中誠信(亞太)
CCX

Rating Methodology for Commercial Banks

Summary

A commercial bank is a bank which holds a banking license permitting the bank to receive deposits of any amount from individual depositors, corporations and any other legal entities, and to lend any amount of money to eligible individuals, corporations and any other legal entities under the law of the country where the bank is operating.

The credit rating methodology for commercial banks adopted by China Chengxin (Asia Pacific) Credit Ratings Company Limited ("CCXAP") comprises quantitative analysis and qualitative analysis which are reviewed from time to time.

A stable banking industry is of paramount importance for the economy of a country; therefore banks are strictly regulated by the respective central bank or financial regulator. In the credit rating for a commercial bank, CCXAP analyses the bank's internal credit strength from the qualitative and quantitative perspectives, focusing on the bank's capital structure, capital adequacy ratio, liquidity, profitability, efficiency, asset quality, assets and liabilities management, management quality, risks and risk management, and then analyses the availability of external support to the bank and the effectiveness of financial policies.

Introduction of Rating Methodology

1. Assessing a Bank's Internal Strength is Fundamental; Incorporating with the Availability of External Support

A commercial bank is a bank which holds a banking license permitting the bank to receive deposits of any amount from individual depositors, corporations and any other legal entities and to lend any amount of money to eligible individuals, corporations and any other legal entities under the law of the country where the bank is operating its banking business.

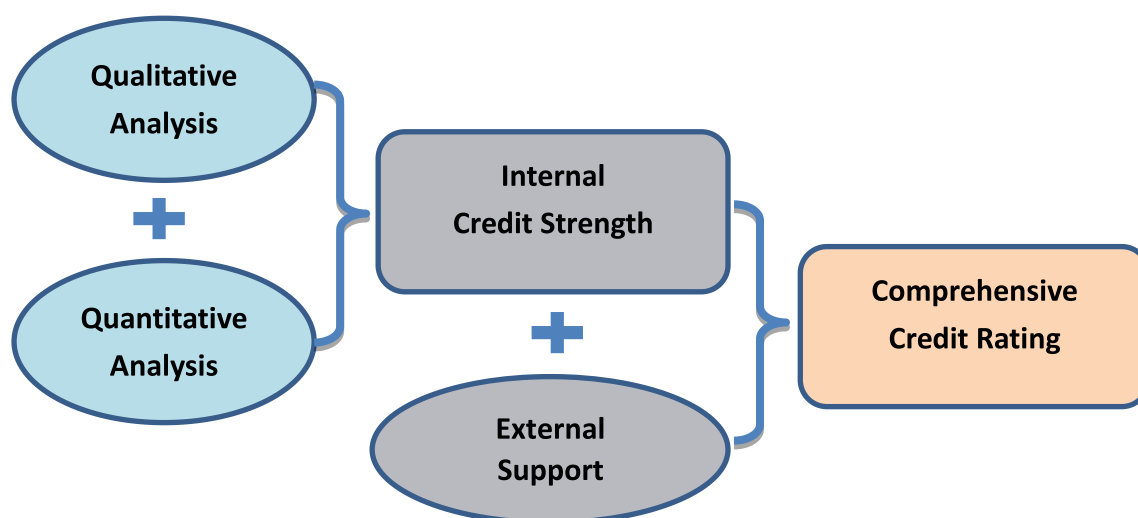
Our credit rating methodology for commercial banks adheres to our general credit rating principles of independence, objectivity and integrity. Our methodology comprises qualitative analysis and quantitative analysis with emphasis on the characteristics of commercial banks which are strictly regulated by the respective central bank or the like in accordance to its local rules and the international regulations as set by the Basel Committee.

Differing from a corporation, a commercial bank has a bigger impact on an economy because a commercial bank is a financing source for corporations and individuals. As such, bank regulators such as central bank and monetary authority have the primary duty to maintain a stable banking system through strict regulations and provision of implicit or explicit support to the banks when needed.

In our credit risk analyses of a commercial bank, we take into consideration of (1) its internal credit strength and (2) the availability of external support when needed. The internal credit strength rating reflects our view of a bank's standalone financial strength and management ability. It measures the probability of requiring external support to avoid default.[1] Based on the assessment of internal credit strength, we incorporate the availability and effectiveness of various forms of external support to form the comprehensive long-term credit rating.

2. Qualitative Analysis and Quantitative Analysis

The qualitative analysis and quantitative analysis combine to reveal the financial strength and management quality of a bank. A commercial bank's financial statements are the main source of financial data for evaluating the bank's financial strength.



Rating a Bank's Internal Credit Strength

The key determinants for the assessment of the internal credit strength of a bank are divided into qualitative determinants and quantitative determinants, as shown in Table 1.

Table 1: Determinants for Internal Credit Strength

[1] For the rating scale of internal credit strength, please see Appendix.

Qualitative Rating Determinants	Operation Environment
	Franchise Value
	Management Quality
	Risk Management
Quantitative Rating Determinants	Capital Adequacy
	Asset Quality
	Profitability
	Efficiency
	Liquidity

1. Qualitative Rating Determinants

Each of the qualitative determinants carries several sub-determinants and these are shown in Table 2.

Table 2: Key Qualitative Rating Determinants

Determinants	Sub-Determinants
Operational Environment	Economic Environment
	Legal and Regulatory System
Franchise Value	Sustainable Market Share
	Geographical Diversification
	Steady Earnings
	Diversification of Earning Source
Management Quality	Ownership
	Management Leadership
	Corporate Governance
	Transparency of Financial Reports
Risk Management	Credit Risk
	Liquidity Risk
	Market Risk
	Operational Risk
	Regulatory Risk

(1) Operational Environment

The business performance and credit quality of a bank is substantially affected by its operational environment, including the worldwide financial system and the economies in which the bank is operating. A bank's financial strength usually weakens in a volatile economic environment. An under-developed legal and regulatory environment restricts a bank ability to perform well.

(i) Economic Environment

The pace of economic growth as well as the stability of fiscal and financial policies affects the business performance of banks. Factors taken into consideration include prospects of economic growth, stability of interest rate and exchange rate, and trend of inflation rate. When a country's economy is growing at a steady and healthy pace, the performance of its banks is usually good. Stable economic policies and financial policies issued by government bodies and financial regulators help banks to set up long-term business strategies and to better manage any risks that may arise.

(ii) Legal and Regulatory Environment

Well-developed legal and regulatory systems can help stabilize a banking system. A solid legal system provides a fair environment for banks to lend out money and possess their lender's right, therefore, it is important to find out whether the bank under analysis can get back its lent-out money in whole or in part efficiently from a legal perspective. The regulatory environment also affects the development and risks of the banking system. A well-regulated market environment requires banks to establish a good management system and to avoid taking excessive risks.

A prudent regulatory banking system has the following characteristics: a high degree of transparency; an international standard closely adhering to the Basel Accord; an independent banking regulator; and effective regulatory implementation and supervision.

(2) Franchise Value

A bank's franchise value shows in its sustainable market share, geographical diversification, steady and diversified earning sources. These tie in with the bank's capacity to generate and maintain stable earnings. Franchise shows it value in difficult market conditions. A high value franchise can help a bank not only sail through difficult market conditions, but also helps the bank to seize business opportunities.

(i) Sustainable Market Share

When a bank can sustain its market share, it reflects the bank's stable market standing, wide brand recognition, and high competitiveness that may scare away potential market entrants. The size of a bank is usually proportionate to the size of its market share. A bank's market size is not the sole determinant for its earning, however. A bank's business strategy also has impacts on its earning; hence a small bank may be able to generate stable revenue in a niche market.

(ii) Geographical Diversification

A bank with diversified business and diversified geographical business locations can help reduce credit risk and increase its franchise value.

(iii) Steady Earnings

Steady earnings can be evaluated by analyzing how predictable the business line of a bank is. Earning volatility often leads to high credit risk. In general, earnings generated from the retail banking business are relatively stable. When assessing a bank's earnings stability, the ratio of loan to individual borrower to the total loan amount is an important indicator.

(iv) Diversification of Earning Sources

Diversified sources of earnings help a bank remain resilient to market volatility. A bank with concentrated or limited business lines is more likely to have its repayment capability negatively influenced by unexpected changes in market conditions. A commercial bank's major source of income is interest income generated from loan assets. Diversifying into fee income businesses helps a bank to increase profit.

(3) Management Quality

Good corporate governance and professional personnel indicate that a bank has high quality management. Ownership and management structure serve as the force that advances their bank forward.

(i) Ownership

The ownership structure of a bank affects the standard of corporate governance of a bank. In most cases, the major shareholders hold the key positions on the board of directors and executive posts in management. Other than meeting the minimum compliance, following the best market practices of corporate governance and the willingness of the shareholders to further inject capital to the bank by way of subscribing new shares are the important elements supporting the strength of the bank.

(ii) Management Leadership

Banking is a people business. Strong and rigorous management leads their bank to grow in size and increase in profit. Quality management complies with regulatory requirements, formulates business strategies, plans for the future development, ensures good internal control, manages risks, and ensures continuity of business in any kind of market situation.

(iii) Corporate Governance

The importance of corporate governance lies in its contribution both in business prosperity and accountability. In essence, it is the set of processes, customs, policies, laws and institutions affecting the way in which a bank is directed, administered and controlled. Good corporate governance is the pre-condition for sustainable development of a bank. We believe it important for a bank to have a low exposure to related parties and a high level of independence.

(iv) Transparency of Financial Reports

The financial reports of a bank should reflect the financial strength of that bank. By regulations, the financial reports of a bank must be timely issued, transparent, globally comparable, true, and reliable.

(4) Risk Management

A bank faces different kinds of risk in its daily operation therefore managing risk is an inherent aspect of the daily work of a bank. The task of risk management is to remove or minimize the risks the bank is facing and maximize the bank's earnings. If the risks are not managed appropriately, a bank's profitability will be affected and its credit quality will be hurt. The management of credit risk, liquidity risk, market risk, operational risk and regulatory risk are the key areas to focus on when evaluating the

quality of risk management.

(i) Credit Risk

Credit risk is the major risk a bank faces in its day-to-day business. Credit risk is embedded in loan assets, investment portfolios, and transactions. Whether a bank can manage the credit risk it encounters depends on the management's risk-taking attitude and ways of dealing with credit risk. A high risk-taking management tends to take in loan assets and investments of higher return, caring less about the credit analysis on borrowers and credit rating of securities issuers. Prudent management pays more attention to know-your-client analysis and continuously monitors clients' credit situation post-lending, and provides sufficient allowance for loan impairment losses.

In analyzing a bank's ability to manage credit risk, while the track record of the loan default rate on the bank's loan portfolio and its financial capacity to absorb non-performing loans are the major indicators, concentration in asset type and geographic allocation should not be neglected either in the assessment.

(a) Client Concentration

When a bank's lending business relies heavily on a small number of borrowers, concentration risk to the bank is high. A bank will suffer from a large amount of non-performing loans if its largest clients become insolvent or bankrupt.

(b) Industry concentration

Industry concentration of a bank's lending may constitute a high credit risk if the industry is in the decline and those doing business in it may not be able to make enough profit to repay their bank loans.

(ii) Liquidity Risk

Sufficient liquidity is of paramount importance to a bank. A bank cannot continue to run without sufficient liquid funds to meet its day-to-day financial obligations. A bank of high liquidity has an effective liquidity management policy, a large number of depositors, good inter-bank relationships, and a diversified funding source for raising short-term and long-term funds.

(iii) Market Risk

Adverse market conditions affect a bank's funding ability and funding cost, its efficiency in assets-and-liabilities management and the value of assets held by it. A bank with a high quality assets-and-liabilities management committee can mitigate market risk. As market conditions may change suddenly, a bank is required by its central bank or financial regulator to do regular stress tests according to pre-set criteria.

(iv) Operational Risk

Operational risk arises from human error and technical deficiency. Human error can be mitigated by internal segregation of duties and computerization, whereas technical deficiency is more complicated to handle well. As electronic banking and computerization of daily work are characteristics of modern banking, operational risk due to the aforesaid automation is a key concern to banks. Preventing hacking into the electronic banking system and system breakdown is the priority in operational risk management. Hence, a bank should invest sufficient money in its electronic banking and computer

systems; therefore it has to have a good number of I.T. professionals to take care of the system round the clock.

(v) Regulatory Risk

Financial regulators have taken a much stricter policy to regulate banks and financial institutions to stabilize financial markets due to the serious financial crises that have arisen in the past 20 years. If a bank does not comply with banking regulations, it will be penalized by the regulator by either a fine or even the revoking of its banking license. Hence, a bank should have professional and experienced compliance officers to ensure the bank always observes the relevant regulations.

2. Quantitative Rating Determinants

Five key quantitative determinants are used in the analysis of financial strength of a bank.

Table 3: Key Quantitative Rating Determinants

Determinants	Ratios
Capital Adequacy	Capital Adequacy Ratio
	Basel Accord
Asset Quality	Non-performing Loan Ratio
	Classification of Loans
Profitability	Net Interest Margin
	Return on Asset
	Return on Equity
Efficiency	Cost-to-income Ratio
Liquidity	Liquidity Ratio
	Funding Instruments

(1) Capital Adequacy

Central banks which are members of the Bank for International Settlements should comply with the Basel Accord which has set the minimum capital adequacy ratio for banks. Most central banks set a capital adequacy ratio higher than the Basel Accord for their banks to follow. A bank with a high capital adequacy ratio has greater capacity to resist risks. Banks should meet minimum capital adequacy requirements, and then they could take advantage of business opportunities.

(2) Asset Quality

As loan assets accounts for the largest portion of a bank's total assets, the quality of a bank's loan book has a determinative effect on the bank's profitability and creditworthiness Classification of loans according to their performance and the respective reserve provided as well as the non-performing loan ratio serve as indicators for the quality of the loans.

(3) Profitability

A bank with a good earning capacity can increase its capital and enhance its capacity to meet its financial obligations in a timely manner. The financial ratios of net interest margin (NIM), return of assets (ROA), and return on equity indicate a bank's earning capacity.

(4) Efficiency

A bank that is highly efficient can contain costs to a reasonably low level. Cost-to-income ratio is the indictor used to assess a bank's efficiency.

(5) Liquidity

A bank is required by its central bank or financial regulator to maintain a minimum liquidity ratio. A bank with a high liquidity ratio can help maintain its competitiveness in a tight credit market situation. Shortage of liquid funds is always the direct cause of failure of a bank.

Rating a Bank's Comprehensive Credit Strength According to External Support

Other than the internal credit strength of a bank, the availability of external support to the bank when needed helps strengthen the bank's credit capacity.

In general, external support to a bank comes from three sources: a) support from the central government; b) support from the local government; and c) support from shareholders.

1. Support from the Central Government

If a bank is wholly or partially, directly or indirectly owned by the central government, it should have strong support from the central government. For other banks, the following situations also justify the likelihood of receiving support from the central government support:

- The bank is so big that its operation has a substantial influence on the national economy and the livelihood of the general public.
- Its market share of deposits and loans in the domestic banking industry is very large.
- The government may have a policy of rescuing banks from insolvency no matter what the circumstances.

2. Support from the Local Government

In some countries, certain regional banks, city commercial banks and rural commercial banks receive support from their respective local governments when they face difficulties in meeting their financial obligations. Such support may appear to be direct capital injection, or provide temporary liquidity, even take over or replace the non-performing loans or provide guarantees to the bank's debt. To assess the probability a bank may be able to receive local government support, the following factors are considered:

- Proportion of shareholding by the local government
- Willingness and capacity of the local government (mainly reflected in the financial strength of the local government)
- Market share of deposit and lending of the bank in the regional or local market as percentage of the total tax contribution to the local government

3. Support from Shareholders

Shareholders of a bank can be individual shareholders or the bank's parent company. When carrying out a comprehensive rating for a bank, consideration of the probability of support from the bank's shareholders or parent company is necessary. This probability is subject to the willingness and capacity of the shareholders or parent company.

To calculate the probability of support, the following indicators are important for the assessment:

- Extent to which the parent company controls the rated bank, including the proportion of shareholding and de facto control
- Strategic importance of the rated bank to the shareholders or parent company, including its strategic position, brand name and reputation risks
- Track record of the shareholders or parent company in supporting its subsidiaries

(Updated in April 2016)

Appendix. About Internal Credit Strength Rating

The internal credit strength rating measures the issuer's standalone credit strength in absence of any external support. CCXAP uses the rating symbols from AAAi to Di to express the internal credit strength, corresponding to the rating scale of long-term credit ratings.

Rating Symbol	Definition
AAAi	Extremely strong standalone credit strength, and thus subject to minimal probability of requiring external support
AAi+ **AAi** **AAi-**	Very strong standalone credit strength, and thus subject to very low probability of requiring external support
Ai+ **Ai** **Ai-**	Strong standalone credit strength, and thus subject to low probability of requiring external support
BBBi+ **BBBi** **BBBi-**	Adequate standalone credit strength, and thus subject to moderate probability of requiring external support
BBi+ **BBi** **BBi-**	Relatively weak standalone credit strength, and thus subject to relatively high probability of requiring external support
Bi+ **Bi** **Bi-**	Weak standalone credit strength, and thus subject to high probability of requiring external support
CCCi	Very poor standalone credit strength, and thus subject to very high probability of requiring external support
CCi	Extremely poor standalone credit strength, and thus subject to extremely high probability of requiring external support
Ci	Limited standalone credit strength, and near default in absence of any external support 个
Di	Default in absence of any external support

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