

## 6. Financial Institutions

### 6.1. Introduction and Overview

6.1.1. DMCs use FIs to manage funds received from government, MDBs including ADB, other donors, and the financial markets. The FIs act as financial intermediaries in providing loans and equity contributions to public or private sector organizations in sectors, or subsectors, such as agriculture, industry, and small- or medium-scale enterprises.

6.1.2. FIs include commercial banks and other financial institutions. ADB loans to FIs may be referred to as FILs. ADB previously referred to FIs as development finance institutions (DFIs). The World Bank and the African Development Bank refer to FIs as financial intermediaries. They are also known by sectoral titles, such as agricultural banks (AgDBs), industrial banks (IDBs) and housing development banks (HDBs), or as development financial intermediaries, microfinance institutions (MFIs), and microfinance intermediaries.

6.1.3. FIs are expected to generate an interest rate spread (the difference between lending and borrowing rates) that covers all operating costs, including provisions for bad and doubtful debts, and in appropriate circumstances provides a profit. ADB can support FI operations in both the public and the private sectors. In addition to this introduction, this part has five sections:

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|-----|-----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 6.2 | Reviewing FI Financial Management | This section describes specific issues to be considered when reviewing the financial management practices of FIs. These issues include the treatment of interest rate distortions, directed credit, and subsidies. |
| 6.3 | FI Investments                    | This section describes ADB's approach to FI investments. It discusses selection of participating institutions and appraisal approaches.                                                                            |
| 6.4 | Assessing FI Performance          | This section describes considerations regarding, and approaches to, measuring the performance of FIs. In particular, it advises on applying the CAMEL framework and                                                |

assessing FI risks. The section stresses that the performance measures recommended throughout other parts of these Guidelines are not necessarily applicable to FIs.

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| 6.5 | FI Appraisal Checklist           | A generic checklist is provided for appraising FIs.                                         |
| 6.6 | FI Reporting and Auditing Issues | This section provides specific guidance on the reporting and auditing requirements for FIs. |

## **6.2. Reviewing FI Financial Management**

### **6.2.1. General Operational Issues**

6.2.1.1. State-owned FIs resemble their commercial cousins in that frequently they have been formed to address the needs of a particular community, or category of commerce or industry, or branch of human activities, such as lending very small sums to urban and rural poor through microfinance. Some state-owned FIs are very large, such as the Industrial Development Bank of India (IDBI) or the Agricultural Bank of China (ABC). Other state-owned FIs can be very small and are sometimes operated by volunteers under a manager seconded from a commercial bank. So, as there is no generic model, each FI must be identified and prepared for a project, and appraised as to its capabilities and capacities to deliver a proposed project.

6.2.1.2. The objective of reviewing FI operational performance is to assess its ability to: (i) deliver subloans to achieve defined country/sector economic objectives, (ii) efficiently recover subloans, and (iii) cover all operating costs and make a reasonable profit on the invested capital. FIs have numerous forms of performance indicators that can provide analysts with an understanding of past and ongoing performance.

6.2.1.3. Where an existing FI is the subject of a proposed project, or of a continuing ADB lending operation, the financial analyst (or investment officer) should begin by closely studying the FI's most recent annual financial statements and associated auditors' reports and opinions.

6.2.1.4. For an ongoing project, this review should be conducted against the objectives and recommended operational performance set out in the most recent RRP. After drawing conclusions as to past and current performance, the financial analyst (or

investment officer) should discuss their findings in detail with the project officer and the FI management and, if appropriate, with the proposed or actual borrower, and an apex institution (where participating). Every effort should be made to reach agreement on these initial findings; particularly on management deficiencies, system defects, and performance shortcomings or failures.

6.2.1.5. This first step is essential to ensure that the FI management understands and is likely to fully support the likely objectives of a proposed project, or revision of objectives (where necessary) for an ongoing project, as the ADB mission continues its work of preparing or supervising a project.

6.2.1.6. Full collaboration by FI management and their complete endorsement of a mission's proposals are critical for the investment's success. Any reservations by FI management or the borrower should be confirmed in the Aide Memoire and reported to the MRM.

6.2.1.7. It is particularly important to monitor the implementation and fulfillment of the stakeholders responsibilities, and the impact of their obligations on: (i) their respective national economies, (ii) performance of the institution as a borrower, (iii) national influences on regional operations (where present), and (iv) selected enterprises in representative regions of countries as subborrowers.

## **6.2.2. Policy Framework for FIs and FI Loans**

6.2.2.1. The design and timing of FILs should take account of the prevailing and expected macroeconomic environment, including the exchange rate regime and international capital mobility, as well as conditions in real sectors. Given the critical importance of the macroeconomic and sectoral framework for financial sector sustainability and efficiency, ADB considers FILs only in the context of a satisfactory macroeconomic framework. Within this framework, ADB uses its lending and nonlending services to focus on improving the incentive environment for FIs.

6.2.2.2. ADB involvement in the financial sector of countries through FILs: (i) supports improvements in the incentives structure for market participants, including elimination of impediments to efficient resource mobilization and allocation; (ii) supports development of infrastructure, including creation and strengthening of sound and competitive financial institutions and markets, and improvements in financial and prudential regulations, banking supervision, and accounting and auditing standards; and (iii) aims to remove or substantially reduce subsidies, whether provided through interest rates, directed credit, institution-building grants, or otherwise. (Institution-building TA

grants and other non-interest rate subsidies may be provided in a variety of ways, for example, as preferential income-corporate tax treatment, free use of facilities, consultancies, guarantees, training, and subsidized staff costs and overheads).

### **6.2.3. Treatment of Interest Rate Distortions**

6.2.3.1. The level and structure of interest rates are critical determinants of: (i) economic efficiency with which resources are allocated in an economy, and (ii) financial sector viability.

6.2.3.2. By definition, interest rates reflect the opportunity cost of capital in undistorted markets. Interest rate distortions may lead to a misallocation of resources, resulting in forgone national income. Therefore, the removal of interest rate distortions in a country is an important objective of financial sector reform programs supported by ADB-funded FILs.

6.2.3.3. When there are major interest rate distortions in a country (e.g., large interest rate subsidies, pervasive interest rate controls, or policies that cause extremely high interest rates), ADB does not support a program until the country establishes agreed programs to remove or substantially reduce the distortions during implementation of the FIL.

6.2.3.4. Interest rate reforms should be appropriately phased to minimize adverse impacts on the solvency and liquidity of FIs and enterprises.

6.2.3.5. In determining whether there are major interest rate distortions, the following factors should be considered: (i) whether domestic interest rates are administered, are determined noncompetitively, or are affected by the government's fiscal tax/subsidy and regulatory policies; and (ii) when capital markets are open, whether there are significant differences between domestic interest rates and interest rates payable on borrowings of foreign capital (that cannot be explained by prevailing economic conditions).

6.2.3.6. However, under certain circumstances, ADB may support programs that include directed credit or subsidies.

### **6.2.4. Treatment of Directed-Credit Programs**

6.2.4.1. ADB-supported FILs also aim to remove or substantially reduce the use of directed credits that are similar to interest rate subsidies, as these lead to resource allocation outside market mechanisms.

6.2.4.2. Directed credit programs supported by ADB may be channeled through specialized FIs, particularly those that concentrate their lending in certain subsector market niches for business strategy reasons.

6.2.4.3. In many countries, increasing access to credit by specific sectors (e.g., microfinance institutions or the rural sector) is a major government policy objective, and some use directed credit to pursue this objective.

6.2.4.4. An ADB FIL may support directed-credit programs to promote sustainable financing for such sectors, provided that the programs are accompanied by reforms to address the underlying institutional infrastructure problems and any market imperfections that inhibit the market-based flow of funds to those sectors.

6.2.4.5. Such reforms include measures to: (i) address obstacles that impede the flow of funds to the credit recipients, or (ii) enhance the creditworthiness of the intended beneficiaries through appropriate approaches such as mutual group guarantees. When such targeted lending is commercially oriented, it is not considered to be directed credit.

6.2.4.6. It is good practice to routinely monitor the contribution of directed credits and their associated concessional terms to the growth of the targeted sector(s) and poverty reduction, taking into account any adverse impact on other parts of the economy.

### **6.2.5. ADB Policy on Subsidies**

6.2.5.1. In some cases, subsidies may be an appropriate use of public funds (e.g., poverty-reduction programs). ADB supports programs involving subsidies only if they:

- are transparent, targeted, and capped;
- are funded explicitly through the government budget or other sources subject to effective control and regular review;
- are fiscally sustainable;
- do not give an unfair advantage to some FIs over other qualified and directly competing institutions; and
- are economically justified, or can be shown to be the least-cost way of achieving poverty reduction objectives.

6.2.5.2. Subsidies that do not meet these tests should be phased out, or are substantially reduced, during the course of a FIL.

### **6.2.6. Eligibility Criteria for FIs**

6.2.6.1. ADB requires assurances that FIs, acting as lenders using FILs and other investment operations, are financially efficient and viable institutions. In particular, they must:

- be financially sustainable—as represented by adequate profitability, capital, and portfolio quality, as confirmed by financial statements prepared and audited in accordance with accounting and auditing principles acceptable to ADB;
- have acceptable levels of loan collections;
- have appropriate capacity, including staffing, for carrying out subproject appraisal (including environmental assessment) and for supervising subproject implementation;
- have the capacity to mobilize domestic resources;
- have adequate managerial autonomy and commercially oriented governance (particularly relevant when state-owned or state-controlled FIs are involved); and
- have appropriate prudential policies, administrative structure, and business procedures.

6.2.6.2. Using these criteria, ADB determines the eligibility of a proposed FI, or it may require an apex institution or other appropriate entity to do so.

6.2.6.3. New and existing FIs that do not meet all the eligibility criteria for being intermediaries may participate in an ADB-funded FIL if they agree to an institutional development plan that includes a set of time-bound monitorable performance indicators and provides for a midterm review of progress.

6.2.6.4. When an FIL includes such FIs, the size and complexity of the FIL should be commensurate with the FIs' implementation capacity; and the FIL may include an institution-building component that the borrower may pass on in the form of grants. Such FIs' continued participation in the FIL is subject to their satisfactory implementation of their institutional development plans; when progress is not satisfactory, ADB considers appropriate remedial action, including suspension.

6.2.6.5. FIs, whose performance in relation to eligibility criteria has been unsatisfactory for an extended period of time, are required to take substantial corrective measures and to demonstrate improvement before they are permitted to participate in a FIL under an institutional development plan as described above.

### **6.3. FI Investments**

#### **6.3.1. Introduction**

6.3.1.1. This section describes ADB's approach to FI investments. It discusses selection of participating institutions and appraisal approaches.

#### **6.3.2. Investing in FIs**

6.3.2.1. ADB's involvement in a country's financial sector is set out in the CSP and driven by ADB's overarching poverty-reduction objective. As relevant, the CSP: (i) shows how the financial sector affects country development prospects; (ii) highlights reforms to be supported by ADB financial sector operations, including their sequencing; and (iii) states why the proposed operation is the appropriate vehicle for ADB support for reforms.

6.3.2.2. As appropriate, ADB consults with IMF, World Bank, and selected donors on proposed FI lending, and it coordinates its financial sector strategies and operations with theirs.

6.3.2.3. One of the forms of ADB's intervention in the financial sector is an FIL. Under an FIL or an FIL component of an investment loan, ADB provides funds to eligible participating FIs for onlending, at the FI's risk, to final borrowers.

6.3.2.4. The appraisal should ensure that the following objectives of FI lending include: (i) supporting reform programs in the financial sector or related real sectors; (ii) financing real sector investment needs; (iii) promoting private sector development; (iv) helping to stabilize, broaden, and increase the efficiency of financial markets and their allocation of resources and services; (v) promoting the development of the participating FIs; and (vi) supporting the country's poverty reduction objectives.

6.3.2.5. FILs are provided in the context of sound analytical work on sector issues, appropriate technical assistance, and, as relevant, adjustment operations to address policy issues.

6.3.2.6. ADB's intervention in the financial sector may also be in the form of other lending instruments (e.g., structural and sector adjustment loans and technical assistance loans), guarantees, and nonlending activities (e.g., country economic and sector work, training, and financial advisory services).

### **6.3.3. Selecting Participating Institutions**

6.3.3.1. ADB's Economics and Research Department (ERD) developed a paper in 1999 that explored in detail approaches to selecting participating financial institutions in credit projects. This paper, *Towards Good Practice*, can be accessed in the Knowledge Management section of the web-based Guidelines.

### **6.3.4. Appraising an FI Investment**

#### **6.3.4.1. Introduction**

6.3.4.1.1. ADB's appraisal of an FIL should:

- confirm, with justifications, if it is the appropriate intervention to achieve the desired objectives with due regard to the sustainability of the financial sector;
- establish the financial and economic justifications for the operation;
- confirm, for an FIL justified by its poverty-reduction goals, that it is a practicable, cost-effective way of achieving such goals;
- confirm the eligibility of FIs proposed for inclusion; and
- confirm that implementing the FIL is not likely to undermine the financial condition of participating FIs.

6.3.4.1.2. The economic analysis of an FIL should take into account the prevailing and expected macroeconomic environment and substantiate that the proposed operation will lead to net economic benefits arising from policy and institutional changes and increased availability of investment funds.

6.3.4.1.3. If the justification for an FIL depends critically on addressing perceived market failures (i.e., nonmarket effects or externalities), the analysis should explain the assumptions and their empirical basis. If there is evidence of a subsidy involved in an FIL such that resources, through interest rates or other forms, are provided below their economic opportunity cost, the extent of subsidy dependence must be calculated and assessed.

6.3.4.1.4. Risk analysis should be used to demonstrate how robust the projected economic benefits of the project are to possible changes in assumptions about the macroeconomy, borrower commitment to the reforms supported by the FIL, and institutional performance. Note that this reference to risk analysis should not be confused with market risk and associated indicators.

### **6.3.4.2. Subprojects**

6.3.4.2.1. Increased production of goods and services should be established at the subproject level. It must be derived from expanding existing productive capacity, increasing the efficiency of capacity utilization, or creating new types of productive capacity. Working capital financing to maintain existing levels of production is not eligible for ADB financing.

6.3.4.2.2. FILs are used to finance investments in subprojects for increased production of goods and services. The subprojects must meet eligibility and development criteria agreed with ADB. ADB agrees with the borrower on appropriate arrangements to monitor subproject compliance with these criteria. In addition to the above criteria, the appraisal should ensure that subprojects are financially viable and technically, commercially, managerially, and environmentally sound.

### **6.3.4.3. Use of ADB Funds**

6.3.4.3.1. The borrower may pass on ADB funds to a FI either as a loan or as borrower's equity; similarly, FIs may pass on ADB funds to subborrowers as subloans or equity investments. In all cases, ADB funds are disbursed against eligible expenditures for goods, works, and services.

6.3.4.3.2. FILs are normally amortized by ADB's borrowers on country terms as established by ADB and not on a back-to-back basis (by earmarking subborrowers' repayments for amortizing the ADB loan). The borrower may pass the funds on to FIs either on a back-to-back basis or on the basis of another amortization schedule acceptable to ADB.

6.3.4.3.3. When FI loan repayments to the borrower are not on a back-to-back basis, FIs may, within their overall loan amortization schedules, use repayments for purposes that are consistent with their business strategies, or for prepayments to the borrower. Under an apex or two-tier lending arrangement, ADB funds are passed initially to an apex (first-tier) institution, which onlends them to the participating retail financial institutions.

6.3.4.3.4. An FI with actual or potential conflict of interest cannot serve as an apex institution.

6.3.4.3.5. Two-tier lending arrangements are common, but a three-tier arrangement may be feasible, particularly to address micro-credit operations.

#### **6.3.4.4. Onlending Terms**

6.3.4.4.1. FIL onlending terms are set in the context of a borrowing country's interest rate structure and any agreed program for interest rate reforms.

6.3.4.4.2. ADB funds are priced to be competitive with what the participating FIs and their subborrowers would pay in the market for similar money, taking into account, as relevant, maturities, risks, and scarcity of capital.

6.3.4.4.3. When interest rates are not market-determined and there is an agreed program of interest rate reforms, FIL funds are onlent to participating FIs at interest rates agreed with ADB that: (i) are not negative in real terms; (ii) provide adequate margins to FIs to cover all costs, including credit and other risks, and an adequate profit margin; and (iii) do not discourage resource mobilization from the market by providing a price advantage in using FIL funds.

6.3.4.4.4. ADB funds may be onlent to participating FIs and their subborrowers in either foreign exchange or domestic currency on the basis of prudent credit decisions, including prospective subborrowers' ability to bear the foreign exchange risk to avoid later credit risk. Where interest rates are market-determined and there is relatively easy capital movement, local currency interest rates include an implicit premium that reflects market expectations in regard to exchange rate changes. In such situations: (i) ADB FIL funds are onlent to FIs in either local or foreign currency, provided the onlending interest rates are consistent with prevailing interest rates in the borrowing country for comparable credit; and (ii) FIs normally onlend to subborrowers in the same currency or currencies that the FIs borrowed.

6.3.4.4.5. If interest rates are not market-determined but are set administratively, it is not possible to determine market expectations of exchange rate changes, as foreign exchange risks may be under priced in local currency interest rates. Therefore, the foreign exchange risk of FIL funds is borne either by: (i) subborrowers through borrowing and repayment in foreign currency, or (ii) the government if onlending and repayment are in domestic currency at prevailing administered interest rates. In the latter case, the government charges a fee that is passed on to FIs and subborrowers to offset the anticipated foreign exchange risk.

#### **6.3.4.5. Monitoring Financial Institutions Investments**

6.3.4.5.1. During project appraisal and negotiations, provision is made for effective monitoring and evaluation of the FIL's progress toward its objectives and development impact throughout the life of the project.

6.3.4.5.2. The performance indicators agreed on at loan negotiations cover sectoral, financial, and institutional variables.

6.3.4.5.3. The variables for the FIs include among other things, adequacy of capital, quantity and quality of earnings, quality of assets, sufficiency of liquidity, extent of subsidy dependence, effectiveness of FI loan administration (appraisal, supervision, and collection performance), and adequacy and timeliness of preparation of audited financial statements. During implementation, ADB, the borrower, and the FIs in each tier must use the agreed performance indicators, implementation progress reports, and a review of a sample of subprojects to monitor the FIL's progress.

6.3.4.5.4. At least once each year during implementation, ADB conducts a formal review of the condition and performance of participating FIs, including a review of their audited financial statements, to determine their continued compliance with eligibility criteria. The findings of this review are to be recorded in supervision reports.

## **6.4. Assessing FI Performance**

### **6.4.1. Introduction**

6.4.1.1. A wide range of indicators is available for reporting by FIs. The most important are described in this section. The ratios and indicators that are described in other parts of these Guidelines are generally not appropriate for assessing FI performance.

6.4.1.2. It is important that the financial analyst (investment officer) only recommends indicators that the FI fully understands and is willing to use in their day-to-day management processes. However, where a FI is reluctant to prepare and use indicators effectively, or does not have a financial management system capable of preparing the indicators that ADB staff have recommended, these issues should be recorded in an Aide Memoire and reported to an MRM.

6.4.1.3. The most important criteria for determining the appropriateness of an FI to act as a financial intermediary are its solvency, profitability, and liquidity. In this respect, since 1988, the Basle Committee on Banking Supervision (BCBS) of the Bank of International Settlements (BIS) has recommended using Capital adequacy, Assets quality, Management quality, Earnings and Liquidity (CAMEL) as criteria for assessing an FI.

6.4.1.4. The following sections describe the application of the CAMEL framework and provide a selection of appropriate indicators. They also discuss risk management in relation to FIs. A special section examines the application of these Guidelines to microfinance institutions (MFIs).

#### **6.4.2. Assessing Microfinance Institutions**

6.4.2.1. The World Council of Credit Unions (WOCCU) recommends a set of financial ratios covering **P**rotection, **E**ffective financial structure, **A**sset quality, **R**ates of return and costs, and **L**iquidity and **S**igns of growth (PEARLS) to monitor the financial stability of Credit Unions, including MFIs. The PEARLS methodology is specifically designed for evaluating credit unions and addresses shortcomings of the CAMEL system in this respect.

6.4.2.2. Further information on the PEARLS methodology can be found in the Knowledge Management section of the web-based Guidelines and at [www.woccu.org](http://www.woccu.org).

#### **6.4.3. Applying the CAMEL Framework**

6.4.3.1. The five following subsections describe the components of the CAMEL framework and recommend appropriate performance measures.

##### **6.4.3.1. Capital Adequacy Ratio**

6.4.3.1.1. Capital Adequacy is a measure of an FI's financial strength, in particular its ability to cushion operational and abnormal losses. An FI should have adequate capital to support its risk assets in accordance with the risk-weighted capital ratio framework. It has become recognized that capital adequacy more appropriately relates to asset structure than to the volume of liabilities. This is exemplified by central banks' efforts internationally to unify the capital requirements of commercial banks and to generate worldwide classification formulae such as the one proposed here. This indicator requires that assets be classified by reference to their demands on the equity (or capital) structure of the FI.

6.4.3.1.2. The CAR indicator is derived by comparing the ratio of an entity's equity to its assets-at-risk. The covenant specifies that the borrower/EA/FI should not make an advance to a subborrower, if after making the advance, the ratio (the performance indicator) of its equity to its assets-at-risk would be greater than that specified in the covenant.

$$\text{Capital Adequacy Ratio (\%)} = \frac{[\text{Paid in Capital} + \text{Reserve Funds} + \text{Net Profits}] \times 100}{\text{Total Assets} - \text{Loan Loss Provision} - \text{Risk-Free Assets}}$$

Risk-free assets should include:  
 (i) Cash on hand; (ii) Due from Banks; (iii) Interbank loans; (iv) Government-guaranteed loans; and (v) Investments in government securities, etc.

6.4.3.1.3. Equity is defined as the total of: (i) unimpaired paid-up capital; (ii) retained earnings; (iii) reserves available to meet any losses that may be incurred through the nonrecovery of assets; and (iv) all other capital and revenue reserves, including provisions for bad and doubtful debts and provisions for loan and lease losses.

6.4.3.1.4. Assets-at-risk are defined as the total of the impaired values of assets at the date of making the advance to the subborrower. Assets are typically classified as: (i) risk-free; (ii) minimum risk; (iii) general risk; (iv) substandard; (v) “workout” (or minimal chance of recovery); and (vi) fixed assets, furniture and office equipment, computers, etc. To each of these classifications is awarded a percentage of their values for which an FI’s capital is needed to cover risk of losses.

6.4.3.1.5. The BCBS of the BIS recommends a mandatory minimum CAR of 8% for banks in OECD countries. However, the emerging banking regulatory and supervision system in most ADB DMCs, combined with an emphasis on directed lending, results in poor portfolio quality. As such, these Guidelines recommend a minimum Capital Adequacy Ratio (CAR) of 12%.

### 6.4.3.2. Assessing Asset Quality

6.4.3.2.1. Asset quality has direct impact on the financial performance of an FI. The quality of assets particularly, loan assets and investments, would depend largely on the risk management system of the institution. The value of loan assets would depend on the realizable value of the collateral while investment assets would depend on the market value.

Ratios or Other Measures	Computation Method	Significance and Notes
I. Loan Concentration Tables	Concentration of Loans by: <ul style="list-style-type: none"> <li>• Industry</li> <li>• Region</li> <li>• Borrower</li> <li>• Portfolio Quality</li> </ul>	Indicates concentration of exposure. The analyst should review whether the FI has a policy regarding the ceiling or maximum exposure to any company or group.

Ratios or Other Measures	Computation Method	Significance and Notes
2. Related Party Policies and Exposure	<ul style="list-style-type: none"> <li>Loans outstanding to related parties</li> <li>Current approval process for these loans</li> <li>Checks and balances for such loans</li> </ul>	
3. Loan Loss Provision Ratio (%)	$\frac{\text{Loan Loss Provision}}{\text{Average Performing Assets}}$	<p>Indicates provisioning requirements on loan portfolio for the current period.</p> <ul style="list-style-type: none"> <li>The Loan Loss Provision is the current period allocation to the loan loss reserve.</li> <li>Performing assets currently pay interest or are not more than 60 days past due.</li> <li>Average performing assets: beginning balance and ending balance are averaged for the period (including loans, investment, and advances).</li> </ul>
4. Portfolio in Arrears (%)	$\frac{\text{Balance of Loans in Arrears} \times 100}{\text{Value of Loans Outstanding}}$	Measures amount of default in the portfolio.
5. Loan Loss Ratio (%)	$\frac{\text{Amounts Written Off} \times 100}{\text{Average Loans Outstanding}}$	<p>Indicates extent of uncollectible loans over the last period. Any loan more than one year past due should automatically be considered uncollectible.</p> <ul style="list-style-type: none"> <li>The amount written off is the loss recognized on a loan during the period.</li> </ul>
6. Reserve Ratio (%)	$\frac{\text{Loan Loss Reserve} \times 100}{\text{Value of Loans Outstanding}}$	<p>Indicates the adequacy of reserves in relation to the portfolio.</p> <ul style="list-style-type: none"> <li>The loan loss reserve is a reserve maintained to cover potential loan losses.</li> </ul>

### 6.4.3.3. Assessing Management Quality

6.4.3.3.1. The performance of the other four CAMEL components will depend on the vision, capability, agility, professionalism, integrity, and competence of the FI's management. As sound management is crucial for the success of any institution, management quality is generally accorded greater weighting in the assessment of the overall CAMEL composite rating.

Ratios or Other Measures	Computation Method	Significance and Notes
1. Cost per Unit of Money Lent	$\frac{\text{Operating Costs}}{\text{Total Amount Disbursed}}$	Indicates efficiency in distributing loans (in monetary terms).

### 6.4.3.4. Assessing Earning Performance

6.4.3.4.1. The quality and trend of earnings of an institution depend largely on how well the management manages the assets and liabilities of the institution. An FI must earn reasonable profit to support asset growth, build up adequate reserves and enhance shareholders' value. Good earnings performance would inspire the confidence of depositors, investors, creditors, and the public at large.

Ratios or Other Measures	Computation Method	Significance and Notes
1. Return on Assets (%)	$\frac{\text{Net Income After Tax} \times 100}{\text{Average Total Assets}}$	
2. Return on Equity (%)	$\frac{\text{Net Income After Tax} \times 100}{\text{Average Total Equity Funds}}$	
3. Interest-Spread Ratio (%)	$\frac{\text{Income from Loan Portfolio} \times 100 \text{ (a)}}{\text{Average Loan Portfolio (b)}} - \frac{\text{Interest Expenses and Other Financial Charges} \times 100 \text{ (c)}}{\text{Average Borrowings (d)}}$	<p>(a) Sum of interest on the loan portfolio plus interest received from other FIs. It also includes discount and commission earned and other charges (front-end fees) levied on customers.</p> <p>(b) Average of customer loans, interbank loans and due from banks.</p> <p>(c) Includes commission and discount paid, brokerage, charges levied by correspondent banks, etc.</p> <p>(d) Comprises deposits and other borrowings.</p>

Ratios or Other Measures	Computation Method		Significance and Notes
4. Earnings-Spread Ratio (%)	$\frac{\text{Total Income} - \text{Non-Operating Income} \times 100}{\text{Average Total Portfolio (e)}}$	$\frac{\text{Interest Expenses and Other Financial Charges} \times 100}{\text{Average Total Resources (f)}}$	(e) Loan portfolio, cash, Due from Banks, Interbank loans, Investments in Government securities and other investments. (f) Equity + Deposits + Borrowings.
5. Intermediation Cost Ratio (%)	$\frac{[\text{Total Expenses} - (\text{Interest expenses} + \text{fees and commissions and commitment charges})] \times 100}{\text{Average Total Assets}}$		

### 6.4.3.5. Assessing Liquidity

6.4.3.5.1. An FI must always be liquid to meet depositors' and creditors' demand to maintain public confidence. There needs to be an effective asset and liability management system to minimize maturity mismatches between assets and liabilities and to optimize returns. As liquidity has inverse relationship with profitability, an FI must strike a balance between liquidity and profitability.

6.4.3.5.2. Current and quick ratios are inappropriate for measuring FI liquidity. A loan-to-deposit ratio is more relevant. However, an FI's liquidity and solvency are directly affected by portfolio quality. Consequently, financial analysts (investment officers) should carefully analyze the FI's portfolio quality on the basis of collectability and loan-loss provisioning. Section 6.4.3.2 suggests appropriate measures in this respect.

Ratios or Other Measures	Computation Method
1. Loan to Deposit Ratio (%)	$\frac{\text{Loans (excluding short-term loans and marketable securities)} \times 100}{\text{Customer Deposits}}$
2. Loan to Deposit Ratio (Medium and Long-term) (%)	$\frac{\text{Long and Medium-term Loans} \times 100}{\text{Long and Medium-term Deposits}}$

#### **6.4.4. Assessing FI Risks**

##### **6.4.4.1. Introduction to FI Risk Management**

6.4.4.1.1. The main concern for FIs is risk management. World capital markets are dynamic—their activities can generate rapid and dangerous movements that need to be anticipated and managed. The ability of traditional performance measurement criteria to indicate declining or poor FI performance is limited.

6.4.4.1.2. Therefore, the capital markets and their regulators and advisers [e.g., the Basle Committee on Banking Supervision (BCBS) and the International Organization of Securities Commissions (IOSCO)] have developed additional means of measuring performance and, more importantly, to identify problems in a timely manner.

6.4.4.1.3. In many cases, the FIs that ADB deals with are attached to the public sector and have multiple objectives (e.g., sectoral development objectives in addition to profitability objectives). The risk factors associated with these FIs are likely to be more significant than for single-objective commercial banks. Consequently, it is essential that the financial analyst (investment officer) should seek to: (i) identify the principal potential risks that an FI is exposed to; and (ii) develop an appropriate set of indicators that will provide FI management and ADB with an early warning of problems.

6.4.4.1.4. The major risks to be examined include: (i) market risk; (ii) exchange risk; (iii) maturity risk; and (iv) contagion risk.

##### **6.4.4.2. Market Risk and Value-at-Risk**

6.4.4.2.1. Market risk arises from the potential that a borrower or counterparty will fail to perform on an obligation. The assessment of market risk involves evaluating both the probability of default by counterparty, obligor or issuer and the exposure or financial impact in the event of default. The BCBS of the BIS ([www.bis.org](http://www.bis.org)) makes recommendations on means to sustain the creditworthiness of FIs.

6.4.4.2.2. The concept of Value-at-Risk (VaR) is very important in risk management. VaR is a measure of the maximum potential change in an FI's portfolio's value with a given probability over a prespecified horizon. In simple terms, the Value-at-Risk is meant to answer the question: "Over a 10-day period, what is the dollar amount of V such that there is only a 1% chance our portfolio will lose more than V?"

6.4.4.2.3. The main advantages of VaR-based management are that: (i) it incorporates the mark-to-market approach uniformly; and (ii) it relies on a short forecast horizon of market variables. In some ADB DMCs, particularly in transitional economies, some bank lending is government guaranteed. Financial analysts should treat government-guaranteed bank lending as risk free when estimating VaR.

#### **6.4.4.3. Foreign Exchange Risk**

6.4.4.3.1. The Bank of International Settlements (BIS) document on Managing Settlement Risk is included in the Knowledge Management part of the web-based Guidelines. The document provides advice and guidance on managing foreign exchange settlement risks. It also defines foreign exchange settlement risk, advises on management practices, and includes guidance on internal auditing.

#### **6.4.4.4. Maturity Risk**

6.4.4.4.1. Maturity risk relates to mismatching of investments and borrowing operations. To the extent possible, to avoid losses, an FI should seek to match the maturities of subloans and borrowing operations to minimize the risk of having to meet large outgoing interest payments on borrowings and deposits with lower levels of interest receipts from subloans.

6.4.4.4.2. Mismatching can be expensive during times of increasing market rates, particularly when the FI may have subloans extended over 4 to 6 years with no break or adjustment clauses to address rising interest costs.

6.4.4.4.3. An FI should maintain a running risk analysis of forecast forward transactions with alternative scenarios of market (borrowing rates) to identify the date(s) when it is most at risk, based on its current portfolio. Forecasts of future portfolios can be similarly risk assessed.

#### **6.4.4.5. Contagion Risk**

6.4.4.5.1. Contagion can arise in regions (such as Southeast Asia), in countries, in regions within countries, or within a class or category of financial institutions (such as agricultural FIs).

6.4.4.5.2. Contagion risk can arise where declining economic conditions of depositors and subborrowers simultaneously cause a shortage of funds and a rapid increase in defaults on subloans. This condition can automatically trigger a substantial rise in the risk premium of major lenders that prevents an FI from covering shortfalls.

6.4.4.5.3. Anticipating and avoiding contagion risk is best addressed by financial sector supervisors and regulators because they should maintain a consistent, regular overarching view of the financial sectors and of the local/national/international economies with the objective of providing early warnings, not only to the financial institutions, but to the appropriate ministries that are charged with economic management.

#### **6.4.4.6. Role of Regulators in Risk Management**

6.4.4.6.1. The financial analyst (investment officer) should interview regulators and receive assurances that the following matters are addressed:

- Market surveillance for large positions;
- Cross-market supervision;
- Setting of capital reserves;
- Disclosure of data on market value of financial instruments and risk policies to achieve least-cost uniformity in the sector;
- Examination of FIs' records and internal controls;
- Optimum collaboration with FIs' auditors;
- International, regional, and national linkages and exchanges of information;
- A set of rules and requirements that, at the lowest possible cost, effectively contributes to prevent an isolated failure or crisis of small proportions threatening the market as a whole;
- To the extent possible obtaining voluntary convergence and agreement on the role of the regulator;
- A complete set of emergency plans;
- The emergency plans are constantly updated; and
- The emergency plans are agreed between the central bank and FIs.

#### **6.4.4.7. Other Key Risk Management Steps**

6.4.4.7.1. The following steps should be considered as a means of supporting the generation of useful and accurate performance indicators in a FI:

- use of a consistent set of accounting standards (IOSCO supports the use of IASs);<sup>25</sup>
- efficient netting agreements;
- segregation of customers' accounts and protection of customers' funds in event of bankruptcy; and
- ensuring regulators are kept fully informed, and are efficient in their reporting.

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<sup>25</sup> Financial Analysts have discretion to agree alternative arrangements (see paragraph 2.4.3)

### **6.4.5. Determining FI Credit Ratings**

6.4.5.1. The BCBS of the BIS is in the process of replacing the CAMEL framework. The new policy will become effective in 2003 and will mandate the minimum CAR for banks, based upon their overall credit rating.

6.4.5.2. Financial analysts (investment officers) are required to determine the credit rating of the FI being appraised. In some cases, these credit ratings will be readily available from published sources (for instance, the *Standard and Poor's Global Ratings Handbook*). In other cases, the financial analyst (investment officer) can determine the FI's credit rating by questioning other FI's in the country or region.

### **6.4.6. Specialized FI Internal Controls**

6.4.6.1. Internal controls for FIs:

- Should comprise a set of rules and procedures designed to provide qualitative standards that are complementary to the quantitative analysis of risk
- Are becoming increasingly employed by banks and securities institutions
- Should be used to internally manage operational risk, agency risk, and legal risk
- Should be exercised by independent control unit reporting to the Board, and having no operating linkage with trading activities that create risk

6.4.6.2. The objective is to enhance risk management culture in organization, including by:

- Requiring transparency of reports and documentation of the risk control process;
- Monitoring the content and the efficiency of the vertical and horizontal information flows;
- Monitoring and reporting on accountability;
- Ensuring remuneration policy rewards efficient risk management through high returns and minimum risk;
- Monitoring observance of trading limits and market procedures;
- Establishing rules for dealing with changes in volatilities;
- Testing the soundness of models;
- Examining the quality and uniformity of data input
- Validating and back-testing procedures

## 6.5. Appraisal Checklist

6.5.1. A checklist for appraising an FI project is provided in the Knowledge Management section, along with other appraisal checklists (see section 7.10).

6.5.2. FIs comprise a wide range of institutions, including Apex institutions that service one or more FIs in a country. FIs may provide services to one or more sectors in a country (agriculture, various categories of industry, etc.), including support to microfinance organizations. Therefore, the generic appraisal checklist should be used with caution and appropriately modified to address the nature and form of the FI being appraised.

## 6.6. FI Reporting and Auditing Issues

### 6.6.1. Introduction

6.6.1.1. Financial reporting by, and audits of, FIs require individual specifications for each institution so that financial reporting and auditing requirements will be appropriate to the type, nature, and form of the institution.

6.6.1.2. For example, an industrial FI and a microfinance FI have few common characteristics and the reporting requirements and the auditing specifications will differ sharply.

6.6.1.3. Unless the financial analyst concerned is well-experienced in the financial management of FIs, it is recommended that a consultant be employed, who is experienced with the type of FI that is to be the subject of financial reporting, and later, auditing. Specific guidance on MFI reporting and auditing issues is given below.

### 6.6.2. FI Financial Reporting

6.6.2.1. FIs should be required to report in accordance with IAS No. 30 (Disclosures in the Financial Statements of Banks and Similar Financial Institutions) or SFAS 17 of US GAAP.<sup>26</sup>

6.6.2.2. In addition to the standard statements (Balance Sheet, Income Statement and Cash Flow Statement), an FI should be required to provide the additional statements listed below. This listing is not all-inclusive and should be amended to address the objectives and operations of the FI to be audited:

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<sup>26</sup> Financial Analysts have **discretion to agree alternative arrangements** (see paragraph 2.4.3)

- Income statement and balance sheet adjusted for subsidies;
- Portfolio Report for current and past 2 years;
- Portfolio Report showing aging of receivables (arrearages);
- Portfolio Report showing aging of portfolio at risk;
- Portfolio Report showing market and sectoral exposure;
- Capital Adequacy Analysis;
- Assets Structure by Income;
- Related party transactions; and
- Table of Contingencies, Guarantees, Commitments showing corresponding securities and collateral.

### **6.6.3. FI Auditing**

6.6.3.1. Selection of an auditor for a FI should include the provision of a TOR that is specifically geared to the FI concerned.

6.6.3.2. In addition to the standard requirements (see section 5.4) for auditor selection and appointment, including providing a report and an opinion on the annual financial statements, the auditor should be required to include in the report confirmation, or otherwise, that the additional financial statements and the performance indicators listed above can be relied upon.

6.6.3.3. The Terms of Reference should also address the following:

- The auditor's impression of the efficiency and effectiveness of the overall operations and condition of the institution;
- The adequacy of the intermediary's risk management systems and internal control procedures, including whether or not the bank uses VaR, and if so, whether its use is professionally managed under a separate nonlending manager; results achieved during the fiscal year; and the operation of VaR as at the date of completion of the audit;
- The quality of the loan portfolio and adequacy of loan loss provisions, illustrated as necessary by use of performance indicators above;
- The competence and effectiveness of management, including development of strategic plans and their implementation;
- The adequacy of accounting, financial reporting and management information systems;
- The adequacy of public information systems;
- The resolution, or otherwise, of issues identified off-site or during previous on-site supervisory processes;
- Adherence to laws and regulations and terms of licenses and agreements, including loan covenants with ADB;

- A commentary on central bank or other forms of regulatory supervision during the fiscal year; and
- Quality of human resources employed by the FI and their potential to efficiently sustain all areas of the FI's operations.

#### **6.6.4. MFI Financial Reporting and Auditing**

6.6.4.1. The Consultative Group to Assist the Poorest (CGAP) publishes specific guidance on MFI reporting and auditing issues. This guidance includes handbooks for MFI auditors, guidelines for MFI financial statements, and a handbook on appraising an MFI. These materials can be accessed online at [www.cgap.org](http://www.cgap.org).