

Apart from the key credit considerations discussed above, there could be other considerations that, in our view, should be captured in assessing the issuer's credit profile. For instance, if there is strong evidence to suggest a serious governance issue, it could be reflected as a negative rating adjustment under "Other Credit Considerations".

OWNERSHIP AND GROUP SUPPORT

Once we derive the stand-alone credit profile (SACP), the final step in the rating process is to assess whether there is a possibility of a rating uplift due to extraordinary group support (in the case the bank is a member of a group) or financial support from the government (in the case the bank is a government-related entity, GRE) (please refer to TRIS Rating's Rating Methodology for GRE).

For a bank which is a member of a group whose parent has a strong credit profile, there is a possibility of a rating uplift from SACP if we assess that there is a strong likelihood of "extraordinary" financial support from its parent being provided to the bank under a stressed scenario on a timely basis. The level of support, assuming the readiness of supporting capacity, depends partly on the bank's status and importance within the group. How we determine the status of the bank within its group indicates the number of notches that the SACP can be enhanced (please refer to our Group Rating Methodology).

Rating Methodology



METHODOLOGY UPDATE

We have added details on how we assess a bank's capital position. See the "Capital Adequacy, Capital Position and Earnings Capacity" section.

KEY FINANCIAL RATIOS

Ratios	Definition
Total Revenues	Net interest income + net fee income + non-interest income
Return on Average Asset (ROAA) %	Net income / Average assets
Return on Average Equity (ROAE) %	Net income / Average shareholders' equity
Earning Asset Yield %	Total interest income / Average earning assets
Cost of Funds %	Total interest expenses / Average funding
Net Interest Margin %	Net interest income / Average earning assets
Earning Assets	Cash + Interbank and money market items (asset) + Net investments + Gross loans (including deferred revenue)
Funding	Deposits + Interbank and money market items (liabilities)+ Borrowings and debt issued
Liquid Assets	Cash + Interbank and money market items + Net investments
Credit Cost %	Loan loss provisions / Average gross loans
NPL Coverage %	Loan loss reserves / Gross non-performing loans
Cost to Income %	Total operating expenses / Total revenues

TRIS Rating Co., Ltd.

Tel: 0-2231-3011 ext. 500 / Silom Complex Building, 24th Floor, 191 Silom Road, Bangkok 10500, Thailand www.trisrating.com

© Copyright 2023, TRIS Rating Co., Ltd. All rights reserved. Any unauthorized use, disclosure, copying, republication, further transmission, dissemination, redistribution or storing for subsequent use for any purpose, in whole or in part, in any form or manner or by any means whatsoever, by any person, of the credit rating reports or information is prohibited, without the prior written permission of TRIS Rating Co., Ltd. The credit rating is not a statement of fact or a recommendation to buy, sell or hold any debt instruments. It is an expression of opinion regarding credit risks for that instrument or particular company. The opinion expressed in the credit rating gloes not represent investment or other advice and should therefore not be construed as such. Any rating and information contained in any report written or published by TRIS Rating does not represent investment or other advice and investment decision based on this information. Information used for the rating has been obtained by TRIS Rating from the company and other sources believed to be reliable. Therefore, TRIS Rating does not guarantee the accuracy, adequacy, or completeness of any such information and will accept no liability for any loss or damage arising from any information. All methodologies used can be found at http://www.trisrating.com/rating-information/rating-criteria.