Financial Institutions Rating Criteria

Master Criteria

This criteria updates the 2 April 2019 criteria of the same title.

Summary and Scope

Financial Institutions Definitions: For the purpose of this criteria, the term financial institution (FI) includes any FI that is principally engaged in banking, financial services, or other primarily financial activities, excluding insurance companies and real estate investment trusts.

Key Rating Factors: The five key elements of India Ratings and Research's (Ind-Ra) analysis of any FI, most frequently the main drivers of the rating decision, include industry profile and operating environment; company profile, risk management; financial profile; management strategy and corporate governance; and ownership, support, and group factors. The relative importance of each in the ultimate rating decision can vary from institution to institution.

The agency does not use a pre-set weightage for each of these key factors or for various sub factors within these, as Ind-Ra considers the appropriate weightage can change given particular circumstances. The relative importance of each of these parameters can vary across institutions, depending on its potential to change the overall risk profile of the institution concerned. However, as a general guideline, where one category is significantly weaker than others, this weakest element may attract a greater weight in the analysis.

Additional Analytical Considerations: This report outlines the methodology used by Ind-Ra to analyse the credit quality and financial strength of FIs, and provides insight into the rating methodology for all stakeholders, including the rated entities and users of Ind-Ra's FI issuer and issuance ratings, such as institutional investors, financial counterparties, regulatory bodies, and rating advisory personnel at investment banking companies.

This report also details the suite of different ratings that may be assigned by Ind-Ra to FI issuers and issuances, as well as the rationale behind these ratings. The guidelines in the report are purposely broad in scope, recognising that Ind-Ra's analytical process is dynamic and that each issuer possesses unique characteristics that cannot be captured by a narrow or overly rigid approach.

Criteria Overview

This master criteria identifies rating factors that are considered by Ind-Ra in assigning ratings to a particular entity or debt instrument within the scope of the master criteria. Not all rating factors in this criteria may apply to each individual rating or rating action. Each specific rating action commentary or rating report will discuss factors most relevant to the individual rating action.

While Ind-Ra makes some distinctions between its analysis of banks and nonbank FIs, which are addressed throughout this report, the agency's definition of a bank or a nonbank FI for the purposes of which this criteria is applied in rating an institution is not bound by jurisdictional, legal, or regulatory definitions of banks or nonbank FIs. As a result, some nonbanks will be rated under the bank elements of the criteria, while some banks with banking licenses may be rated using nonbank elements of this criteria as well as nonbank subsector criteria, particularly when the bank, as determined by Ind-Ra, has a primary purpose of facilitating the operations of affiliated entities or the characteristics of the bank are more akin to nonbanking FIs.

Related Criteria

Non-Bank Finance Companies Criteria

Rating FI Subsidiaries and Holding Companies

Securities Firm Criteria

Rating of Financial Institutions Legacy Hybrids and Sub-Debt

Rating Bank Subordinate and Hybrid Securities

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The term bank, for the purpose of this report, includes but is not limited to commercial banks, savings banks, bank holding companies, bancassurance holding companies, and bancassurance companies operating as single legal entity, state-owned banks, private banks, small finance banks and payment banks. For bancassurance companies, elements of insurance analysis may also be incorporated. The term nonbank FIs, for the purpose of this report, includes any FI that is principally engaged in financial services or activities not defined as a bank. Ind-Ra rates a variety of nonbank FIs that include, but are not limited to, government-sponsored enterprises, development banks, financial holding companies, finance companies, securities firms, investment management companies (alternative and traditional), leasing companies, microfinance companies, asset reconstruction companies, and factoring companies. While the basic analytical approach to all these institutions is broadly the same, there are specifics and differences in the degree of risk relating to each type of subsector, activity, or institution type that may warrant additional detail. The universe of companies encompassed in this report covers a broad spectrum of products, markets, and franchises. Therefore, while FIs share the common characteristic of providing financial products and services, the business model employed by each can produce a different hierarchy of risks that may lead to differences in how various FIs are ultimately evaluated.

Further details on ratios and more detailed application of this master criteria report are also addressed in sector-specific and special criteria reports. Ind-Ra also rates FIs that have unique structural features or issue various instruments that warrant further examination. In this context, there are other sector-specific criteria and special reports available on the agency's website www.indiaratings.co.in that discuss more specific features of the analytical process for these different types of FIs, structural features, or instruments. In particular, Ind-Ra's ratings of subordinated, hybrid, or preferred stock instruments are typically covered in Ind-Ra's criteria on "Rating Bank Subordinated and Hybrid Securities" and "Rating of Financial Institutions Legacy Hybrids and Sub-Debt" available on Ind-Rawww.indiaratings.co.in.

Ind-Ra's analysis of an FI includes an assessment of both qualitative and quantitative factors, external and internal, that drive the issuer ratings assigned to FIs. Examples of qualitative factors include franchise and management. Examples of quantitative factors include capitalisation, profitability, and asset quality. The relative weightings of these factors may vary according to specific circumstances. External factors include the economic environment in which the FI operates the legislative, regulatory, and fiscal framework, and the structure of the financial system.

Data Sources and Limitations

Ratings are based on all relevant information known and believed to be relevant to the analysis and rating decision. The information could include public information, provided directly by or during interaction with issuer, information provided by third parties, relevant information gathered by Ind-Ra analysts during their interaction with other issuers together with the agency's judgments and forecasts. Generally, Ind-Ra will interact with management and may receive non-public information. Where management interaction is forthcoming, the information derived may or may not influence the rating based on Ind-Ra's judgment with respect to the usefulness of such information. In certain cases, Ind-Ra's forward-looking views related to risk exposures or forecasts may dominate a rating conclusion, and such forward-looking views may be based on factors that are highly judgmental. The absence of participation by an entity in the rating process does not necessarily prevent Ind-Ra from establishing and maintaining a rating, if the agency considers there is sufficient public information available to perform the credit analysis process.

Ind-Ra's analysis and rating decisions are based on relevant information available to its analysts. The sources of this information are the issuer and the public domain. This includes relevant publicly available information on the issuer, such as audited and unaudited (e.g. interim) financial statements and regulatory filings. The rating process also can incorporate information provided by other third-party sources. A limitation to Ind-Ra's ratings of FIs includes event risk. Event risk is a term used to describe the risk of a typically unforeseen event which, until the event is explicit and defined, is excluded from existing ratings. Event risks can be externally triggered — a change in law, a natural disaster, cyberattack or a hostile takeover bid from another entity — or internally triggered, such as a change in policy on capital structure, a major acquisition, fraud or other material operational/regulatory/litigation risk events or a strategic restructuring. When an event occurs, Ind-Ra's rating review will assess the impact of the event on the FI's credit profile and, where material, determine whether ratings should be affirmed, upgraded, downgraded, or placed on Rating Watch. Such a review will not generally include a full assessment of all components of Ind-Ra's financial institutions rating criteria, only those affected by the event.

FI ratings are subject to the limitations that are outlined at www.indiaratings.co.in.

Reasonable Investigations

Users of ratings should, nonetheless, be aware of general limitations on the nature of the information that rated entities or their agents make available to Ind-Ra. In issuing and maintaining its ratings, the agency relies on factual information it receives from issuers and underwriters and from other sources it believes credible. Ind-Ra conducts a reasonable investigation of factual information relied upon by it in accordance with its rating methodology. Ind-Ra may obtain reasonable verification of that information from independent sources, to the extent such sources are available for a given security or issuer or in a given jurisdiction.

Issuers may choose not to share certain information with external parties, including rating agencies, at any time. While Ind-Ra expects each issuer that has agreed to participate in the rating process, or its agents, will supply promptly all information relevant for evaluating both the ratings of the issuer and all relevant securities, Ind-Ra neither has, nor would it seek, the right to compel the disclosure of information by any issuer or any agents of the issuer.

Financial Institutions Ratings

Ind-Ra can assign both short-term and long-term ratings to FI issuers. The assignment of short-term ratings is discussed in Appendix A of this report. In addition, support views, support floors and standalone credit profile views may be made internally on banks and selectively on nonbank FIs, when deemed appropriate. The standalone credit view reflects the standalone credit risk of an FI without taking into account any expectation that the FI will receive future extraordinary support if needed. The support view reflects the likelihood of the FI receiving future extraordinary support by a third party, either the state or an institutional owner. For many nonbank FIs, institutional support is more typically seen than a sovereign support.

While arriving at the issuer rating, the agency adopts a so-called higher-of approach. In other words, Ind-Ra will determine what level of long-term rating an FI could attain based solely on its standalone financial strength, institutional support from its shareholders, and sovereign support (as reflected in the support view floor). The agency will then assign a long-term rating based on the highest of these three levels. Ind-Ra's approach to institutional support is elaborated in Ind-Ra's criteria on Rating FI Subsidiaries and Holding Companies, available at www.indiaratings.co.in.

Standalone Credit Profile

The standalone credit profile represents Ind-Ra's view on the intrinsic creditworthiness of an issuer. It assesses an FI's exposure to, appetite for, management of, and absorption capacity for risk; therefore it represents Ind-Ra's view on the likelihood of the FI failing or becoming nonviable

and requiring extraordinary support. While this is largely an assessment of the standalone credit fundamentals of the FI, agency recognises that some elements of support cannot be entirely divorced from the standalone credit, such as lower funding costs or greater franchise strength associated with its supporting entity. In those cases, the standalone credit view is likely to incorporate these funding benefits or franchise strength in the standalone assessment.

Ind-Ra's analysts evaluate several different factors; the principal ones among these include an FI's industry profile and operating environment, company profile and risk management, financial profile, management strategy, and corporate governance. These topics are all covered in greater detail later in this report.

Support View

One of the main differences between banks and nonbank FIs is that nonbank FIs typically do not benefit from state support, except in limited circumstances. As such, sovereign support generally plays less of a role for this universe of entities than it would for banks. However, government-sponsored, government-owned, or development banks or government-linked enterprises are clear examples where support is usually the primary rating factor for nonbank FIs. In contrast, where nonbank FIs have strong institutional owners, institutional support is often the main driver of their Issuer Default Ratings.

Ind-Ra's support views incorporate an assessment of a potential supporter's (either a sovereign state's or an institutional owner's) propensity to support an FI, timeliness of support and its ability to support. Individuals and families who own FIs are not taken into account, as their ability and propensity to support cannot usually be assessed.

A potential supporter's ability to support is primarily set by its own long-term rating. Other relevant considerations might include the relative sizes of the potential supporter, the support beneficiary, and the financing flexibility of a supporter. A sovereign or institutional owner's propensity to support a bank/bank subsidiary is ultimately a judgment by Ind-Ra. The following are examples that might influence Ind-Ra's assessment of the propensity of sovereigns and institutional shareholders to support an FI.

Sovereign Support

While evaluating sovereign support, Ind-Ra takes into account sovereign guarantees and commitments; relationship with the state, including ownership; systemic importance of the FI; and the support philosophy of the sovereign. The agency would also take into account precedence of support and public articulation on the support stance. Ind-Ra's assessment of support, especially for government-owned banks, would also factor the importance of the segment as a whole. For instance the possible rub-on effect of default of a public sector bank on the wider segment, the role they play in terms of channeling savings and furthering sovereigns' broader economic and social agenda, and the implication on systemic stability in case of a default.

Institutional Owner or Owners

Strategic importance of the FI to the owner(s); degree of integration with a parent; guarantees and commitments provided by the parent; percentage ownership or control; jurisdiction; track record of support; cost of support; the nature of the owner; and the importance of the FI to the owning institution(s) *(for a more detailed discussion see Ind-Ra's criteria on "Rating FI Subsidiaries and Holding Companies," available at www.indiaratings.co.in)*.

It should be emphasised that support views are exclusively the expression of Ind-Ra's opinion, even though the principles underlying them may have been discussed with the relevant supervisory authorities, the sovereign state, and/or owners (private or public).

Support views are predicated on the assumption that any necessary support, either in foreign currency or, where appropriate, local currency, is provided on a timely basis. They are also predicated on the assumption that any necessary support will be sufficiently sustained so the FI being supported is able to continue meeting its financial commitments until its financial strength is restored.

For cases where Ind-Ra considers sovereign or institutional support would be forthcoming, it is typically assumed the following obligations will be supported: senior debt (secured and unsecured); insured and uninsured deposits (retail, wholesale, and interbank); obligations arising from derivatives transactions and from legally enforceable guarantees and indemnities, letters of credit, and acceptances; and trade receivables and obligations arising from court judgments. In cases where depositors have preferential status, this may have a significant effect on the risk of default and, consequently, the recovery rates for other debtholders.

The anchor rating for government banks is their long-term issuer rating. Ind-Ra believes that even if a bank's Long-Term Issuer Rating is driven by the expectations of government support and is higher than its notional standalone or unsupported rating, the notching down of Tier 1 hybrids with going-concern loss-absorption features starts from the said long-term issuer rating as against the lower unsupported rating as was the prevalent view earlier. While the junior debt has been designed for loss absorption before public funds could be infused, the GoI's serial actions that resulted in PSBs' continued ability to service the junior debt through FY15-FY21 signify the high systemic impact of non-performance that the government might be considering.

Furthermore in March 2020, the government issued a gazetted notification where it allowed PSBs to offset share premium account with accumulated losses, thereby allowing distributable reserves to be boosted by equity infusions and thus the coupon servicing ability is substantially enhanced. Additionally, over the past several years, there have been several instances of support by the GoI for the Tier 1 instruments – these ranged from substantial equity infusions into banks timed to achieve the capital benchmarks that would enable coupon payment, to widening the definitions of distributable reserves (enabling payment of Tier 1 coupons). However, in rare instances, if the bank's Long-Term Issuer Rating is driven by the expectations of non-government institutional support, and is higher than its standalone or unsupported rating, the notching down of Tier 1 hybrids will continue to be the from the lower unsupported rating. This is on account of the inability of sponsor to augment coupon-paying distributable reserves through equity infusions. Also, there is limited conviction in terms of non-government's appetite to bail out hybrid capital in distress.

The anchor for notching the ratings of tier 1 instruments would continue to be the unsupported profile for banks with sustained weak financial strength, reflecting their vulnerable profitability and capital ratios which could result in challenges in debt servicing in case of delays in timely support flow through from the government, if applicable. The element of anchor rating could be revisited in case some of the regulatory dispensations undergo material adverse changes. Preference shares have compulsory deferral on the occurrence of annual loss and these are usually notched down at least twice from the unsupported rating. For a detailed treatment of hybrid instruments please refer to Ind-Ra's criteria on "Rating Bank Subordinated and Hybrid Securities".

Support Floors

In conjunction with its support views, Ind-Ra may sometime take a view on support floors for banks. An FI's support floor is derived directly from its support view and represents the minimum long-term rating that would be assigned to that FI. The FI's issuer rating will not fall below its support floor as long as the assessment of support factors does not change. Like the support view, the support floor is based on the agency's judgment of a potential supporter's propensity to support a bank and of its ability to support it and does not assess the intrinsic credit quality of a bank. Rather, it communicates the agency's judgment on whether the bank would receive support should this become necessary.

Industry Profile and Operating Environment

The starting point for Indi-Ra's FI rating analysis is to obtain an understanding of the FI's operating environment. This allows analysts to make better judgments on the unique attributes of individual institutions by discerning their risks and opportunities on a relative basis and on absolute basis.

Background factors typically assessed include economic issues that contribute to the environmental conditions affecting an FI. Ind-Ra will comment on these factors when these factors constitute a meaningful rating driver, otherwise, background factors are unlikely to be mentioned. Analysts usually look at the basic economic indicators of the country , such as the size and composition of its economy, gross domestic product (GDP) growth, inflation, growth in consumer lending, growth in real estate lending, savings and investment, trends in unemployment, exchange rates, bond yields, and national and/or regional property price indices. Political and cultural aspects, as well as demographic trends, may also be considered important factors in the analytical process. However, FIs may be global and compete in many markets and economies, where individual country analysis may be less relevant and meaningful to the rating decision.

Other factors often taken into account in the assessment of an FI's operating environment include the following:

- Characteristics of the FI's relevant market(s), existing and potential competition and barriers to entry, and the degree of concentration within the sector.
- Accounting practices and requirements for public reporting by FIs.
- Regulatory framework, including the role and functions (if any) of the appropriate supervisory authorities, as well as the degree of state control (or privatisation) of the banking system.
- Legal framework under which the FI operates.

A key difference between banks and many nonbank FIs is that many nonbank FIs are subject to significantly less regulatory oversight and restrictions. Banks generally are heavily regulated and usually subject to meaningful operating restrictions that may factor into the rating process. However, the current regulatory environment for many nonbank FIs continues to evolve, and Ind-Ra monitors the effect of new regulations and restrictions on each issuer. To the extent that new regulations affect a company and become ratings drivers, Ind-Ra will indicate this in its public commentary.

Ind-Ra' public articulation in rating action commentaries and published reports will generally mention an FI's industry profile and operating environment when relevant to the rating action. Generally, a weak or stressed operating environment combined with other factors may pressure a company's rating because of the effect on its earnings prospects or potential for heightened losses. Conversely, a benign or positive operating environment on its own may not have an effect on an FI's ratings but, coupled with other positive rating factors, may stabilize a rating or allow for positive rating momentum.

Company Profile and Risk Management

Evaluating the strength and depth of an FI's franchise, as well as the FI's ability to safeguard existing business and gain new business, is subjective, although important, in Ind-Ra' analysis and often a driving factor behind rating actions.

Some of the main considerations Ind-Ra may take into account in its analysis of business franchise include the following:

- Management expertise & stability and depth relative to key business activities.
- Size of the FI and critical mass in key activities.

- Market position in core operations
- Ability to manage the business through economic cycles
- Ability to exercise pricing power and/or differentiate itself through efficiency.
- The nature and concentration of its customer base.
- Current business mix and competitive advantages/disadvantages in each segment.
- Geographic and industrial sector diversification of its activities, both domestic and international.
- Diversity of services and products it provides to customers and the ability to create new products.
- Systemic importance of an institution
- Quality of the FI's distribution network.

Ind-Ra's assessment of risk management, another fundamental element of its analytical process, incorporates an evaluation of an FI's risk appetite as well as the adequacy and robustness of the systems it has in place. The ability of an FI's management to identify, measure, and manage and monitor risk is often dictated by these systems. However, Ind-Ra's rating process does not involve an audit of these risk management systems or practices.

Key areas that analysts may take into consideration are the following:

- The independence and effectiveness of the risk management function.
- Whether all risks are managed centrally or can be easily compiled to establish an enterprise-wide view of risk.
- Procedures and limits in place, which set these limits, and the degree to which these procedures and limits are adhered to.
- Senior management's understanding and involvement in risk management issues, e.g. the extent to which accountability is evident and reporting lines in place.

Analysts examine a broad set of risks, the most significant of which, for most FIs, are discussed below.

Management, Strategy, and Corporate Governance

One of the most difficult yet critical aspects of Ind-Ra's analysis is the assessment of a company's management team and its stated strategies. Strong management teams are effective at communicating and executing their strategic vision and helping the company increase the value of its franchise. It is important that management demonstrates a high degree of credibility, dependability, experience, and competence. The evaluation of an issuer's management is often a relative exercise; analysts may identify management teams with clear weaknesses through the evaluation of the institution's financial strength and risk management practices — for instance, a poor financial performance may reflect the quality of a company's management strategy. Ind-Ra can also gain a perspective on the quality of management by assessing a management team's ability to articulate its risks and how it chooses to manage such risks and balance risk and return as it responds to opportunities for growth.

As part of its assessment of an issuer's management, Ind-Ra looks at the following:

- The organisational structure of the entity, the dependence of the management team on one or more persons, the coherence of the team, the independence of management from major shareholders, management's culture, and its track record in terms of business mix, operating efficiency, and market position.
- The quality and credibility of management's business strategy, including plans for future internal or external growth both in general and in terms of target markets/segments. When evaluating future plans, it is important to determine how realistic these are, and significant credit is given for delivering on past projections and keeping to strategies.

Corporate Governance

Corporate governance can influence many other areas of analysis and could, if not adequately implemented and affected, be detrimental to the overall health of an institution. Ind-Ra's general approach to analysing corporate governance is a pragmatic approach, rather than a check-the-box compliance exercise. The primary focus is on the fairly isolated instances of outlier corporate governance behaviour that may have an effect on ratings, particularly on the downside. If corporate governance is not sufficiently weak to affect the ratings, it is often not commented on in published reports and rating action commentaries.

While sound corporate governance policies and practices are important for all companies, they are, arguably, even more significant for FIs, since these play a central and influential role in the broader economy. From a governance perspective, FIs are, in effect, unique players for several reasons, outlined as follows:

- They are not just selling products and services but are also looking after people's money, often in the form of investments, which increases public vulnerability to any problems that arise.
- The systemic importance of many FIs to the economy may result in close regulation, which may promote confidence in safety and soundness of operations but can reduce the incentive for key stakeholders to monitor board and management behaviour. Furthermore, although regulation has been helpful in promoting sound governance practices, it is not a cure all; Ind-Ra considers that corporate governance is not purely a matter of compliance but a function of sound risk culture. Its analysis attempts to look beyond regulatory compliance to differentiate the governance quality of the FIs it rates.
- There may be more stakeholders in FIs than in other companies. These may include equity holders, debtholders, investors (in underlying funds, and so on), regulators, and the central bank. This can help provide various checks and balances on risk taking but can also make the task of differentiating governance quality across institutions more challenging.

Corporate governance is considered part of an issuer's general risk management culture and practices and is taken into consideration as part of Ind-Ra's analysis of risk management. Corporate governance issues may also arise in relation to an issuer's management and strategy as well as its legal structure and ownership. (Refer to Ind-Ra's criteria on Evaluating Corporate Governance" available at www.indiaratings.co.in).

Corporate governance operates as an asymmetric consideration. Where it is deemed adequate or strong, it typically has little or no impact on the issuer's credit ratings, i.e., it is not an incremental positive in the rating calculus. Where a deficiency which may diminish debtholder protection is observed, the consideration may have a negative impact on the rating assigned.

Evidence of fundamentally weak management or corporate governance in an FI, which could make debtholders vulnerable to potentially significant credit losses, would have a negative effect on the ratings and would be commented on in the published analysis. On the other hand, good governance or management practices may not warrant a mention in the published analysis, although exceptionally strong governance practices may do so, even if it is unlikely this would lead to any positive rating action.

Ownership, Support, and Group Factors

As noted in the description of Ind-Ra's support views, a key driver includes an entity's ownership, support, and other relevant group factors. To the extent an institution can rely on support, the issuer rating may benefit from ratings uplift. Analysts assess the stability of the shareholding structure of the entity as well as the ability, timeliness and propensity of its owners or the government to support the institution in case of need and, in the case of institutional support, the supported entity's strategic importance to its shareholders. In general, ownership of FIs can include institutional owners, private individuals and families, public shareholders, and state owners (national or regional), as well as banks with mutual ownership structures.

In cases where a sovereign has a material ownership stake in an institution, Ind-Ra expresses this linkage by clearly articulating the linkage and the approach applied, i.e. notching down from the sovereign assessment or notching up from the standalone assessment in published research.

Group Structure

Ind-Ra's FI analysis incorporates the primary operating subsidiary, related financial services entities, and subsidiaries or related entities, while also considering the unique characteristics and attributes of the holding company as a standalone legal entity. These attributes may vary significantly from company to company. In particular, regulatory issues play an important role in the analysis of a financial holding company and distinguish the analysis from that of unregulated corporate entities. Mutual support mechanisms, intercompany guarantees, and legal and/or regulatory restrictions surrounding flow of funds between subsidiaries and the parent company within a group that could ultimately impede or improve debt service capabilities in times of stress are factored into the analysis of an FI.

The degree of rating difference, if any, Ind-Ra assigns to various subsidiaries of a group will be determined by the factors listed above as well as by more subjective factors. These subjective factors can include Ind-Ra's view of the strategic importance of a subsidiary, reputational risk, future strategic limitations, or other ramifications the institution may expose itself to if it does not fully support a subsidiary.

Ind-Ra also notes that FIs could have structure where there may be other FI and or non FI entities within the group in various form including subsidiaries, associates, sister concerns or sponsor companies. Ind-Ra may take consolidate view wherever it considers appropriate, to the extent it considers prudent in evaluating the financial flexibility and potential challenges.

For more detailed account, see Ind-Ra's criteria on "Rating FI Subsidiaries and Holding Companies," available at www.indiaratings.co.in.

Holding Company Analysis

Ratings for financial holding companies are highly correlated to ratings of the company's main operating subsidiaries. Based on the analysis of several factors, including parent company's liquidity, double leverage, profitability, cash flow, and level of complexity, holding company senior debt ratings are often aligned with those of the operating subsidiaries, although under certain circumstances holding company ratings may also be notched down. The alignment of holding company ratings with primary operating subsidiary ratings reflect Ind-Ra's determination that the holding company is prudently managed and has appropriate liquidity. This builds from the belief that the probability of default of the two entities (holding company and FI subsidiary) is similar, particularly for highly rated companies. Typically, notching is limited to one notch for investment-grade FIs. A more detailed analysis of bank holding companies is discussed in Ind-Ra's criteria on "Rating FI Subsidiaries and Holding Companies," available at www.indiaratings.co.in

Credit Risk

Ind-Ra, as part of its analytical process, looks at credit risks whether they arise from on-balance-sheet activities (including loans, counterparties, lease receivables, investment securities, and interbank deposits and loans) or off-balance-sheet activities (such as off-balance-sheet commitments or securitisations). It may also look at the possible additional risk for senior creditors arising from securitisation. A key attribute of a well-run institution is one that establishes clear parameters around risk appetite and expected returns (profit) for risks being taken. Asset quality indicators are a primary tool to assess the level of risk being taken *(for relevant asset quality ratios by type of institution, see Appendix C on page 25 and, depending on the institution, see the Key Nonbank FI Ratio Definitions table on page 26 or Appendix D on page 28 for banks).*

Ind-Ra analysts may consider a broader range of asset quality indicators than is reported under Indian generally accepted accounting principles (IND-AS) or International Financial Reporting Standards (IFRS), such as managed loss and delinquency measures that include the effects of off-balance-sheet securitisations as well as restructured loans and loans supported through regulatory intervention / subvention schemes. Ind-Ra would analyse the performance of the restructured pool of assets and the incremental credit cost that could be incurred in case of slippages from these assets. The level and volatility of asset quality indicators will be viewed in the context of returns achieved and the adequacy of risk management to determine how the risk return equation may evolve in different phases of the business cycle. Indications of poor asset quality or credit risk management will typically lead to lower ratings, whereas strong asset quality and credit quality are positively factored into a rating decision, absent other material weaknesses.

Typically, a key element of Ind-Ra's analysis of credit risk lies in the structure of the FI's balance sheet, including the relative proportions of different asset categories. However, in some cases FIs may not have significant balance sheet exposure (such as some investment managers), or in other cases some FIs may have more credit risk concentrated in counterparty risk or government bond holdings. Banks typically have significant balance sheet exposure, where loans are often the most significant proportion of a bank's assets. There are also many nonbank FIs where lending is a primary activity, such as finance companies.

For FIs where there is significant credit exposure, usually in the form of loans or guarantees on loans, a comprehensive review of the loan or guarantee book is often essential. In this context, analysts may ask for a breakdown of lending by type of loan, size, maturity, currency, economic sector, and geography. They also look at concentrations of credit risk, including large exposures (generally more than 10% of equity) and credit risk concentrations in particular industries and economic sectors.

Single-credit risk, product, or geographic concentrations in particular industries or economic sectors are often typical for many FIs, particularly finance companies and government-sponsored enterprises. Analysts may liaise with analysts in Ind-Ra's other analytical groups to gain a full and prospective view of various credits and sectors. The evaluation of the loan or guarantee portfolio will also place importance on growth and the role of new types of exposure. Loan or guarantee growth in excess of the growth in the economic market the institution is operating in will generally warrant further investigation of strategies being employed to achieve such growth with a particular focus on underwriting and pricing standards and possibly incentive compensation. Expansion of lending activities into new sectors, geographic markets, new customer segments, or new product types will receive additional attention.

In evaluating credit quality metrics, Ind-Ra considers when an FI stops accruing income on a loan or guarantee, classifies it as delinquent, impaired, or nonperforming, and charges it off. To the extent there is a material level of loans or guarantees considered problematic, whether they are sensitive or watch list (i.e. still performing), impaired, or restructured, analysts may seek additional information from the issuer regarding these loans. Ind-Ra also takes into account changes to an issuer's policies, articulation of its loan loss reserve methodology, and comparisons to peers. It is Ind-Ra's expectation that FIs have a well-articulated loan loss reserve methodology. Ind-Ra views reserve methodologies that are dynamic and forward looking as preferable to those that rely solely on historical performance, although Ind-Ra recognises that reserve methodologies are often limited by accounting principles.

In assessing the underlying risk of problem loans or guarantees, the adequacy of collateral and impairment allowance is taken into account if this information is available. As far as impairment allowances are concerned, analysts examine the different types of allowances (i.e. specific and collective), the FI's overall policy toward taking impairment charges, its historical loan loss experience, and its write-off and recovery policies. Asset quality is usually assessed using both

absolute and relative measures. In instances where Ind-Ra believes the future performance of the loan or securities portfolios run the risk of performing considerably weaker than historical norms, the analytical team may, at its discretion, conduct various stress scenarios that may be used to evaluate the adequacy of loan loss allowances or performance of that asset class. These scenarios can range from portfolio-wide assessments to a scenario targeted at a specific geography, product type, or origination period.

Where internal ratings-based portfolio data is available, either in Basel II pillar three disclosure or provided to Ind-Ra by the institution, Ind-Ra assesses migration between internal categories and compares risk weights to various asset classes between banks.

Many FIs also maintain sizable securities or investment portfolios for liquidity and therefore loss content is often limited. When Ind-Ra believes the loss content is greater or increasing, it will analyse the general quality of the securities or investments, their maturity, liquidity, any undue concentration such as by product type, year of origination, or by large credit exposures and the valuation of these securities. For fixed income securities, the analysis of the securities may include a review of the seniority of the given instruments. Analysts may also assess the adequacy of valuation allowances and impairment policies on all material non-loan assets.

For some FIs, counterparty risk can be significant or even the largest component of credit risk. For these institutions, counterparty risk often arises from trading activities typically seen in securities firms, large commercial banks, and investment management companies. Ind-Ra will often review counterparty limit structures, how counterparty limits are maintained and monitored, whether collateral posting requirements have been established, and the concentration and exposures to individual counterparties.

The analysis of an FI’s off-balance sheet commitments makes up an equally important element of Ind-Ra’s overall analysis of an FI’s risks. These commitments can take on several different forms, including the more traditional guarantees and letters of credit, derivatives (including interest rate and credit default swaps), assets that have been securitized and are held by special-purpose vehicles, and exposures to conduits and structured investment vehicles.

Market Risk

While most, although not all, FI are exposed to some level of market risk, the degree and relevance of this exposure varies by institution. Therefore, Ind-Ra’s analysis of an FI’s market risk will vary by institution. Generally, Ind-Ra’s analysis of market risk incorporates structural risks when present (such as interest-rate risk management) and/or trading risks when present. The vast majority of FIs are subject to structural interest-rate risks due to the shorter nature of their liabilities (including deposits for banks) compared with the duration of their assets. Market risk on its own may not be a rating driver; however, poor market risk management or aggressive market risk-taking without mitigants (such as hedges) would likely pressure an institution’s ratings.

Many FIs are also exposed to structural foreign exchange risks. For firms predominantly exposed to such structural market risks, analysts typically review the asset and liability management strategy to assess the risk appetite of the institution. Board and management policy limits are typically expressed as earnings at risk limits. These are usually evaluated along with reports from management systems, if available. Analysts may also review historical net interest margin trends against the industry and peers, use of swaps to adjust fixed to floating payments, and any potential prepayment risks.

Some FIs conduct business in both local and foreign currency, potentially exposing themselves to significant capital impairment from devaluation of the local currency on a short foreign currency position. Analysts review an FI’s compliance with local regulations on maximum open foreign

currency positions, the willingness of management to expose the FI to currency risk, and the appropriateness of hedging techniques.

FIs with a significant trading book are more likely to warrant an in-depth review of their market risks. Some principal areas examined include the firm's general trading strategy, a breakdown of the trading book by product and market, the proportion of proprietary trading in its book compared with market-making activities or trading on behalf of clients, a breakdown of trading revenues, and the effect of the trading book on the company's overall profitability.

If possible and when market risk is material to a rating, analysts will review management reports that provide insight into the firm's risk appetite and how the firm is measuring and managing market risk. For firms with more complex market risk exposures, when information is available, analysts will review value at risk (VaR), stop-loss limits, concentrations and stress tests, and the relative performance of the institution in measuring risk as demonstrated through back testing when information is available. In this context, Ind-Ra may also review board limits or other policies that set the FI's risk tolerance levels when available. Ind-Ra believes scenario stress testing can also provide valuable insight into the risk exposures of an entity. When available and relevant, Ind-Ra will evaluate stress tests conducted by the FI and, to the extent possible, may run its own scenarios to assess the FI's exposure to remote but possible adverse market conditions. This can include comparing the capital cushion to stressed VaR in the trading book — calculated by multiplying the aggregated 10-day. 99% level maximum VAR by a factor of five to capture the market risk under extremely severe market conditions.

Derivatives

To the extent an FI engages in derivatives activity, Ind-Ra's derivative portfolio review is scaled appropriately, taking into account the institution's size, sophistication, and level of risk posed. In addition to an evaluation of the net exposure to counterparties and counterparty credit risk characteristics, derivatives review generally includes the types of derivatives and their purpose, the notional and market value of the portfolio, and the extent that the derivatives portfolio creates potential calls on liquidity (for example, collateral posting requirements, rating triggers, and unwind events).

Ind-Ra seeks transparency on credit derivatives in particular, as sellers of credit derivatives are exposed to the credit risk of the underlying credit, which may have different termination provisions than in the cash market. Depending on the size (in terms of notional and risk exposure) and scope of an institution's credit derivatives exposure, Ind-Ra may need to conduct an analysis similar to its review of fixed-income securities. Ind-Ra will not always comment publicly on an FI's derivatives portfolio, particularly if the risk is considered relatively low and its rating is not affected by its derivative exposure. However, if an FI's exposure to derivatives is significant and the FI is significantly exposed to meaningful liquidity events from its derivatives, such as collateral posting, ratings triggers, and termination events that could create liquidity problems for the institution, the ratings may be adversely affected.

Operational Risk

Operational risk incorporates what the Basel Committee on Banking Supervision defines as "the risk of loss resulting from inadequate or failed internal processes, people and systems or external events." It has also been defined as all risks other than credit, market, and liquidity risk. This risk can weigh more heavily on FIs with high transaction volumes and can be the key risk area for trust, custody, clearing, or processing businesses.

Typically, issues that may be evaluated as part of Ind-Ra's assessment of operational risk include ascertaining the entity's definition of such risk, the quality of its organizational structure and operational risk culture, the development of its approach to the identification and assessment of

key risks, data collection efforts, and overall approach to operational risk quantification and management controls.

Often operational risk is evaluated through the prism of economic capital. Where it is deemed necessary, Ind-Ra will evaluate assumptions and data and other pertinent information to explore the appropriateness of the operational risk identification system. Where possible, Ind-Ra reviews external auditor statements to determine whether operational risks were detected. Scenarios where concerns have arisen from the external auditor's report or a loss resulted from a shortcoming in the control environment may be the impetus for further exploration and determination of the extent of its operational risk liability. However, Ind-Ra does not audit the operational risk functions and may not be able to independently fully assess this risk.

Debtholders can be susceptible to losses arising from operational deficiencies, such as systems failures or limit breaches (e.g. rogue trading incidents); therefore, if analysts determine an institution's operational risk infrastructure or control environment is weak, this would most likely lead to negative rating actions.

Ind-Ra would also factor in the risk arising from lapses in cyber security and the financial loss arising out of the same. If Ind-Ra comes to know that the issuer has heightened exposure to such risk and finds material deficiencies in the management of the risk related to cyber security, then it can have a negative influence on the ratings.

Reputation and Legal Risk

Reputation and legal risk typically are not often standalone ratings drivers but can be when they are significant. In cases where they are significant, typically reputation and legal risk would adversely affect an issuer's rating. Reputation risk, although difficult to evaluate, can be significant for some issuers, particularly those reliant on institutional funding, those active in private banking, or those with large sums of assets under management.

Legal risk is likewise difficult to assess but may, in some cases, have significant potential ramifications for an issuer. It may arise from contracts drawn up with a third party that turn out to be unenforceable, as well as lawsuits or legal actions taken against an institution.

Financial Profile

The key elements of an FI's financial profile reviewed by analysts include profitability, funding, and liquidity and capitalisation. Asset quality measures, also often an important rating driver that may be considered part of an FI's financial profile, are discussed on page 9 of this report under Credit Risk. The ultimate performance of the combination of these key elements can be a meaningful driver in the ratings of an FI. Ind-Ra's calculations of key quantitative measures are usually calculated in a standardized way based on granular data, so may differ from those reported by the FI itself or through regulatory filings.

Profitability

Ind-Ra generally starts by looking at the historical trend of an FI's earnings performance, the stability and quality of its earnings, and its capacity to generate profits. It also examines earnings prospects, if possible backed up by budgets and forecasts made available by the issuer, as well as any medium-term plan it may have. While management's track record in providing reliable budgets is an important consideration, analysts nevertheless endeavour to test the robustness of any projections given to them by the issuer. They may also incorporate forward-looking assumptions about future performance in the analysis with a conservative bias.

The diversification of an FI's earnings is another key factor in the analysis of its profitability and, where possible, Ind-Ra analyses earnings for each of the institution's significant business lines. For banks and FI issuers that are more spread driven, Ind-Ra will usually look at trends in the following:

- Net interest revenue, including the evolution of interest spreads in each business line, trends in lending volumes, and evolution of funding costs.
- Non-interest income, including more stable revenues in the form of service fees, commissions, management fees, or other revenues, such as more volatile trading revenues.
- Non-interest expenses, breaking down personnel and other expenses, and comparing the expense level with other variables such as total revenues and earning assets.
- Impairment charge levels, together with the capacity of the FI's earnings to absorb impairments.
- Exceptional or nonrecurring income and expenditure items as well as developments in taxation charges.
- For other FIs where interest spread is not as meaningful a component of earnings, such as securities firms and investment managers, Ind-Ra usually looks at trends in the following:
- Core operating revenues, which can include commissions, management fees, and more volatile trading revenues.
- Core operating expenses, including compensation and other expenses, comparing the expense level with other variables such as total revenues.
- Impairment charges, unrealized/realized gains and losses, and the ability for the institution to absorb these losses.
- Exceptional or nonrecurring income and expenditure items as well as developments in taxation charges.

As a rule, Ind-Ra analysis is usually based on accounts drawn up under recognised accounting standards such as Indian GAAP and Ind-As, where available. If Ind-Ra considers it necessary in its rating analysis, it may make adjustments to an issuer's reported income statement figures, so that financial performance indicators are as comparable as possible from one FI to another.

Generally, earnings can be a meaningful ratings driver. Ind-Ra's evaluation of earnings will focus on absolute levels, quality of earnings, and volatility of returns. Weak or negative profitability, poor earnings prospects, and/or profitability that is trending weaker are likely to negatively influence an FI's rating. However, while positive profitability can add to some positive rating momentum, positive earnings performance alone may not be sufficient to warrant an upgrade, although the ability to sustain profitability, particularly in times of stress, is likely to help an issuer maintain its ratings.

Funding and Liquidity

Ind-Ra believes an FI's solvency and liquidity are highly correlated. A shortage of liquidity can be a key driver in FI failures and is a significant ratings driver. Weak or poor liquidity or liquidity risk management will translate into lower ratings and negative ratings momentum, and strong, well-managed liquidity, in conjunction with other rating factors, often equates to higher rated institutions. However, a strong liquidity position, at a point in time, alone will not garner a high rating or provide upward rating momentum.

A key difference between banks and nonbank FIs lies in their funding. Banks typically can rely on relatively more stable deposit funding, while nonbank FIs typically have a higher preponderance of wholesale funding, which can be more confidence sensitive than deposits. Since nonbank FIs, in particular, encompass a broad array of financial entities with different funding structures, liquidity analysis is covered more specifically in subsector criteria pieces.

Depending on the level of liquidity risk, FIs substantially exposed would be expected to have a detailed funding plan and a contingency funding plan to meet liquidity needs to draw on when there are market disruptions. Ind-Ra assesses potential on- and off-balance-sheet calls on liquidity, which may be as varied as meeting maturing debt payments, drawdowns of credit commitments, collateral posting requirements, or redemption requests in underlying assets under management when and where applicable. Ind-Ra analyses the FI's internal liquidity

sources (such as marketable securities and maturing loans) and external sources (such as access to capital markets, unutilised working capital lines from banks, and access to other third-party facilities, which can include sovereign or central bank).

To mitigate being unable to cover a cash flow shortage, institutions may hold a portfolio of marketable securities and other assets which can be sold quickly for cash if required. In addition, collateral available for repurchase transactions with other market participants or central banks can be used for short-term borrowing. It is important to assess the marketability of an FI's so-called marketable securities portfolio and other assets and whether they would be sufficiently liquid in a crisis. Ind-Ra generally defines marketable securities as those that can be sold or pledged to the central bank or government-backed vehicle within one day and those that can be sold or pledged in less than a month.

Ind-Ra analysts review the structure and diversification of an FI's funding base (in particular the weighting of retail and wholesale funding for banks), including any marked concentration of deposits or borrowing, as well as significant trends in funding sources. For banks, recourse to wholesale funding is a particularly important element of analysis, as those banks with high levels of wholesale funding tend to be more vulnerable in a more stressed environment. In addition, many banks, unlike most nonbank FIs, have access to central bank liquidity. Utilization of contingent liquidity sources could be indicative of weakening financial flexibility and result in negative rating actions. Dependence on central bank funding for prolonged periods is also a negative ratings factor.

Ind-Ra considers funding concentrations to establish any potential liquidity risks, paying attention to near-term maturities and how well these are matched with assets on the balance sheet and how these maturities will be met. An FI with a high proportion of short-term debt may be more susceptible to liquidity risk, particularly if there are concentrations in tenor. Where available, Ind-Ra assesses not only period-end liabilities but average liabilities outstanding, as FIs may balloon their balance sheets between reporting periods, only to reduce these exposures at period end (a practice known as window dressing). This can give a false sense of risk. Generally, laddered maturities are viewed more positively, as it is often easier to roll over smaller amounts of maturing debt than large concentrations. The risk of liquidity drying up in a deteriorating credit market is likely to be heightened, as an institution may be required to reissue or roll over maturing debt at a higher cost, and there is also the possibility of non-committed liquidity sources disappearing.

Ind-Ra would expect the management of larger, more sophisticated institutions exposed to liquidity risk to provide details of the stress testing that is carried out on their liquidity position. Ind-Ra may also conduct independent stress tests on liquidity that may include assumptions regarding reliance on funding sources and how an FI's liquidity position would fare if there is a disruption in the market or funding sources are shut down temporarily. Generally, funding from sources which carry mandate for long-term management of funds (such as pension funds, insurance) would be considered less volatile with higher predictability of refinance in stress market conditions versus funding from sources which has shorter term mandate (funding from liquid mutual funds). When possible, Ind-Ra will evaluate liquidity on a legal entity basis as well as on a consolidated basis. While Ind-Ra recognises legal entity structures often allow for cash to move freely between entities and is fungible, times of stress can greatly reduce and even eliminate this flexibility, in particular for firms that are part of regulated entities.

The main risk for an institution's funding is not being able to renew or replace maturing liabilities, either at all or at a reasonable cost. A well-diversified and stable funding base and a good spread of suppliers of funds within each source can limit this risk. Therefore Ind-Ra evaluates borrowing by size, maturity, geography, and currency, as well as in certain instances to evaluate trends in funding costs relative to peers of similarly rated institutions. If Ind-Ra analysts deem an entity's funding position susceptible to shutting down or have to contend with higher funding costs, this

will negatively influence a rating. For example, if funding costs exceed loan pricing, this could have negative repercussions.

As part of its funding and liquidity analysis, Ind-Ra may review an FI's major credit agreements, incorporating any covenant, security, collateral posting requirements, or other features in the funding that may bear on an issuer's ability to conduct its business or disrupt its liquidity. When present, these funding features are evaluated to determine the likelihood these may be triggered. If these features are tripped, even if only technical in nature and subsequently waived by creditors, they are most likely to have an adverse effect on the issuer's rating. Similarly, Ind-Ra assesses potential collateral calls that would be triggered by ratings downgrades and reviews the FI's ability to meet these calls should such a downgrade occur.

Conduits and Special Purpose Vehicles

The potential risks to liquidity and capital of SPVs can be significant. The off-balance sheet vehicle may be sponsored by the FI, which in turn may have committed to provide backstop liquidity to the entity. Off balance sheet conduits may pose potentially more significant liquidity risks, as they rely exclusively on bank liquidity agreements to meet maturing debt needs. Globally, accounting standards bodies have moved to increase public disclosure requirements of these off-balance sheet vehicles and to bring more of them on balance sheet; however, varying disclosure globally creates situations where limited and often opaque information can make it difficult to gauge risks posed to the issuer.

Where relevant to Indian FIs, Ind-Ra attempts to derive as much information as possible about risks in these vehicles from the sponsor institutions. Such information may include the underlying credit quality of the SPV's assets, potential liquidity draws on the sponsor entity, and reputation risk posed by not supporting the off-balance-sheet vehicle that could be consolidated or brought onto the entity's balance sheet. Ind-Ra analysts evaluate the effect of consolidation of such vehicles on an institution's balance sheet as well as the level of capital they would need to support them, to the extent possible.

Securitisation & Co-lending

Securitisation, including covered bonds and sale of receivables through direct assignments can provide FIs with additional liquidity and access to cost-effective funding. It can also aid FIs in the management of their credit risk exposure, provide regulatory capital relief, and enhance earnings performance measures. However, while in many cases it brings benefits to an FI, there are also risks inherent in securitisations that can result in recourse to the FI that have to be taken into account.

As part of the rating process, Ind-Ra evaluates the level of risk potentially transferred through securitisation. In some cases, very little risk is transferred since the issuer holds residual interests in the securitisation and has an ongoing servicing relationship with the sold receivables. When this is the case, Ind-Ra may add back securitised receivables to the FI's balance sheet (if accounted for off-balance sheet) in calculating various metrics that can include leverage, profitability, and credit quality. Many FIs, particularly finance companies, use securitisation as a primary financing mechanism; therefore, Ind-Ra assesses the reliance on securitisation and the effect closure in the securitisation market can have on an issuer. Analysts may liaise with their colleagues in Ind-Ra' Structured Finance department for further details of these securitisations. To the extent an issuer has meaningful recourse on its securitisations and depending on the quality of the underlying assets, the securitisations may affect the FI's rating.

For institutions with meaningful securitisations, Ind-Ra also evaluates the performance of securitized receivables. Performance of sold receivables can be materially different from what remains on the balance sheet. The performance of securitized receivables could have an adverse effect on an FI because of representation and warranty, which could force the FI to repurchase

loans at par that had previously been sold off. In addition, the performance of securitized receivables can impact the value of credit enhancement assets held on balance sheet as well as the ability to access the securitisation market in the future. If possible, Ind-Ra will review whether there is adverse selection on its securitized receivables, which can also have negative rating implications if there is potential recourse or poor performance on balance sheet.

Capitalisation and Leverage

For the most part, capitalisation is an important rating factor for an FI. Typically equity capital provides a cushion to absorb unreserved losses and thereby allows it to continue as a going concern, thus staving off insolvency, or if insolvency does become inevitable, to some finite degree absorbing losses that would otherwise have to be borne by creditors. Generally for FIs, the quality of its capital base, the absolute size of its equity capital and its capital adequacy (i.e. the size of its capital in relation to its risks) are, thus, fundamental considerations when analysing its creditworthiness. For some FIs, capitalisation may not be as material a rating factor. For example, investment managers that simply manage third-party assets often do not have sizable balance sheets that require meaningful loss absorption or funding and, as such, capitalisation is unlikely to be as important as an institution that conducts significant lending.

For institutions where capital is a fundamental consideration in analysing creditworthiness, the quality of the issuer's capital base is also an area of keen focus for Ind-Ra. Generally, the greater loss absorption ability of a capital element will carry as much if not more weight in Ind-Ra's evaluation of capital than the absolute size of the capital base. Banks and some institutions covered by this criteria report are heavily regulated and may have various capital thresholds they will be strongly committed to achieving. While adherence to regulatory capital standards may be a factor in Ind-Ra's analytical review, it is quite possible Ind-Ra may assess capital more conservatively or liberally than would be indicated by the institution's capital levels relative to regulatory minimums or regulatory classification of capital. Ind-Ra may also subject the capital to stress tests that assume a spike in credit cost. Capital levels under this stress scenario offer an indication of the robustness of capital to absorb losses before it hits creditors.

Assuming an issuer is well positioned among the other rating factors and capital is a meaningful rating element, strong capitalisation typically leads to stronger ratings, and weak capitalisation leads to weaker ratings. However, if capitalisation is strong but susceptible to meaningful weakening as a result of other factors, such as impending losses due to poor asset quality or poor asset performance or a weak and potentially volatile operating environment, strong capital alone will be insufficient to maintain a rating or to have a high rating. The adequacy of the capitalisation would be also viewed in perspective of entities growth aspirations and its ability to generate capital internally or access capital markets.

Since it is primarily risk capital, there is no obligation for equity to be paid back to anyone, and there can be no obligation for it to pay the equivalent of interest. However, there are usually expectations on the part of investors that equity capital will generate some sort of return. On the other hand, if there is any form of obligation to pay a return, the capital in question is not pure common equity.

Ind-Ra assesses capital and leverage through various ratios. Relevant leverage ratios can vary by subsector and are addressed in specific subsector criteria. However, Ind-Ra does apply its own standard quantitative measures of capitalisation to FIs, the principal one being core capital. Core capital is Ind-Ra's primary measure of capital and serves as the basis for other measures of capital. It is generally defined as reported equity with adjustments that include reductions for hybrid capital, any non-loss-absorbing, non-controlling interests, net deferred tax assets related to net operating losses brought forward (if available and at a minimum value of zero), otherwise net deferred tax assets in its entirety (at a minimum value of zero), goodwill, other intangibles (including mortgage servicing rights), first-loss tranches of securitisations not on balance sheet

(if available), credit component of fair value changes on an FI's own debt, and net asset value of insurance companies held. Reported equity generally consists of the following:

- Issued and fully paid-up common/ordinary share capital.
- Treasury shares.
- Share premium/capital surplus.
- Retained earnings.
- Other general and statutory reserves.
- Non-controlling interests.
- Other comprehensive income (including primarily changes in the fair value of available-for-sale securities, foreign exchange valuation reserves, fair value of derivatives on cash flow hedges, and fixed asset valuation reserves).

Ind-Ra eligible capital is defined as core capital plus eligible hybrid debt and other capital securities. While hybrid debt, which encompasses all instruments that are neither common stock nor ordinary debt, such as preferred and preference shares, and various convertible securities, is an important source of long-term funding for many FIs. Ind-Ra may assign equity credit to hybrid and other capital securities. Equity credit is an analytical concept that expresses the extent to which Ind-Ra views a security as containing debt-like or equity-like qualities. Ind-Ra primarily evaluates, an FI's tangible common equity ratio, which is tangible common equity, defined as common equity less goodwill and intangibles divided by tangible assets, which also excludes goodwill and intangibles. This ratio provides the loss-absorbing capacity of an institution's common equity and how much is not subject to dividend payments or coupon payments.

If an issuer has its own internal economic capital models and they are made available, Ind-Ra may review the general construct of these models, the processes by which they are operated, and whether they are embedded in the management culture of the institution. This review assists Ind-Ra in forming a view on both the risk appetite of the issuer and the adequacy of its capital base to support that risk appetite. Management's policies with regard to minimum capital ratio objectives, share buyback programs, and dividend payouts are taken into account, as are the issuer's ability to raise new capital and its internal capital generation record.

In case of an FI getting into a co-lending model with another FI (bank or NBFC), the capital requirement reduces to a certain extent since the endeavour is to earn fee income on the AUM rather than spread income on the balance sheet. Ind-Ra analyses the stability of this model and the quantum of first loss guarantee provided by the FI in such kind of arrangements.

Cash Flow

For institutions where capital is not a key rating driver, cash flow is often a more meaningful measure of an institution's ability to meet its obligations. For example, some nonbank FIs, including asset management and advisory firms, often have little in the way of assets on their balance sheets; therefore, rely on cash flow from management fees or other activities to meet all financial commitments. In addition, as FIs' ratings migrate towards lower level, cash flow metrics often become more meaningful as the source of repayment for outstanding obligations, particularly if an institution's balance sheet becomes more encumbered. Typical measures used can include fee-related earnings measures; earnings before interest, taxes, depreciation, and amortisation (EBITDA); debt to EBITDA; EBITDA to interest expenses or debt service (if there is amortisation); and EBITDA to fixed charges. Often, many of these measures are adjusted for various analytical considerations, including but not limited to nonrecurring items, performance-related items, or other noncash expenses.

Appendix A

Short-Term Ratings Criteria for Financial Institutions

Short-Term Ratings

Ind-Ra's initial view on the short-term rating generally considers the issuers' long-term ratings. The short-term rating may also be clarified by a detailed review of the liquidity position, stability, and contingency programs used to manage liquidity based on any criteria relevant for that sector. Where an issuer demonstrates strong specific liquidity-related features with no major deficiencies, the higher of the two short-term ratings may be assigned.

Short-Term Ratings Linked to Long-Term Ratings

While there are a large number of discrete factors that drive short-term ratings, their primary driver is a linkage to long-term ratings. This reflects the inherent importance of liquidity and near-term concerns within a longer-term assessment. Additionally, it ensures the two scales do not intuitively contradict each other for a given issuer. This linkage displays a certain asymmetry, namely:

- Higher relative short-term default risk implies an elevated risk of default in the near term that cannot be separated from the long-term default assessment.
- But lower relative short-term default risk, perhaps through factors that lend the issuer's profile temporary support, may coexist with higher medium- or longer-term default risk.

This thus limits the potential for a combination of a particularly weak short-term rating with a high long-term rating. The other asymmetry — stronger short-term rating but weaker long-term rating — is addressed conceptually. The short-term rating within investment grade is a measure of intrinsic or sustainable liquidity, which excludes temporary or unsustainable support.

Assigning Short-Term Ratings — Sustainable Liquidity

The period of higher short-term ratings typically relates to the continual liquidity profile of the rated entity that would be expected to endure over the period of the long-term rating, typically three to five years. This approach places less emphasis on favourable or unfavourable features of the liquidity profile that may be regarded as temporary. Examples include temporary state guarantees, high cash balances or a high volume of liquid assets that would not or may not be expected to be maintained, or a high degree of contractual certainty on revenues/cash flows for the next 12 months that will then roll off with a lower likelihood of replacement.

In contrast, for lower ratings, greater emphasis is generally placed on the actual expected liquidity profile of the issuer over the 12 months that follow, including the impact of temporary improvements or declines in liquidity.

Short-Term Issuer Ratings and Issuance Ratings

Issuer Ratings

Issuer ratings are Ind-Ra's primary rating scale for entities and, as the name suggests, reflect default risk. Issuer ratings do not reflect relative prospects of recovery given default. Although most issuers will typically be assigned both short- and long-term ratings, there may be instances where only one rating is assigned.

Issuance Ratings

Short-term ratings are assigned to issuances with an original maturity of 365 days or less. Commercial paper and other such instrument ratings are generally set at the issuer's short-term rating. A distinction is occasionally drawn between the short-term rating of the issuer and the short-term rating of its issuances. The two primary examples of this issuance/instrument linkage are the following:

- Where explicit and limited enhancement was provided (letters of credit-backed commercial paper, for example). The short-term rating on the instrument will be the higher of the direct-pay letter of credit or similar guarantee provider or the short-term rating of the issuer itself.
- Where preferences exist under law for a class of rated short-term obligations. This occurs in limited cases where the comparable long-term rating of the same seniority of the obligation is itself consistent with a higher short-term rating. Bank deposit ratings may possess ratings one notch above both their short- and long-term ratings, if regulations provide a senior position to uninsured depositors in liquidation. When this occurs, it reflects a belief that the higher prospects of support for depositors from central authorities as a class in general grant a marginal uplift to the liquidity of those obligations for depositors due to preferences explicitly defined in regulatory capital documents.
- Comprehensive state guarantees provided for short-term debt obligations for a limited time.

Defaults

When an entity defaults or there is a high probability of the default, its short-term rating is changed to 'D'. For instance 'D' used for a long-term rating also applies to a short-term rating. Ind-Ra expects that a long-term entity rating of 'D' will generally correspond to a short-term entity rating of 'D', unless specific knowledge justifies a difference. For example, a rating of 'D' in recognition of default will be assigned to both short- and long-term ratings unless Ind-Ra knows that debt service in one capacity is maintained. Like long-term ratings, short-term ratings do not include any assessment of recovery prospects.

Liquidity Risks

Commercial paper (CP) issuers need sufficient liquidity reserves (including liquid assets, working capital bank lines, or liquidity from a parent or third party) to withstand two types of liquidity challenges — systemic risk and credit, or event, risk. Systemic risk is the possibility of a broad market disruption affecting the entire CP market or a whole market tier.

Credit risk for CP issuers is less related to default risk than to rating migration risk (i.e. the possibility of an issuer-specific event such as a hostile takeover offer announcement, an unexpected adverse decision in a lawsuit, or an unfavourable earnings announcement warranting a credit downgrade that makes investors unwilling to buy new CP notes of that Issuer). Although any CP issuer can experience a reduction or loss of liquidity due to individual credit events, issuers in the 'IND A1' and 'IND A2' categories face the most serious liquidity impacts, since a downgrade would greatly reduce or eliminate CP market access. Market access for tiers 2 and 3 issuers can also be impaired by adverse news about another company in the same industry sector, even if the issuer is not directly affected.

The credit rating is not the only factor affecting market access. Very large issuers offering CP continuously in the market and issuers whose brand identities are well known tend to have better market access than do sporadic issuers with small CP programs and a lower public profile. However, credit ratings generally correspond with levels of market access, systemic risk, and credit risk.

Why Liquidity Backup is Important

If an institution's CP funding does not match its normal asset conversion cycle or operational free cash flow, the issuer must refund CP notes already in the market either with new CP notes or by issuing long-term bonds or accessing CP-specific or so-called general corporate purpose bank lines that enable same-day funding. If the issuer does not have such immediate funding, the company may not be able to repay maturing obligations. To mitigate liquidity risk, Ind-Ra considers liquidity backup for outstanding CP and other short-term debt obligations an important element in assigning instrument-level ratings as well as an element in assessing the issuer's default risk (the long-term rating).

Buyers of CP backed by bank liquidity commitments should not rely on these as direct credit enhancement. Liquidity backup exists primarily to protect the issuer's overall credit against the

risk of default or insolvency caused by unsuccessful CP market rollovers. A default or insolvency by the issuer would in nearly all cases prohibit drawing under the credit lines. Therefore, the rating of corporate CP backed by liquidity arrangements is linked to the issuer's credit standing and is not tied to the ratings of liquidity providers.

Liquidity backup is either adequate or inadequate. So-called more-than-adequate liquidity backup does not justify a higher short-term credit rating. On the other hand, when CP is explicitly enhanced, for example if it is backed by a direct-pay LOC or similar form of guarantee, the ultimate CP rating will be the higher of the direct-pay LOC or similar credit enhancement or the short-term rating of the issuer itself.

Ind-Ra typically expects commercial paper issuers to have full (100%) liquidity backup available for outstanding CP and other short-term obligations. Backup may not only be in the form of bank commitments but may also include unencumbered cash or marketable securities, expected operational cash flow sources, tangible parental support, or other alternative forms of liquidity support. Additionally, Ind-Ra would assess the sources of CP and other short-term obligations to assess the roll over risk on the short term obligations. Typically CPs or other short term obligations subscribed by banks or lenders with long term mandate to manage funds (pension and insurance companies) would typically expected to be more stable source of funds provider versus capital market supplier with short horizon (liquid scheme of mutual funds). Ind-Ra also understands that the liquidity is subject to sudden market shocks and hence would endeavour to have more frequent engagement with issuers on their liquidity positions and plans.

Calculating Sufficient Commercial Paper Backup Coverage for Financial Institutions

Ind-Ra calculates CP backup coverage as the sum of all unused working capital lines primarily but may also include the alternative forms of liquidity support described in this note — divided by the sum of CP and other short-term financial obligations, such as notes payable and master trust demand notes. For this purpose, special funding programs and securitisations that have dedicated liquidity backup are removed from the numerator and their dedicated backup is removed from the denominator.

When backup liquidity coverage is less than 100% and an investment grade short-term rating is assigned by Ind-Ra to the CP or short-term debt obligation, an exception will be noted in Ind-Ra's rating communications and the issuer-specific rationale will be explained. Alternatively, if the rating committee does not find the issuer to have sufficient liquidity backup, then Ind-Ra may not be able to assign a rating to the CP or short-term obligation. Furthermore, a deficiency in an entity's liquidity profile will also be considered when evaluating its default risk.

Bank-Provided Backup

Unutilised working capital credit facilities provided by commercial banks compose the largest source of CP backup. These facilities typically are revolving credit agreements (RCs), credit lines that permit the borrower to draw funds provided certain conditions are met before borrowing. Other accepted means of backup include bank letters of credit and, in the case of finance companies, committed receivables purchase facilities. In assessing the standby lines from banks, Ind-Ra would assess the diversification of lines and concentration of the same with top banks.

Conditions of Lending and Covenants

A bank RC may be committed funding where the bank has a contractual commitment to lend, provided that the borrower is in compliance with the facility's conditions to funding. An RC also includes a series of representations by the borrower and affirmative and negative covenants of the borrower. Events of bankruptcy or insolvency or violation of certain of the covenants typically relieve the lending bank from an obligation to make new advances. Conditions precedent to lending and financial covenants are generally less stringent the shorter the tenor of the credit

facility and can be few or virtually non-existent for borrowers with strong credit quality. Conversely, borrowers of lesser credit quality are likely to encounter more onerous conditions and more stringent financial covenants, although competitiveness in the syndicated loan market lead to periodic weakening of lending discipline.

Financial covenants may include limitations on leverage, and on incurring liens, gross non-performing assets, downward rating migration, a fixed-charge coverage test, a tangible net worth test, and change of control covenants. If a covenant is likely to be triggered, ability to draw under the backup facility would depend on a waiver from the bank or banks, which would weaken the value and predictability of the backup facility.

Covenants citing financial ratios generally do not limit the effectiveness of the backup when, as is usual, they relate to periodic audited accounts data and are set at levels well outside those consistent with investment-grade parameters. However, the potential does exist for more challenging financial covenants to render the backup invalid for Ind-Ra's calculations if Ind-Ra believes there is a reasonable likelihood that covenants could be breached.

Alternate Liquidity Backup

Liquidity backup need not be in the form of bank facilities. For finance companies, asset securitisation through committed conduits and receivable purchase facilities are important alternate sources of liquidity. In rare cases, companies with excess cash reserves or access to liquid assets may use proceeds of asset monetisation as a part of their backup arrangements, providing the assets are truly available, they can be converted to cash in a few days, and a full contingency plan exists to mobilise these resources. In such cases, Ind-Ra's periodic reviews of the credit include evaluations of the quality of the assets and the mobilisation plan.

Bank Certificates of Deposit

Ind-Ra places emphasis on liquidity management and alternative funding plans in assessing the liquidity and financial flexibility of banks, investment management companies, and securities companies rather than a reliance on backup facilities. As a result, the liquidity backup considerations discussed for nonbank finance companies do not apply to banks and broker-dealer CP/CD programs.

Ind-Ra's rating committees may adjust these criteria based on the special circumstances of individual issuers. Where criteria adjustments occur, such adjustments will be discussed in related rating action commentaries or research reports.

Appendix B

Rating of Financial Institution-Issued Market-Linked Notes

Some FIs, in particular (but not exclusively) non-banking finance company subsidiaries of foreign universal banks and investment banks, are regular issuers of debt securities that return amounts referenced to an external market risk, i.e. a risk essentially independent of the issuing bank's own creditworthiness. Ind-Ra refers to these notes collectively as market-linked notes (MLNs), also known as structured notes. In some cases only the coupon stream references the market risk (principal-protected notes), and in others both coupon stream and principal repayment are driven by the reference market risk (non-principal protected notes). MLNs reference a very broad array of risks, most commonly equities, currencies, and commodities. Each of these can be referenced on a single-name basis or on a basket or index basis. In some cases, the structured note may also contain other structural features that determine the return to the investor, such as caps, collars, call or put options, and embedded leverage. This huge variety arises because structured notes are often specifically tailored to a client request (often referred to as reverse inquiry). MLNs are typically issued off standard programs, which may or may not also be used to issue non-structured debt.

Ind-Ra does not believe it is possible to factor these highly varied embedded market risks into a conventional credit rating. Indeed, Ind-Ra takes the view that in a non-principal protected note, the additional risk, i.e. beyond the counterparty risk, is potentially so great that the total return to the investor could be very low or even zero. As such, Ind-Ra will not rate instruments that do not have 100% principal protection. Ind-Ra defines 100% principal protection as the return to the investor, on the maturity date of the note, the full nominal amount of the note in the same currency that it was originally invested. This means Ind-Ra does not rate dual-currency notes where the principal is repaid in a different currency to that invested, nor does it rate notes that repay in shares.

- Notes that give the investor the option to redeem prior to the maturity for an amount based on a market-linked calculation are not subject to this rule as long as the issuer is obligated to pay the nominal amount in full at maturity if the investor does not exercise the option.

In the case of MLNs that have 100% principal protection, Ind-Ra assigns ratings that solely address the counterparty risk of the issuing bank/FI. The variability of return to the coupon created by the embedded market risk and any other embedded structural features is fully excluded from the rating assigned to the note. Almost all such notes are issued as senior obligations and will carry a rating identical to that of senior obligations of the same issuer ranking pari passu. Should a market-linked security be issued in a subordinated form, it will carry the same rating as the issuer's other pari passu subordinated obligations.

To reinforce the limitation in scope to the counterparty risk, Ind-Ra appends a subscript (.emr) to its MLN ratings. This addresses solely the exclusion of the embedded market risk from the rating. It does not indicate any limitation in the analysis of the counterparty risk, which in all other respects follows published Ind-Ra criteria for analysing the issuing FI.

This approach only applies to MLNs that are directly issued by FIs. It does not apply to issuance from a special purpose vehicle unless that issuance is the beneficiary of an explicit guarantee from the rated FI. In that case, the issuance would be rated on the basis of the guarantee, again excluding the embedded market risk. Any other structures would, if appropriate under their criteria, be rated by Ind-Ra's Structured Finance Group.

Specifically excluded from the above approach are any directly issued MLNs where the embedded risk is the credit risk of a third party or of a basket of third parties. These credit-linked notes are not rated by Ind-Ra's FI Group. If appropriate under their criteria, these would be rated

by Ind-Ra's Structured Finance Group. Where the underlying risk is the market risk of a credit index, this is rateable as a market-linked note under these criteria.

For the purposes of these criteria, inflation is not regarded as a market risk, and inflation-linked notes in the absence of additional embedded market risk are rated without the addition of the emr subscript.

Appendix C

Ratio Framework for Financial Institutions

As noted earlier in this criteria report, Ind-Ra's application of various ratios differs depending on the activities and type of FI. The ratio framework table below provides some general guidance on which category(ies) of ratios applies to various FIs by entity type or activity. However, it is important to note this table does not incorporate all FIs, and the groupings of ratios can vary in individual issuer analysis. Therefore, these are general ratio categories for asset quality, capital, leverage, funding/liquidity, profitability, cash flow ratios, and market risk measures that may apply. Ultimately, more categories may be relevant to some issuers, and fewer categories may be relevant to others.

Broad nonbank FI ratio definitions are shown on page 25 and expanded on in relevant subsector criteria. Ind-Ra emphasises that some FIs engage in multiple activities that run across more than one institution type or activity that may warrant additional ratio analysis, or the specific institution may engage in more limited activities or its business profile may be such that fewer ratios are used in the analysis. Therefore, this table should be used only to provide an enhanced understanding of how some of these ratios may be applied. Individual issuers are likely to incorporate more ratios in a category than are presented in the table.

Figure 1

Ratio Framework

	Asset-quality ratios	Capital ratios	Leverage ratios	Liquidity/ funding ratios	Profitability ratios	Cash flow ratios	Market-risk measures
Banks	✓	✓		✓	✓		✓
Finance and leasing companies	✓	✓	✓	✓	✓	✓	✓
Securities firms			✓	✓	✓	✓	✓
Investment managers			✓			✓	

Source: Ind-Ra

Figure 2
Key Nonbank FI Ratio Definitions

	Definition	Types of companies to which ratios are typically applied
Asset quality ratios		
Delinquent loans/loans	Loans or leases classified as past due at least 30 days/period-end gross loans or leases.	Finance and leasing companies
Impaired loans (nonperforming loans)/loans	Loans or leases where income has either stopped accruing or collectability is impaired/period-end gross loans or leases.	Finance and leasing companies
Credit cost average loans	provisions and write-offs/average loans for the period.	Finance and leasing companies
Reserves/NPAs	Loan or lease reserves/NPAs (NPAs equal NPLs plus repossessions).	Finance and leasing companies
Operating profit buffer	Pre-provision operating profit / credit cost	Finance and leasing companies
Net NPA/tangible equity	Gross NPA less provisions / tangible equity	Finance and leasing companies
Capital ratios		
Tangible common equity/tangible assets[a]	(Common equity less goodwill less intangibles)/(total assets less goodwill less intangibles).	Trust/processing bank, finance and leasing companies
Core capital/tangible assets[a]	Core capital (as defined in this criteria)/tangible assets.	Finance and leasing companies
Leverage ratios		
Debt or managed debt/tangible common equity	Debt or managed debt (debt plus off-balance sheet funding)/tangible common equity.	Finance and leasing companies
Debt or managed debt/core capital	Debt or managed debt (debt plus off-balance sheet funding)/core capital.	Finance and leasing companies
Adjusted leverage	(Total assets less reverse repurchase agreements)/adjusted equity (adjusted equity equals common equity less goodwill less intangibles less ineligible deferred tax assets plus hybrid equity credit of 0%–100%).	Securities firms
Net adjusted leverage	(Total assets less reverse repurchase agreements less securities borrowed)/adjusted equity.	Securities firms
Adjusted equity/total assets	Adjusted equity/total assets.	Securities firms
Debt/EBITDA	Debt/earnings before interest, taxes, depreciation, and amortization, with adjustments for significant noncash items such as noncash compensation expenses.	Investment managers/some securities companies (such as interdealer brokers)
Liquidity/funding ratios		
Illiquid assets	Generally, high-yield debt plus merchant bank, private equity investments plus emerging market plus bank loans plus goodwill plus intangibles plus non-investment-grade derivatives MTM plus other assets plus non-investment-grade residual assets.	
Liquid assets/total assets[a]	(Total assets less illiquid assets [as defined above])/total assets.	Finance and leasing companies, trust/processing banks, securities firms
Long-Term funding sources/illiquid assets	(Adjusted equity plus adjusted debt [includes non-equity hybrid allocation])/illiquid assets.	Securities firms
Short-Term borrowings/total assets[a]	Short-term borrowings including current portion of long-term debt/total assets.	Finance and leasing companies, trust/processing banks
Short-Term borrowings/total interest-bearing liabilities	Short-term borrowings including current portion of long-term debt/total interest-bearing liabilities.	Finance and leasing companies, trust/processing banks
Profitability ratios		
Yield on interest earning assets	Interest earned on earning assets / average loan book	Finance and leasing companies
Cost of borrowing	Interest expense on borrowings / average borrowings	Finance and leasing companies
Net interest margin	Net interest income/average interest earning assets.	Finance and leasing companies, trust/processing banks
Return on average assets[a]	Net income/average assets.	Finance and leasing companies, trust/processing banks
Return on average equity	Net income/average equity.	All
Pretax profit margin	Pretax income/net revenue.	Securities firms
EBITDA margin	EBITDA/total revenue.	Investment managers
Management fees/average assets under management	Management fees/average (earning) assets under managements.	Investment managers
Cash flow ratios		
EBITDA/interest expense	Earnings before interest, taxes, depreciation and amortization, with adjustments for significant noncash items/interest expense.	Investment managers/some securities firms (such as inter-dealer brokers)

Figure 2
Key Nonbank FI Ratio Definitions

	Definition	Types of companies to which ratios are typically applied
EBITDA/debt service	Earnings before interest, taxes, depreciation and amortization, with adjustments for significant noncash items/debt service (includes debt amortization).	Investment managers/some securities firms (such as inter-dealer brokers)
Fixed-Charge coverage	EBITDAR (EBITDA plus rental expenses/fixed charges (includes interest expense, debt service, preferred dividends, and significant rental expenses when applicable).	Investment managers/some securities firms (such as inter-dealer brokers)
Market risk measures		
Average trading VaR	Average period trading value-at-risk adjusted to 99% confidence interval and one-day holding period.	Securities firms

VaR – Value at risk.
Source: Ind-Ra

Appendix D

Typical Ratios Used in Bank Analysis

As accounting standards have significantly converged in recent years, Ind-Ra, wherever possible, seeks to use a common suite of ratios across its rated bank universe. These are listed in the table below and are mostly self-explanatory. It should be noted that published data will not always be available, especially in interim financial statements, for all these ratios to be calculated, and that, where calculated, the significance and weighting attached to the ratios may well vary from bank to bank and through time. As accounting standards and disclosure requirements also vary over time, the exact composition and derivation of these ratios is subject to periodic change, although their broad thrust is expected to remain stable. Ind-Ra may use additional ratios to those listed below, typically where such ratios are not so readily extracted from published financial statements. This would include market risk measures, which will typically be based on a value-at-risk number.

Figure 3

Key Bank Ratios

Interest ratios
Interest income on loans/average gross loans
Interest expense on customer deposits/average customer deposits
Interest income/average earning assets
Interest expense/average interest-bearing liabilities
Net interest income/average earning assets
Net interest income less loan impairment charges/average earning assets
Other operating profitability ratios
Non-Interest income/gross revenues
Non-Interest expense/gross revenues
Non-Interest expense/average assets
Pre-Impairment operating profit/average equity
Pre-Impairment operating profit/average total assets
Loans and securities impairment charges/pre-impairment operating profit
Operating profit/average equity
Operating profit/average total assets
Taxes/pretax profit
Other profitability ratios
Net income/average total equity
Net income/average total assets
Net income/average total assets plus average managed assets
Capitalisation
Core capital/regulatory weighted risks
Tangible common equity/tangible assets
Tangible common equity/total business volume
Tier I regulatory capital ratio
Total regulatory capital ratio
Equity/total assets
Cash dividends paid and declared/net income
Cash
Net income − cash dividends/total equity
Loan quality
Growth of total assets
Growth of gross loans
Impaired loans(NPLs)/gross loans
Reserves for impaired loans/gross loans
Reserves for impaired loans/impaired loans
Impaired loans less reserves for impaired loans/equity
Loan impairment charges/average gross loans
Net charge-offs/average gross loans
Impaired loans + foreclosed assets/gross loans + foreclosed assets
Funding
Loans/customer deposits
Interbank assets/interbank liabilities

Source: Ind-Ra

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