CAMELS Rating System in the Context of Islamic Banking:
A Proposed ‘S’ for Shariah Framework

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[Development of exact modus operandi for regulation and supervision of Islamic banks by the central bank deserves special attention for smooth development of the Islamic banking system, especially in Bangladesh. Notwithstanding the experience of more than two decades of Islamic banking, which now covers more than one third of the private banking system of the country, no concerted effort has been made to add a Shariah component both in on-site and off-site banking supervision system of the central bank. Rather it is being done on the basis of the secular supervisory and regulatory system as chosen for the traditional banks and financial institutions. To fill the gap, an attempt has been made in this paper to review the CAMELS standard set by the BASEL Committee for off-site supervision of the banking institutions, their consistencies and inconsistencies under an Islamic setup and put forward a Shariah Matrix (Supervisory inspection areas of both on-site and off-site examinations on assets and liabilities sides of the Islamic banks and their respective weightage) for the first time to elicit comments and suggestions from the Shariah experts and expert Islamic bankers. Hopefully, this study will enable the regulators and supervisors get a Shariah benchmark to supervise and inspect Islamic banks and Islamic financial institutions from an Islamic perspective. This effort may add a new ‘S’ to the CAMELS rating system as Shariah rating, and CAMELS would then become ‘CAMELSS’ rating system. Finally, if the proposed Shariah benchmark is adopted by the regulators and supervisors, that will undoubtedly enhance the supervisory strength and oversight, and also establish strong confidence of the people in this new banking paradigm]

Introduction

Recently much has been talked and written about the broad attributes of sound financial regulation and supervision, particularly in light of the complex challenges presented by the increasingly integrated global financial markets. Financial integration does not only make the issues complex in nature and in usability but also entangles those with the domestic environment warranting a matching solution. As regards banking supervision, the supervisory authorities especially central banks have devised many techniques and tools to ensure effective and necessary banking supervision. The importance of stable macroeconomic conditions and effective supervisory structures for the wellbeing of the financial system is well documented. Spiraling inflation and recession wreak havoc with fundamental credit quality. Equally, an efficient financial infrastructure, e.g., a well-defined accountable legal system, and consistent, transparent accounting standards are in many ways a prerequisite to promoting effective supervisory structures. Effective market discipline and improved practical measures provide both internal and external incentives to promote enhanced risk management and, thus, safeguard markets. For instance, with established and transparent procedures in place for resolving failing financial institutions, managers have adequate incentives to conduct prudent banking.

It is also undoubtedly a necessary work for a central bank to chalk out a conducive rating framework with suitable guideline where Islamic banking system has occupied a prominent place. In the context of Bangladesh, developing a supervisory guideline and rating framework for evaluating the overall performance of the Islamic banks and financial institutions is of great importance since the Islamic banking system has been growing at a rapid rate.

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The present day on-site or off-site supervisory guidelines are not enough to judge and evaluate the functions of Islamic banks and Islamic financial institutions from the Shariah point of view. Therefore, it is imperative to develop a systematic rating framework for the Islamic banks and Islamic non-bank financial institutions to help the central banks to take follow-up measures to ensure Shariah compatibility and also to ensure public confidence towards Islamic banking system.

With that background, this paper discusses the framework and modalities of CAMEL rating linking it to the newly growing banking system based on Islamic Shariah. It is hoped that this new framework would enrich the on-site and off-site surveillance systems currently employed by the regulatory authorities in monitoring the financial condition and performance of the entire banking system. They would be able to make appropriate changes that might require prompt adjustments in overall monetary or supervisory policy on the basis of aggregate data on the condition of the banking system. Therefore, the objectives of the paper are to provide an overview of the different rating approaches undertaken by the bank supervisors and to make a general assessment of the methods that are being used or developed and analyze whether those are appropriate for actual assessment of Islamic banking companies. The study reveals some untouched area that should be incorporated in the banking supervision literature and discussion. The paper is organized into six sections. Section II highlights the different approaches of bank supervision techniques while Section III deals exclusively with the CAMEL and CAMELS rating systems of Bangladesh. Section IV examines the shortcomings of the CAMELS Model in interpreting the actual performance in the context of the Islamic banking system. This section also portrays an analysis of the probable rating areas of Islamic banks with a proposed “S” for Shariah rating. Section V concludes with remarks and recommendations.

Section II

Different Approaches of Bank Supervision Techniques

What is Off-Site Supervision

Offsite supervision or detection methods mandate periodic bank reports, in addition to the financial disclosures and reports collected by the respective departmental examiners. Examples of periodic financial disclosures or reports that are useful to bank supervision are reports of condition of deposits, advances and income; legal lending limit exposure reports; and reports of indebtedness of executive officers and principal shareholders and their related interests to banks. The data are supplemented by generating critical ratios related to bank performance, and analysis of key bank financial ratios and other financial data. The offsite surveillance in Bangladesh and analysis can serve as illustration of the process. Offsite analysis precedes on-site examinations and inspections. This offsite system is used as well in evaluating applications filed for opening of new branches, granting of demand loans etc. The entire health of the banks is verified through this process.

Importance of Offsite Supervision

The advent of the “information age” has brought a new process for bank supervision technique: offsite bank surveillance systems for the collection and interpretation of regular reporting returns and other statistical data. Several countries in Asia have implemented offsite supervision systems. Offsite monitoring systems have a number of advantages:
a. This system is less costly than on-site supervision program;
b. This system can be updated frequently when new information is received through quarterly financial returns;
c. It can provide the basis for a financial evaluation of the bank between examinations; and
d. It is potentially able to isolate risk factors that may lead to future problems.

Therefore, offsite monitoring systems complement examinations’ focus on the bank’s current condition, e.g., Shariah implementation status, deposit, credit, income, and capital, and are designed to accomplish a number of objectives. Foremost, they serve as an “early warning device” to detect emerging bank financial problems. The success of an offsite supervision system hinges on several elements. First, the accuracy and timeliness of the data submitted by banks. Second, the technology used to capture the data and compile the comparative ratios, trend analyses and percentile ranks relative to peers. Finally, the analyst makes a judgment based on a variety of financial ratios and trends, and combines the findings to offer compelling evidence of a specific bank’s financial condition.

**A Simple Framework for Banking Regulation and Supervision**

There is no theoretically optimal system or standard textbook blueprint for the structure and process of regulating and supervising financial institutions, including banks. In fact, arrangements for banking regulation and supervision differ considerably from country to country. Apart from differences in political as well as historical financial environmental structures, the most important factors that account for the differences in regulatory and supervisory approaches include the general complexity and state of development of the financial system, the number, size and concentration of banking institutions, the relative openness of the domestic financial system, the nature and extent of public disclosure of banks’ financial positions, capacity of the Shariah supervisory boards to give verdict on different modern financial questions and the availability of technological and human resources for regulation and supervision.

Over the last few years supervisors have adopted new approaches and developed new systems for ongoing banking supervision in order to be better equipped to face newly created manifold challenges presented by financial innovation and globalization measures. These new systems seek to assess and track changes in a bank’s financial condition and risk profile and to generate timely warning for the supervisor to help initiate warranted action.

**Off-site Supervisory Bank Rating Systems**

**PATROL** Rating System

The Bank of Italy has introduced the annual PATROL rating system in 1993 as an off-site supervision tool to give a systematic representation of the financial health of individual banks and provide support in prioritization of the use of supervisory resources in scheduling on-site examinations. As there is no specific mandate for periodic on-site examinations of banking institutions in Italy, they are undertaken based exclusively on evidence provided by the whole set of information available for analysis to the supervisor for assigning PATROL ratings.

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1 This section heavily draws on Sahajwala and Bergh (2000) and other internet materials.
2 Italian abbreviation of five items, Capital adequacy, Profitability, Credit quality, Organisation and Liquidity.
The main inputs for the PATROL off-site analysis include information from monthly, semi-annual and annual regulatory reporting data received by the Bank of Italy. The five components of PATROL are capital adequacy, profitability, credit quality, organization and liquidity. Capital adequacy is assessed by comparing the own funds of a bank with regulatory prescriptions of capital for credit risk, position risk, settlement risk, market risks and exchange rate risk. To assess profitability, the economic results net of extraordinary items are related to the requirement to cover capital losses stemming from bad debts, and the return on equity is related with the average of the banking system. The interest margin is also taken into account. Credit quality is assessed on the basis of aggregate data of adjusted bad debts derived from the central credit register and an individual loan concentration index. The organizational component is assessed on the basis of ad hoc information available to the analyst, on information obtained from meetings held with the management of banks and on-site examination results. Liquidity is assessed after ascertaining maturity mismatches under normal operating conditions, and by simulating exogenous shocks over a one-year time horizon. Two stress scenarios are also simulated, which include a sudden outflow of customer and inter-bank deposits and an increase in the share of used credit facilities on behalf of borrowers, to see how the bank would perform under adverse conditions.

Each component of PATROL is rated on a scale of 1 (best) to 5 (worst) based on supervisory criteria and guidelines. Five individual component ratings are converted into a composite rating, also on a scale of 1 (best) to 5 (worst), which includes all other quantitative and qualitative information available to the analyst. Ratings assigned are validated through comparisons with the actual results of on-site examinations.

**ORAP Rating system**

The French Banking Commission introduced the annual Organization and Reinforcement of Preventive Action (ORAP) Rating System in 1997 as a multi-factor analysis system for individual institutions. The objective of the system is to detect potential weaknesses in banking institutions by examining all components of risk associated with the activity and environment of each institution making use of quantitative and qualitative information. The ORAP rating makes use of various internal and external sources of information. These include different databases of the Bank of France and the Banking Commission (in particular the data provided by the credit institutions themselves, which are stored in a special financial markets database), as well as results of on-site supervisory inspections. The external sources include external auditors, other supervisory bodies in France and information made available under bilateral arrangements with supervisory bodies in other European countries.

The ORAP rating system works within a standardized and formalized framework, with specific ratings on 14 components. The components relate to prudential ratios (capital, liquidity, large exposures and capital adequacy), on- and off-balance sheet activity (asset quality, bad loans and provisions for bad loans), market risk, earnings (operating income, non-recurring items and return on assets) and qualitative criteria (shareholders, management and internal control). Each component is rated on a scale of 1 (best) to 5 (worst). Component ratings are converted to a composite rating similarly scaled between 1 (best) and 5 (worst). Every 5 rating implies corrective action. At the Netherlands Bank, until the end of 1999, component ratings were used to identify institutions in need of supervision. The purpose of this rating system was to enhance the prudential supervision of French credit institutions.
annual off-site ratings were assigned by supervisors based on their assessment of a banking
institution in the context of the information made available to them from various sources.
These sources included monthly and quarterly regulatory reporting data, annual accounts, on-
site examination reports and any other available information. Ratings were assigned based
mainly on professional judgments of supervisors, following some general guidelines laid
down by the Netherlands Bank in this regard. In view of the potential for human error in
qualitative assessments, the ratings were subjected to review by another supervisor under the
four eyes principle.

GIRAFE\(^4\) Rating System

PlaNet Finance provides rating services to financial institutions, micro finance institutions
(MFIs), financial backers, supervisors and regulators, as well as auditors and consultants. The
financial and organizational performance of MFIs is objectively evaluated, and the results are
translated into rating reports, accompanied by a spread on the Internet. A debriefing interview
with the institution and the backers is also included. There are six areas of assessment.
Governance and decision making processes, Information and management tools, Risks
analysis and control Activities and loan portfolio Funding: equity and liabilities Efficiency
and liability.

PEARLS Rating System\(^5\)

PEARLS uses a set of financial ratios to monitor the financial stability of the credit unions
within WOCCU's developing movement projects\(^6\). These ratios provide credit unions, project
staff, national federations and regulators with essential tools for monitoring, planning,
standardizing, ranking and facilitating supervisory control in credit unions. Each letter in the
word PEARLS measures the key areas of credit union operations: Protection, Effective
financial structure, Asset quality, Rates of return and costs, and Liquidity and Signs of
growth.

Protection is measured by comparing the adequacy of the provisions for loan losses against
the amount of delinquent loans. A credit union has adequate protection if it has sufficient
provisions to cover 100% of all delinquent loans for more than 12 months and at least 35% of
loans delinquent between 1 and 12 months. Effective Financial Structure of the credit union
is the single most important factor in determining growth potential, earnings capacity and
overall financial strength. The PEARLS system measures credit union assets, liabilities and
capital, and then recommends the "ideal" structure. Credit unions are encouraged to
maximize earning assets as the means to achieve sufficient earnings. A non-earning asset is
one that does not generate income. An excess of non-earning assets negatively affects credit
union income.

PEARLS indicators are used to identify the impact of non-earning assets by analyzing
delinquency ratios, percentages of non-earning assets and the financing of non-earning assets.

\(^4\) GIRAFE stands for Governance and decision making processes, Information and management tools, Risks
analysis and control, Activities and loan portfolio, Funding: equity and liabilities and Efficiency and liability.
www.gdrc.org


\(^6\) WOCCU stands for World Council of Credit Unions, inc. Headquarter is in USA. WOCCU advocates for
credit unions before international organizations.

By segregating all of the essential components of net earnings, the PEARLS system helps management calculate investment yields and evaluate financial costs and operating expenses. PEARLS calculate yields on the basis of average outstanding investments, unlike other systems that calculate yields on the basis of average assets. Yield is computed in four main areas: loan portfolio, liquid investments, financial investments and other non-financial investments. Operating costs are also important and broken down into three main areas: financial intermediation costs, administrative costs, and unrecoverable loan costs. By segregating income and expenses into the previously mentioned areas, PEARLS ratios can accurately pinpoint the reasons why a credit union is not producing sufficient net income.

Liquidity is traditionally viewed in terms of cash available to lend - a variable exclusively controlled by the credit union. With the introduction of withdrawable savings deposits, the concept of liquidity radically changes. Richardson explained, "Liquidity now refers to cash needed for withdrawals - a variable the credit union can no longer control. The maintenance of adequate liquidity reserves is essential to sound, financial management of the new credit union model." PEARLS analyzes liquidity from three perspectives: total net liquidity reserves, obligatory liquidity reserves, and idle liquid funds. The advantage of the PEARLS system is that it links growth to profitability, as well as to other key areas by evaluating the strength of the system as a whole. Growth is measured in seven key areas: total assets, loans, savings deposits, external credit, shares, institutional capital and membership.

**Genesis of CAMEL Rating System**

The CAMEL methodology was originally adopted by North American bank regulators to evaluate the financial and managerial soundness of U.S. commercial lending institutions. The CAMEL reviews and rates five areas of financial and managerial performance: Capital adequacy, Asset quality, Management, Earnings, and Liquidity. Based on the conceptual framework of the original CAMEL, ACCION International developed its own instrument. Although the ACCION CAMEL reviews the same five areas as the original CAMEL, the indicators and ratings used by ACCION reflect the unique challenges and conditions facing the micro finance industry. To date, ACCION has used its CAMEL primarily as an internal assessment tool, which has contributed to setting performance standards both for the ACCION Network and for the micro finance industry as a whole. The MFI is required to gather the following information for a CAMEL examination: (1) financial statements; (2) budgets and cash flow projections; (3) portfolio aging schedules; (4) funding sources; (5) information about the board of directors; (6) operations/staffing; and (7) macroeconomic information. Financial statements form the basis of the CAMEL's quantitative analysis. MFIs are required to present audited financial statements from the last three years and interim statements for the most recent 12-month period. The other required materials provide programmatic information and show the evolution of the institution. These documents demonstrate to CAMEL analysts the level and structure of loan operations and the quality of the MFI's infrastructure and staffing.

Once the financial statements have been compiled, adjustments need to be made. These adjustments serve two purposes: first, they place the MFI's current financial performance in the context of a financial intermediary; second, they enable comparisons among the different institutions in the industry. The CAMEL performs six adjustments, for the scope of micro finance activity, loan loss provision, loan write-offs, explicit and implicit subsidies, effects of inflation, and accrued interest income.
The ACCION CAMEL analyzes and rates 21 key indicators, with each indicator given an individual weighting. Eight quantitative indicators account for 47 percent of the rating, and 13 qualitative indicators make up the remaining 53 percent. The final CAMEL composite rating is a number on a scale of zero to five, with five as the measure of excellence. This numerical rating, in turn, corresponds to an alphabetical rating (AAA, AA, A; BBB, BB, B; C; D; and not rated). Based on the results of the adjusted financial statements and interviews with the MFI's management and staff, a rating of one to five is assigned to each of the CAMEL's 21 indicators and weighted accordingly.

CAMEL Rating Framework

A. Capital Adequacy

Leverage: the relationship between the risk-weighted assets of the MFI and its equity. Ability to raise equity: assessment of an MFI's ability to respond to a need to replenish or increase equity at any given time. Adequacy of reserves: measure of the MFI's loan loss reserve and the degree to which the institution can absorb potential loan losses.

B. Asset Quality

Portfolio Quality: Portfolio at risk: measures the portfolio past due over 30 days. Write-offs/write off policy: measures adjusted write-offs on CAMEL criteria. Portfolio classification system: review of portfolios aging schedules; assesses institution's policies associated with assessing portfolio risk. Fixed Assets: Productivity of long-term assets: evaluates MFI's policies for investing in fixed assets Infrastructure: evaluation of whether it meets the needs of both staff and clients.

C. Management

Governance: how well the institution's board of directors functions, including the diversity of its technical expertise, its independence from management, and its ability to make decisions flexibly and effectively. Human Resources: evaluates whether the department of human resources provides clear guidance and support to operations staff, including recruitment and training of new personnel, incentive systems for personnel, and performance evaluation system. Processes, controls and audit: the degree to which the MFI has formalized key processes and the effectiveness with which it controls risk throughout the organization, as measured by its control environment and the quality of its internal and external audit. Information Technology System: assesses whether computerized information systems are operating effectively and efficiently, and are generating reports for management purposes in a timely and accurate manner. Strategic planning and budgeting: whether the institution undertakes a comprehensive and participatory process for generating short- and long-term financial projections and whether the plan is updated as needed and used in the decision-making process.

D. Earnings

Adjusted return on equity: measures the ability of the institution to maintain and increase its net worth through earnings from operations. Operational Efficiency: measures the efficiency of the institution and monitors its progress toward achieving a cost structure that is closer to the level achieved by formal financial institutions. Adjusted Return an Assets: measures how
well the MFI's assets are utilized, or the institution's ability to generate earnings with a given asset base. **Interest rate policy**: assess the degree to which management analyzes and adjusts the institution's interest rates on micro finance loans (and deposits if applicable), based on the cost of funds, profitability targets, and macroeconomic environment

E. Liquidity Management

**Liability structure**: review of the composition of the institution's liabilities, including their tenor, interest rate, payment terms, and sensitivity to changes in the macroeconomic environment. **Availability of funds to meet credit demand**: measures the degree to which the institution has delivered credit in a timely and agile manner. **Cash flow projections**: evaluate the degree to which the institution is successful in projecting its cash flow requirements. **Productivity of other current assets**: evaluates extent to which the MFI maximizes the use of its cash, bank accounts, and short-term investments by investing in a timely fashion and at the highest returns, commensurate with its liquidity needs.

The Extended CAMEL: CAMELS Rating System

Michigan's Financial Institutions Bureau is the first among the states to adopt the new, modernized bank rating system endorsed by the FFIEC, and adopted by the FDIC, the OTS, and the OCC. According to Commissioner Patrick M. McQueen, the new rating system adds a sixth component to the current "CAMEL" rating system, "S" for sensitivity to market risk. Michigan has long adhered to a regulatory system, which considers interest rate sensitivity, but has now acted to formalize the criteria in the bank examination.

Section III

CAMELS Rating System of Bangladesh

CAMEL Rating for Banking Companies

As has been seen in the foregoing discussion, the CAMEL rating system is made up of five components: capital adequacy, asset quality, management competence, earnings, and liquidity with the associated acronym. CAMEL ratings generally assess overall soundness of the banks, and identify and/or predict different risk factors that may contribute to turn the bank into a problem or failed bank. To bring and ensure the healthy conditions of the banks or to check the ‘bank run’ originated from a failure of a single bank, authorities review the different aspects of the banks such as adequacy of risk-based capital, future sources of capital and dividend payment ratio, asset growth rate, loan growth rate, non-performing loan trends, provision for loan loss and bad assets, maturity profile of assets, their classification-wise weightage, performance of off balance sheet items, return on assets, level and composition of earnings, volatility of deposits base and reliance position on the borrowed funds and its sources, technical competence in the wake of financial globalization and deregulation, uses of financial innovations, leadership ability, administrative and control ability, compliance with the rules and regulations and standard management information system etc.
CAMELS Rating System of Bangladesh

In Bangladesh, since the early nineties, the same 5 components of CAMEL have been used for evaluating the five crucial dimensions of a bank’s operations that reflect in a comprehensive fashion an institution’s financial condition, compliance with banking regulations and statutes and overall operating soundness. Recently, Bangladesh Bank has upgraded the CAMEL into CAMELS effective from June, 2006. After inserting ‘S’ or ‘sensitivity to market risk’, it is presumed that this off-site supervision technique of central bank would make it a more effective tool in rating banks. The present system requires that a bank’s condition and performance be regularly appraised according to predetermined stress testing on asset and liability and foreign exchange exposures, procedures, rules and criteria and on the basis of the results obtained through risk-based audits under core risk management guidelines. A single CAMEL rating for each bank is the result of both off-site monitoring, which uses monthly financial statement information, and an on-site examination, from which bank supervisors gather further “private information” not reflected in the financial reports. These examinations result in the development of "credit points" ranging from 0 to 100. As noted above, the six key performance dimensions – capital adequacy, asset quality, management, earnings, liquidity and sensitivity to market risk – are to be evaluated on a scale of 1 to 5 in ascending order. Following is a description of the graduations of rating:

Rating 1 indicates strong performance: BEST rating.
Rating 2 reflects satisfactory performance.
Rating 3 represents performance that is flawed to some degree.
Rating 4 refers to marginal performance and is significantly below average and
Rating 5 is considered unsatisfactory: WORST rating.

CAMEL Numerical Rating: Rating Description

1. **STRONG**: It is the highest rating and is indicative of performance that is significantly higher than average.
2. **SATISFACTORY**: It reflects performance that is average or above; it includes performance that adequately provides for the safe and sound operation of the banks.
3. **FAIR**: Represent performance that is flawed to some degree. It is neither satisfactory nor unsatisfactory but is characterised by performance of below average quality.
4. **MARGINAL**: Performance is significantly at below average; if not changed, such performance might evolve into weaknesses or conditions that could threaten the viability of the bank.
5. **UNSATISFACTORY**: Is the lowest rating and indicative of performance that is critically deficient and in need of immediate remedial attention. Such performance by itself, or in combination with other weakness, threatens the viability of the institution.

CAMELS Composite Ratings

Each bank is accorded a composite rating that is predicated upon the evaluation of the specific performance dimensions. The composite rating is also based upon a scale of 1 through 5 in ascending order of supervisory concern. The CAMELS rating components,
usually taken into consideration by the monetary authorities have the following weights: capital adequacy 20%, asset quality 20%, management 25%, earnings 15%, liquidity 10% and sensitivity to market risk 10%. The weightings are subjective and based on regulators’ past experience. The numerical ratings assigned to the criteria are:

**Composite CAMELS and their Interpretation**

<table>
<thead>
<tr>
<th>Rating Scale</th>
<th>Rating Range</th>
<th>Rating Analysis</th>
<th>Rating Analysis interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1.0-1.4</td>
<td>Strong</td>
<td>Sound in every respect, no supervisory responses required.</td>
</tr>
<tr>
<td>2</td>
<td>1.6-2.4</td>
<td>Satisfactory</td>
<td>Fundamentally sound with modest correctable weakness, supervisory response limited.</td>
</tr>
<tr>
<td>3</td>
<td>2.6-3.4</td>
<td>Fair (watch category)</td>
<td>Combination of weaknesses if not redirected will become severe. Watch category. Requires more than normal supervision.</td>
</tr>
<tr>
<td>4</td>
<td>3.6-4.4</td>
<td>Marginal (some risk of failure)</td>
<td>Immoderate weakness unless properly addressed could impair future viability of the bank. Needs close supervision.</td>
</tr>
<tr>
<td>5</td>
<td>4.6-5.0</td>
<td>Unsatisfactory (high degree of failure evident)</td>
<td>High risk of failure in the near term. Under constant supervision/cease and desist order.</td>
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**Analysis on “CAMELS” in Bangladesh Perspective**

**Capital Adequacy**

In the standard CAMELS framework, capital adequacy focuses on the total risk weighted capital intended to protect the depositors from the potential shocks of losses that a bank might incur. It is assessed according to: the volume of risk assets, the volume of marginal and inferior assets, bank growth experience, plans, and prospects; and the strength of management in relation to all the above factors (Sundarajan and Errico, 2002). Thereby it helps absorbing major financial risks (like credit risk, foreign exchange risk, interest rate risk and risk involved in off-balance sheet operations). Basel Committee on Banking Supervision also stipulates the CAMELS components. As regards the capital adequacy, they grouped the factors like a) size of the bank, b) volume of inferior quality assets, c) bank’s growth experience, plans and prospects, d) quality of capital, e) retained earnings, f) access to capital markets, and g) non-ledger assets and sound values not shown on books (real property at nominal values, charge-offs with firm recovery values, tax adjustments) (Sahajwala and Bergh, 2000). Banks in Bangladesh have to maintain a minimum capital adequacy ratio (CAR) of not less than 9.0 percent of their risk weighted assets (RWA, with at least 4.5 percent in core capital) or Taka 1 billion, whichever is higher.

**Asset Quality**

In the standard CAMELS framework, asset quality is assessed according to: the level, distribution, and severity of classified assets, the level and composition of nonaccrual and reduced rate assets, the adequacy of valuation reserves; and the demonstrated ability to administer and collect problem credits (Sundarajan and Errico, 2002). As regards the asset quality, Basel Committee on Banking Supervision highlights the factors a) volume of transactions, b) special mention loans—ratios and trends, c) level, trend and comparison of
non-accrual and renegotiated loans, d) volume of concentrations, and e) volume and character of insider transactions (Sahajwala and Bergh, 2000). In Bangladesh, the asset composition of all banks shows a high proportion of loans and advances in 2004-05 (60.7 percent) in total assets. A high proportion of loans and advances indicate vulnerability of assets to credit risk, especially since the portion of non-performing assets is significant. A large non-performing loan portfolio has been the major predicament of banks, particularly of the state-owned banks. The most important indicator used to identify problems with asset quality in loan portfolio is the percentage of gross and net non-performing loans to total assets and total advances.

**Management Soundness**

Sound management is a key pre-requisite for the strength, profitability and growth of any financial institution. Since indicators of management quality are primarily specific to individual institution, these can not be easily aggregated across the sector. In addition, it is difficult to draw any conclusion regarding management soundness on the basis of monetary indicators, as characteristics of good management are generally qualitative in nature. The capability of the Board of Directors and internal management personnel to identify, measure, monitor and control different risks associated in the activities and to ensure a safe, sound and efficient operation in compliance with all applicable laws, regulations and especially the core risk management guidelines introduced by the central bank might be a measuring rod of that. In the standard CAMELS framework, management is evaluated according to: technical competence, leadership, and administrative ability; compliance with banking regulations and statutes; ability to plan and respond to changing circumstances; adequacy of and compliance with internal policies; tendencies toward self-dealing; and demonstrated willingness to serve the legitimate needs of the community (Sundarajan and Errico, 2002). As regards the management factors, Basel Committee on Banking Supervision highlights the aspects like a) technical competence, leadership etc. of middle and senior management, b) compliance with banking laws and regulations, c) adequacy and compliance with internal policies, d) tendencies towards self-dealing, e) ability to plan and respond to changing circumstances, f) demonstrated willingness to serve the legitimate needs of the community, g) adequacy of directors, and h) existence and adequacy of qualified staff and programmes (Sahajwala and Bergh, 2000). However, ratios such as total expenditure to total income, operating expenses to total expenses, earnings and operating expenses per employee, and interest rate/mark-up spread are generally used to gauge management soundness. In particular, a high and increasing expenditure to income ratio indicates the operating inefficiency that could be due to weaknesses in management.

**Earnings and Profitability**

Strong earnings and profitability profile of a bank reflect good health and banks enhance their ability to support present and future operations. More specifically, this determines the capacity to absorb losses by building an adequate capital base, finance its expansion and pay adequate dividends to its shareholders. In the standard CAMELS framework, earnings are assessed according to: the ability to cover losses and provide for adequate capital; earnings trend; peer group comparisons; and quality and composition of net income (Sundarajan and Errico, 2002). As regards the earnings and profitability factors, Basel Committee on Banking Supervision highlights the aspects like a) return on assets compared to peer group averages and the bank’s own trends, b) material components and income and expenses—compared to peers and the bank’s own trends, c) adequacy of provisions for loan losses, d)
quality of earnings, and e) dividend payout ratio in relation to the adequacy of bank capital (Sahajwala and Bergh, 2000). Although there are various measures of earning and profitability, the best and widely used indicator is returns on assets (ROA), which is supplemented by return on equity (ROE) and net interest margin (NIM).

Liquidity

In the standard CAMELS framework, liquidity is assessed according to: volatility of deposits; reliance on interest-sensitive funds; technical competence relative to structure of liabilities; availability of assets readily convertible into cash; and access to inter-bank markets or other sources of cash, including lender-of-last-resort (LOLR) facilities at the central bank (Sundarajan and Errico, 2002). As regards the liquidity factors, Basel Committee on Banking Supervision highlights the aspects like a) adequacy of liquidity sources compared to present and future needs, b) availability of assets readily convertible to cash without undue loss, c) access to money markets, d) level of diversification of funding sources: on- and off-balance sheet, e) degree of reliance on short-term volatile sources of funds, f) trend and stability of deposits, g) ability to securitise and sell certain pools of assets, and h) management competence to identify, measure, monitor and control liquidity position (Sahajwala and Bergh, 2000). At present, commercial banks deposits are subject to a statutory liquidity requirement (SLR) of 18 percent inclusive of 5 percent cash reserve requirement (CRR). The CRR is to be kept with the Bangladesh Bank and the remainder as qualifying secured assets under the SLR, either in cash or in government securities. Till date, SLR for the banks operating under the Islamic Shariah is 10 percent and the specialized banks are exempted from maintaining the SLR. Liquidity indicators measured as percentage of demand and time liabilities (excluding inter-bank items) of the banks indicate whether the banks have excess or shortfall in maintenance of liquidity requirements. The basic indicators of sound liquidity position are: deposits are readily available to meet the bank’s liquidity needs; assets are easily convertible into cash; compliance with SLR; and easy access to money markets etc.

Sensitivity to Market Risk

The sensitivity to market risk is assessed by the degree to which changes in market prices, notably interest rates, exchange rates, commodity prices, and equity prices adversely affect a bank’s earnings and capital. The following factors may be taken into consideration to measure the sensitivity to market risk: The sensitivity of the bank’s earnings or the economic value of its capital base or net equity value due to adverse effect in the interest rates of the market. The amount of market risk arising from trading and foreign operations. As regards the sensitivity to market risk, Basel Committee on Banking Supervision highlights the aspects like a) sensitivity of the financial institution’s net earnings or the economic value of its capital to changes in interest rates under various scenarios and stress environments, b) volume, composition and volatility of any foreign exchange or other trading positions taken by the financial institution, c) actual or potential volatility of earnings or capital because of any changes in market valuation of trading portfolios or financial instruments, and d) ability of management to identify, measure, monitor and control interest rate risk as well as price and foreign exchange risk where applicable and material to an institution (Sahajwala and Bergh, 2000).
Section IV

CAMEL Rating System in the Context of Islamic Banking

It seems from the foregoing discussion that CAMEL Rating System can not qualify as an adequate and appropriate system in interpreting the accurate performance of the Islamic banking system since there is no single component in it to measure the Shariah compatibility of the functions of a bank in an Islamic framework. Therefore, from the secular point of view, if judged through the CAMEL rating system, the health of an Islamic bank would be visualized but its Shariah compatibility would not be determined. Moreover, the present framework of CAMEL rating may not include all aspects of Islamic banking if it is to be as per the explanation and spirit of Shariah. The following analysis sheds some of these types of inconsistencies.

Islamic financial intermediation is basically different from the prevailing practices of the conventional financial institutions. The inherent theoretical models and their parameters are quite different. El-Hawary, Grais and Iqbal (2004) mentioned four aspects of differences. The first difference appears in the significant deviation of the structure of assets. On the asset side of the balance sheet, as expected, a clear preference for asset-backed securities (based on trade finance) is evident. The second difference is the choice and application of accounting policies that affect the allocation of income between shareholders and accountholders or between different classes of account holders. In its essence, Islamic finance would be consistent with clear barriers in the deployment of assets between those funded by demand deposits, general investment accounts, special investment accounts and equity. The third difference between practice and principles, related somewhat to the preceding issues, is the status of investment accounts and the fourth difference stems from the governance rights granted to investment account holders.

CAMELS rating system has been viewed in light of the principles and practices of Islamic banking. Though all features of CAMELS are not repugnant or contradictory to the Shariah stance, there should be some separate provisions to make it conducive and proper to analyze the whole operation of the Islamic banks. Definitely, it should also assess the Shariah implementation status of the Islamic banks as well.

Capital Adequacy Requirements in the Context of Islamic Banking

One of the most important concerns of regulators and supervisors of Islamic banks is how to apply internationally recognized standards to these institutions while, simultaneously, enabling them to operate in conformity with the Shariah. In view of the special nature of investment deposits and the risk faced by the assets of Islamic banks, application of the international capital adequacy standards to Islamic banks has become a challenging task (Chapra and Khan (2000). This is so important that the credibility and growth of the Islamic banking system depend on the maintenance of this criterion. Maintaining capital adequacy by the Islamic banks is very easy and simple since it does not contain hybrid instruments escalated by financial innovations, subordinated debts and other new forms of funds that contain illegitimate elements. Assets generated under the PLS modes of transaction are far riskier than the one represented by the non-PLS transactions. Hence, the ratio of riskier assets to total assets will typically be higher in Islamic banking system if those are created through
PLS transactions. But if the assets are created under the debt-based instruments like Murabaha and Bai-Muajjal or Ijara, then that ratio would be minimum due to collateralized financing. In practice, what we see, a small fraction of Islamic banks’ total assets is composed of on the basis of PLS modes. In Bangladesh, it is observed that asset holdings under PLS modes are less than 2 percentage points of total investments (Sarker, 2005). Aggregate data compiled by the International Association of Islamic Banks (IAIB) also indicate a better picture that Musharaka and Mudaraba assets account for some 25 percent of Islamic bank’ total assets, the majority of which are made up of non-PLS modes, notably mark-up transactions (IAIB, 1997). Therefore, an appropriate assessment of the capital adequacy for Islamic banks should be based not only on a thorough evaluation of the degree of risk of each bank’s portfolio, but also on the assessment of the mix of PLS and non-PLS assets.

**Assets Quality in the Context of Islamic Banking**

Being Mudarib in the Islamic banking system, banks are free to create assets as per their own judgment and on the prevailing investment environment. Therefore, it is presumed that banks would create such types of assets which ensure safe and higher return to the banks. Islamic business contracts can be classified into three broad categories:

2. **Business contracts on the basis of Indirect Financial Accommodation** or Uqud al-Muawadhat: Mark-up based Principle, Lease based Principle, and Advance Purchase Principle.
3. **Business contracts on the basis of Services**: Service based principles, Direct Investment, Finance on Development Charge, Rent-sharing on the basis of construction/purchase of houses/flats, godowns, sheds etc. on co-ownership basis, Investment Auctioning, Syndication and Consortium Financing.

**Direct Financial Accommodation**

**Profit Sharing Principle**

Mudaraba (short term): Profit sharing principle for Islamic business contracts is based on the Mudaraba principle in which the owner of the capital provides funds to the capital-user or entrepreneur for some business or productive activity on the condition that profits generated will be shared between them. The loss, if any, incurred in the normal process or course of business and not due to neglect or misconduct on the part of the entrepreneur is borne by the capital-owner. The entrepreneur does not invest anything in the business except his human capital and does not claim any wage for conducting the business. The ratio in which the profits are distributed is ex-ante. In the event of loss, the capital provider loses his capital to the extent of his loss, and the entrepreneur loses all his labor. The willingness to bear the loss justifies a share in the profit for the capital-owner. The profit sharing ratio mutually agreed upon between finance-provider and finance-user is determined by the market forces (Siddiqui, 1983). The finance-user guarantees to return funds only on two conditions: (a) if he is negligent in the use of the funds or if he breaches the conditions of Mudaraba (Iqbal and Mirakhor, 1987). Regarding loss in the Mudaraba form of business contract, Ibn Qudama opined that…’if, however, the loss is a result of a misuse or a violation of the conditions of
the contract on the part of the working partner, then he alone will be liable to cover it’ (Ibn Qudama, A.H. 1367).

**Conditions for the Capital in Mudaraba**

The same conditions stipulated for Musharaka apply also for the Mudaraba contract. Capital should be liquid money and cannot be in the form of other assets. The capital should also be designated by quantity and must be well-defined by type and quality. It cannot be unforeseen or in the form of debt, which is due on the working partner to the owner of capital. The capital should also be delivered to the working partner in full to enable him to trade or engage in production freely with it. This condition is imposed by the majority of schools (Shafi, Maliki and Hanafi). However the Hanbali School differs in its opinion and approves even a partial delivery of capital to the working partner.

**Profit and Loss Sharing Principle**

**Musharaka (long-term)**

Musharaka (company or partnership contract) is a form of business organization where two or more persons contribute to the financing as well as the management of the business, in equal or unequal proportions. Profits may be divided in any (but not necessarily be equal) ratio agreed upon between the partners because the two parties may share the work of managing the business or project in any amount mutually agreed upon. Both parties are allowed to charge a fee or wage for any management or other labor put into the project (Khan, 1997). All providers of capital are entitled to participate in management but are not necessarily required to do so. The losses, however, will be shared in the exact proportion of the capital invested by each party. It is to be noted, however, that although all Shariah scholars were on the general consensus that the Musharaka as a principle is legitimate from the point of view of Shariah, they differ in their opinions with regard to the legitimacy of the different types of Musharaka.

**Output Sharing Principle**

In this type of contracts, output or produce is shared between the parties in contract. Output sharing contracts are mainly of two types namely, Muzara’a and Musaqat. Muzara’a is a contract between an owner of a piece of agricultural land and a farmer for farming it in return for a percentage of its crop. In the case of bank, the bank provides farmers land (which is possessed by the bank itself) for cultivation on crop sharing. Musaqat is one of the variants of Muzara’a. In this case, the bank provides farmers orchards, gardens or trees (which are possessed by bank) for harvesting on crop sharing.

**Indirect Financial Accommodation**

**1. Mark-up based Principle or Murabaha**

This is a cost plus contract in which one party wishing to purchase equipment or goods and commodities approaches the other party to purchase those items and sell to him at cost plus a declared profit. By this method of contract, a party needing finance to purchase business machinery or equipment gets the necessary finance on deferred payment basis. Farmers may also get various inputs and agricultural implements from the bank on a deferred payment basis.
2. Lease-based Principle or Ijara

An individual short of funds may approach another with a surplus (the other party or financier) to fund the purchase of a productive asset and renting that to him on rent-payment basis. If the title of the asset is fully transferred to the user at the end of the period, i.e., lessee becomes the owner of the asset, then it will be called Hire Purchase or Ijara wa Iqtana.

3. Advance Purchase Principle

Bai-Salam: The term Bai-Salam means advance payment or forward buying. The salam contract is the sale of a good to be delivered to the purchaser at a future date, which is set at the time of the contract. This is a trade transaction contract and not a loan contract. This type of financing is most often used when a manufacturer needs capital to manufacture a final product for the buyer. In return for paying in advance, the buyer receives a more favourable price (i.e., splits the profit margin with the manufacturer). Bai-Istisna’a (Progressive Financing): A contract of acquisition of goods by specification or order where the price is paid progressively in accordance with the progress of a job. An example would be the purchase of a house to be constructed, where payments are made to the developer or builder according to the stage of work completed. Istisna’a contract opens the way to a number of new possibilities of business contracts, including some forms of futures contract trading of processed commodities, as it permits deferring of both ends of the contract: delivery as well as payment.

Business Contracts on the basis of Services

Hawalah

Hawalah means transferring a debt from one debtor to another. That means the 1st debtor is released from debt when Hawalah takes place. The main laws on Hawalah are as follows:

- A Hawalah takes place between the debtor and the person to whom the Hawalah is destined. It becomes a firm contract on the kabuliat of the creditor.
- A Hawalah contract to be valid, it is necessary that the transferee is informed of the transfer.
- The transferee has, after payment, a right to claim the amount so paid from the transferor. In such a case, the transferor’s claim from the transferee, if any, has to be adjusted towards the claim.
- The transferee has no claim on the debtor before he has paid the debt.
- The transferee is released from his liability if any of four situations occur:
  - by payment of the debt
  - by re-transferring the debt to another transferee if the creditor accepts
  - by confinement of the creditor
  - if the creditor dies and the person who accepts the transfer is his heir.

When Hawalah is used to meet the legitimate consumer’s need for remittance services, it is called White Hawalah, and when the same is used to serve criminal element’s purposes then it is called Black Hawalah, which indiscriminately exploits the opportunities provided by Hawalah.
**Wakalah**

_Agencyship:_ Wakalah means entrusting a person by another person to act on his behalf as his wakil or representative. It is a very common practice to appoint an agent to facilitate trade operations. Agency is one of the most important elements of Islamic Partnership. As per modern interpretation, relationship between the partners is described as a principal-agent relationship.

**Jo’alah**

Jo’alah is a contract on the basis of which one party (the jaa’el bank of employer) undertakes to pay a specified amount of money (jo’al) to the other party (the amel or contractor) for rendering a specific service in accordance with the terms and conditions of the contract. The concept of jo’alah is similar to that of Istisna’a. Whereas in Istisna’a the seller provides a physical commodity, in jo’alah the seller provides a service rather than a physical commodity. All other aspects of jo’alah are the same as Istisna’a. In jo’alah deal, a seller will offer a definite service to be provided whereas the buyers will pay a definite price for this service. In many instances, it may be difficult to distinguish whether it is an Istisna’a deal or a jo’alah deal. For example, asking a tailor to make a particular dress can be under an Istisna’a contract as well as jo’alah contract. When the client pays the tailor an advance only to cover the purchase of raw material, while the payment for the service and skill of the tailor is postponed and is to be made after the good is delivered, it will be a jo’alah contract. If the client does not distinguish between material and service/skill while making the payments, this will be an Istisna’a contract.

Jo’alah contract is essentially a contract for the beneficial use of a skill or professional service. In this contract, two elements have to be precisely defined: (a) the amount of reward offered, and (b) the nature of service to be accomplished. _L/C Under the Contract of Wakalah:_ The bank establishes the L/C and pays the proceeds to negotiating bank utilizing the customer’s deposit, and subsequently releases the documents to the customers. The bank charges the customer Service fees and commission for its services under the principle of ajar (fee).

**Kafalah**

Kifalah means an obligation, which a person wants to assume in addition to his existing obligation in respect of a demand for something. This may relate to a person, finance or an act. When kafalah relates to a person, it involves production of a person for whom kifalah (bail) was given. But when it relates to finance, it means an obligation to be met in the event of the principal debtor’s inability to honor his obligation. Under the contract of kafalah, bank may provide the facility of a letter of guarantee or L/G to its customers for certain purposes. The L/G may be provided in respect of the performance of a task, the settlement of a loan, etc.

With regard to the level, distribution and severity of classified assets, the regulator should bear in mind that in an Islamic environment assets are created on such terms and conditions which may not be alike the interest-bearing contracts. Assets may be created broadly on three types of contracts mentioned above. Assets represented by Mudaraba and Musharaka transactions cannot be classified until the underlying contracts expire. If investment projects under the above two PLS modes failed to deliver the result of investment, i.e., incur a loss or
remain at break-even point, then only it can be termed as default as per BASEL II. But this would be effected after expiration of the contracts. In the middle course it should be treated as reduced rate assets. It is all the same that an Islamic bank should make sufficient provisions for investment-loss to provide strong incentives to limit the moral hazard problem. Therefore, adequacy of investment loss offsetting reserves remains a key factor in ensuring banking robustness and soundness in an Islamic environment, too. With regard to ability to administer and collect problem credits, an Islamic bank should take stringent measures for recovery of bad debts, but sharing those in case of defaulted PLS transactions.

Management Soundness in the Context of Islamic Banking

The evaluation criteria set in the standard CAMELS framework for management soundness are applicable in case of Islamic banks. Of course, the responsibility of management in Islamic banking system is a bit high because alongwith the traditional competence, Islamic Shariah knowledge and commitment to observe those in the day-to-day operations is a must for the management. Here, development of Islamic competency model on Islamic banking practices and procedures should get utmost importance. Without this model, regulator or supervisor may not be able to assess the management soundness of the Islamic banks. Moreover, capacity and functions of the Shariah Supervisory Boards should also be reviewed. Given the complexity of many Islamic banks’ operations, involving the monitoring of investment projects, managing commodity inventories at times, legal uncertainties relating to Shariah litigation systems, and similar problems, establishing adequate internal systems and controls for managing risks and validation of transactions play a particularly crucial role in the effective management and containment of operational risks (Sundarajan and Errico, 2002).

Earnings and Profitability in the Context of Islamic Banking

The criteria set for earnings and profitability in the standard CAMELS rating framework are generally applicable to the Islamic banks as well. According to Sundararajan and Errico, nonetheless, in an Islamic bank, economic losses would first result in a depreciation of the value of the depositor’s wealth and then affect the bank’s equity position in the event that it had also used its own resources to finance the loss making investment project (e.g., through a Musharaka arrangement). Also, such risks to deposits, if they materialize, might result in reputational damage and loss of depositor base, leading to liquidity and, possibly, solvency problems (Sundarajan and Errico, 2002). As regards the earnings of the Islamic banks, it may be mentioned that in countries like Bangladesh, Islamic banks do not raise Mudaraba deposits for specific investment projects; rather they mobilize deposits for general pool. In making investments the whole amount of deposits are channeled in the same way, so that if some of the investment projects incurred any loss, it does not affect the entire profitability of the Islamic banks. That’s why the Islamic banks seldom experience any loss in their operations. Moreover, it is observed that during the 24 years of Islamic banking in Bangladesh, one or two banks had experienced loss in their operation, which was replenished from the bank owners’ equity fund. However, in any way, profit earning should not be the only goal of the Islamic banks; rather they should earn profit and use those for maximizing Shariah goals in their whole gamut of activities.

Maintenance of Liquidity in the Context of Islamic Banking

Liquidity is important to maintain regular cash flow and to make new investments. The monetary authority also imposes certain percentage on the demand and time liabilities of the
banks to maintain as statutory liquidity requirement. Sound liquidity management is crucial for the Islamic banks if they want to avoid being engulfed in serious liquidity problems. The liquidity problem faced by the Islamic banks in Bangladesh seems to be low at present because of the excess liquidity syndrome that these banks have been facing as a result of the non-availability of adequate Shariah-compatible financial instruments, investment opportunities and inter-bank Islamic money market. As regards the excess liquidity problem of the Islamic banks in Bangladesh, a recent paper observes that “…almost all of the Islamic banks have been facing excess liquidity problems while only one bank, the Oriental Bank Limited, is maintaining liquidity position below the required level. However, the excess liquidity of the Islamic banks and Islamic banking branches of conventional banks (10 conventional banks have opened 22 Islamic banking branches alongside their traditional ones) as of September 2005 was to the tune of Taka 7742.40 million (18.50% of private banks and 7.90% of all banks), which originated mainly due to the non-responsiveness of the good borrowers for credit demand and the absence of adequate interest-free financial instruments in the country” (Sarker, 2005).

Another dimension of liquidity for the Islamic banks is that compared to their conventional counterpart, they cannot avail of the central bank’s lender-of-last-resort (LOLR) facilities, such as demand loan or overdraft facilities operated by the central bank or through access to inter-bank and money markets to avail of the systemic facilities provided through REPO and REVERSE-REPO operations. However, efforts are underway to develop modalities of Islamic money market in Bangladesh.

**Sensitivity to Market Risk in the Context of Islamic Banking**

Greater market discipline is one of the strong aspects of the sound Islamic banking system. As regards risks, Tariqullah Khan observes that, ‘the Islamic banking system tries to realize this discipline by making the banks participate in the risks of the counter-parties, and the depositors, directly or indirectly, in the risks of banking business. Such a sharing of risks should help motivate depositors to choose carefully the bank in which they place their deposits and to demand greater transparency in the affairs of the bank they choose. It should also induce banks to undertake an in-depth analysis of counter-parties as well as the projects proposed for financing, to build closer long-term relations with their counter-parties, and to undertake more effective assessment and management of risks (Khan, 1997).

Market risk is mainly associated with the interest rate risks, exchange rate risks, and commodity as well as equity price risks. Like conventional banks, Islamic banks are also exposed to these risks. Khan observes that interest rate risk is one of the most important market risks faced by conventional financial institutions. Since Islamic banks do not deal in interest-based instruments, it has sometimes been argued that these institutions do not face this risk. However, the fact is that Islamic banks are also indirectly confronted with this risk through the mark-up price of deferred sale and lease-based transactions. Since Islamic banks use LIBOR as benchmark in their financing operations, it is natural for the assets of these banks to be exposed to the risk of changes in the LIBOR rate. A rise in LIBOR will automatically lead to a rise in the mark-up and, in turn, lead to the payment of higher profits to future depositors compared with those received by the banks from the users of long term funds. The nature of investment deposits on the liabilities side of Islamic banks adds an additional dimension to this risk. Profit rates to be paid to Mudaraba depositors by the Islamic bank will have to respond to changes in the market rate of mark-up. However, profit rates earned on assets can not be raised because the price has been fixed on the basis of the mark-
up rates of the previous period. In other words, any increase in new earnings has to be shared with depositors, but it cannot be readjusted on the asset side by re-pricing the receivables at higher rates. The inevitable implication is that the net Murabaha income of the Islamic bank is exposed to the mark-up price risk.

Conventional banks try to manage interest rate, exchange rate, and commodity and equity price risks by using futures, forwards, options and swap contracts. However, no agreement has yet taken place among the *fuqaha* on the permissibility of these instruments. It has, therefore, not been possible to design Shariah compatible substitutes for the conventional risk management instruments (Khan, 1997).

Islamic banks are directly exposed to commodity price risk because, unlike conventional banks, they typically carry inventory items. They are also directly exposed—perhaps to a greater extent than many conventional banks—to equity price risk as the very nature of Islamic banking is equity financing through the PLS modes. In principle, Islamic banks are exposed to exchange rate risk in the same way as conventional banks are (Sundarajan and Errico, 2002). However, it is necessary and extremely important to cultivate an effective risk management culture for the competitiveness and survival of the Islamic banks.

**Probable Rating Areas of Islamic Banks : Proposed “S” for Shariah Rating**

Identification of the probable rating areas for understanding and authentication of implementation status of Shariah rules, regulations and standards in the day-to-day operations of the Islamic banks should be the prime area of concern of the regulators and supervisors of the Islamic banks. Unfortunately, this has not yet been developed by the regulators and supervisors. In Bangladesh context, nothing has been done to develop a *Shariah Matrix* or inspection areas through which one can understand what Shariah instructions an Islamic bank is following and what are the areas of violations committed by this bank. The present evaluation technique CAMELS is not enough to evaluate an Islamic bank as to how far it is Islamic in its all-out operations. Keeping this view in mind, it is urgently felt that a Shariah Matrix should be developed covering both assets and liabilities sides of the Islamic banks and, therefore, an attempt is made in the paper, as a first step, to present a Shariah Matrix on the assets side of the Islamic banks.

In this paper, as a first step, a Box is enclosed for evaluation of the liabilities side of the Islamic banks (Box-1). In the box, all aspects of deposits and its allied Shariah issues starting from the Mudaraba profit sharing ratio up to the profit distribution methods have been discussed. About sixty points of inspection are identified that may be considered as a benchmark in inspecting Islamic banks activities in line with the basic Shariah principles.

**Section V**

**Concluding Remarks and Recommendations**

Promotion, regulation and supervision of Islamic banks in accordance with the prevailing guidelines, laws and regulations seem inadequate since these are basically based on the conventional wisdom and practices. These regulatory and supervisory systems, undoubtedly helps to control their all-out operations with a view to reducing the possibility of their failure, promoting the public’s confidence in the banking system and ensuring its stability. But, in the case of Islamic banks, Shariah implementation in the activities of the banks must also be
ensured by the regulators and supervisors. Lack of enforcement and supervision in line with Islamic Shariah may lead the Islamic banks into systemic Shariah distress. The growing integration of financial markets in the wake of financial globalization, especially with their sophisticated markets and their innovative instruments necessitates the development of new Islamic financial architecture to cope with the challenges posed by them.

Inadequacies of existing rules, regulations and guidelines with respect to Islamic banks hinder the supervisory staff and regulators to acquire a proper understanding of this new area of risk assessment. They have been applying core concepts of conventional supervision without any differentiation to Islamic banks as well. This way of similar supervision for conventional and Islamic banks can not be justified because it does not take into consideration the peculiar characteristics of the Islamic banks. However, to ensure soundness of the financial and operational conditions of the Islamic banks, central banks should develop specific rules and regulations. It is to be mentioned here that, ‘while financial soundness may be enough for retaining the confidence of clients of a conventional bank, in the case of an Islamic bank, Shariah compliance is equally important. An Islamic bank could fail as much due to non-compliance with the Shariah as for financial imprudence. Therefore it should be ensured that all activities of an Islamic bank comply with Shariah principles’ (Al-Jarhi and Iqbal, 2001).

**Recommendations**

1. Central banks or regulatory and supervisory authorities should develop appropriate legal framework for controlling, guiding and supervising the Islamic banking system. It is not sufficient to insert some words or sentences on Islamic banking methodology in the Bank companies Act.
2. Basel II also requires Islamic banks to meet legal and regulatory standards as specified in Basel II. Some opine that Islamic banks should not be subject to all regulatory measures specified by Basel II, but they should be subject to regulations similar to corporations due to the participation of the investment depositors in the risk of Islamic banks (Hassan and Chowdhury, 2004). There are several reasons for Islamic banks to comply with the Basel II regulations. Islamic banks are at the initial stage of growth and their sizes are normally small to medium. In order for them to gain international recognition, Basel II compliance becomes a cornerstone. The standards developed by AAOIFI and IFSB should be added to the Basel II. The regulatory framework prescribed by the Basel Committee of Banking Supervision will then bring standardization for the Islamic banks.
3. To advise Bangladesh Bank on Shariah matters and to formulate and implement uniform Shariah principles/rules/regulation for all the Islamic Banks/ Islamic branches of conventional banks/ Islamic subsidiary companies operating in the country, it is necessary to constitute a central Shariah Supervisory Council at Bangladesh Bank. The broad functions of the Central Shariah Supervisory Council may be grouped as:
   a) To study the rulings of Islamic Shariah previously issued by the Shariah councils of different Islamic banks and financial institutions in an attempt to make decisions identical;
   b) To supervise the activities of the Islamic banks and financial institutions to ensure conformity with the rulings of the Islamic Shariah. In addition, it has to draw the attention of the concerned parties and Board of Directors of Bangladesh Bank to any potential violation of these activities;
   c) To issue legal religious opinions on banking and financial questions;
d) To study matters related to financial and banking operations in response to requests for advice from the Islamic banks and financial institutions;

e) To conduct Shariah audit and inspection of specific branches/offices of the Islamic banks and financial institutions with the help of the officers of DBI (Department of Banking Inspection) and submit inspection report with recommendations to the Board of Directors thereby ensuring Shariah compliance by the Islamic banks and financial institutions;

f) To plan, design, conduct and manage different training courses, seminars, Symposia on Shariah and financial matters with the help of the Research Department and Bangladesh Bank Training Academy;

g) To assess the present status of Shariah compliance by the Islamic banks and financial institutions, identify problems and suggest remedies;

h) To collect, process and preserve data on Islamic economics, banking and finance with the help of the Statistics Department;

i) To collect information/published data and books on Islamic banking with the help of Bank's Library.

4. A separate 'Islamic Banking Department' may be established at Bangladesh Bank to conduct comprehensive research in various fields of Islamic Economics, finance and banking, to conduct field surveys on different Islamic Banking and finance issues from time to time, collect data from the field level/concerned institutions and prepare papers/reports on the basis of data/information collected and surveys conducted, ‘to inspect a sample of documents relating to operations, such as contracts and accounting records to ensure compliance of the operations with the approved models and juridical rules, and to issue directives to officials of Islamic banks and Islamic non-bank financial institutions, in the form of circulars, circular letters, and bulletins, drawing their attention to common mistakes from a Shariah point of view and ways of avoiding them’ (Al-Jarhi and Iqbal, 2001). The Shariah-based audit may also be done through this department. This department should have a number of ‘ulama’ in the field of Islamic jurisprudence, who are well versed in financial, legal and accounting issues.

5. The most acute problem is a general scarcity of qualified people equally conversant with the present inspection techniques and Shariah aspects of Islamic banking. This constraint in turn is a contributing factor to other weaknesses such as reluctance to adopt proper guidelines and also to conduct regulatory and supervisory functions in line with the Shariah prescriptions. Therefore, capacity building programs for the regulators and supervisors of the central bank should be undertaken. Different training programs for the officers of supervision departments is often conducted solely on-the-job in a less than systematic manner so that skills are acquired in a hit-or-miss fashion. Inadequacies in training and development affect the supervisor’s ability to build a skilled, knowledgeable, and competent staff. In addition, off-the-job training should be conducted in a systematic fashion. To have the knowledge on Islamic banking regulation and supervision, central banks can get help of the Islamic Research and Training Institute of Islamic Development Bank as they have already excelled in research in Islamic economics, banking and finance and developed different training materials of effective banking supervision in line with Shariah with the combination of intellectual resources of experts in fiqh al-muamalat and financial sectors as well.

6. It is evident that in most of the industrial countries of the west and in South Korea, there are separate institutions/supervisory agencies that jointly supervise the activities of banks and financial institutions through corporate leadership built upon the principles of delegation of power and co-ordination. They work simultaneously but there is clear delineation of the responsibilities. In the United States for example, there are as many as six separate agencies
that supervise and control banks without conflicts. In Germany, the Federal Supervision Office (FSO) is a separate legal entity enjoying authority though it has close functional relationship with the Deutsche Bundes Bank, the central bank of the country. In Bangladesh, the central bank, Bangladesh Bank, is the single organization that shoulders the entire responsibilities of bank and non-bank financial institutions’ supervision irrespective of conventional and Islamic. In the context of heavy responsibilities, Bangladesh Bank may consider giving the supervisory responsibilities for Islamic banks and Islamic financial institutions upon a separate private supervisory institution.

Bibliography

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<td>Are the principles of Al-Wadiah, Al-Mudaraba and Al-Amanah followed by the Bank properly in deposit management?</td>
<td>3</td>
<td>Yes</td>
<td>4</td>
</tr>
<tr>
<td>2</td>
<td>Are the above principles duly disclosed to the Mudaraba depositors?</td>
<td>4</td>
<td>Yes</td>
<td>5</td>
</tr>
<tr>
<td>3</td>
<td>Has the Prime Profit-Sharing Ratio (PPSR) on the basis of which profit to be distributed/shared between the depositors (Shahiib-al-Mal) and the Bank (Mudarib) been mentioned in the A/C opening form (AOF)?</td>
<td>5</td>
<td>Yes</td>
<td>6</td>
</tr>
<tr>
<td>4</td>
<td>Are the AOF with attested photograph of account holders in order? Are all accounts properly introduced and other formalities complied with?</td>
<td>6</td>
<td>Yes</td>
<td>7</td>
</tr>
<tr>
<td>5</td>
<td>Has the weightage on the basis of which profit is to be distributed among the different categories of depositors been mentioned in the A/C opening form?</td>
<td>7</td>
<td>Yes</td>
<td>8</td>
</tr>
<tr>
<td>6</td>
<td>Whether provisional profit rates are declared taking the last year's final profit paid into account and provision made to adjust those after finalization of the yearly account.</td>
<td>8</td>
<td>Yes</td>
<td>9</td>
</tr>
<tr>
<td>7</td>
<td>Has any change made in the PPSR or weightages during the period of contract been agreed with the depositors?</td>
<td>9</td>
<td>Yes</td>
<td>10</td>
</tr>
<tr>
<td>8</td>
<td>Has the Bank sought authorization from the depositors to invest Mudaraba deposits in the restricted or unrestricted investment accounts of the bank?</td>
<td>10</td>
<td>Yes</td>
<td>11</td>
</tr>
<tr>
<td>9</td>
<td>Has the bank got approval both from the Shariah Supervisory Board and Board of Directors as regards fixation of PPSR?</td>
<td>11</td>
<td>Yes</td>
<td>12</td>
</tr>
<tr>
<td>10</td>
<td>Have the areas of investment activities selected for utilization of the Mudaraba funds been approved by the Shariah Supervisory Board (SSB) and the Board of Directors of the Bank?</td>
<td>12</td>
<td>Yes</td>
<td>13</td>
</tr>
<tr>
<td>11</td>
<td>Is profit on Mudaraba deposits (participating funds) paid for the whole period as per final rate including the accounts closed during the year before finalization of the account?</td>
<td>13</td>
<td>Yes</td>
<td>14</td>
</tr>
<tr>
<td>12</td>
<td>Whether adjustment of profit at the end of the year is done properly.</td>
<td>14</td>
<td>Yes</td>
<td>15</td>
</tr>
<tr>
<td>13</td>
<td>At the time of closing of the account, whether profit has been paid to the depositors at the previous year's final rate or provisional rate.</td>
<td>15</td>
<td>Yes</td>
<td>16</td>
</tr>
<tr>
<td>14</td>
<td>At the time of closing of the account whether profit has been paid to the depositors at the provisional rates of the current year.</td>
<td>16</td>
<td>Yes</td>
<td>17</td>
</tr>
<tr>
<td>15</td>
<td>Whether the bank has prepared profit calculation format and circulated those among the branch incumbents.</td>
<td>17</td>
<td>Yes</td>
<td>18</td>
</tr>
<tr>
<td>16</td>
<td>Whether the bank or Mudarib has incorporated any clause in the Mudaraba agreement for guaranteed repayment of principal as well as fixed rate of profit/interest.</td>
<td>18</td>
<td>Yes</td>
<td>19</td>
</tr>
<tr>
<td>17</td>
<td>Has the bank incorporated any clause in the Mudaraba agreement for guaranteed return of the depositors’ fund owing to bank's negligence, breach of contract emanated from the abrupt growth of NPLs and committing to fraud and forgeries?</td>
<td>19</td>
<td>Yes</td>
<td>20</td>
</tr>
<tr>
<td>18</td>
<td>Whether income derived from both investment and non-investment activities has been considered in the calculation of profits to be given to the depositors.</td>
<td>20</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Sl. No.</td>
<td>Shariah Related Inspection Issues</td>
<td>Score</td>
<td>Compliance Status</td>
<td>Score Obtained</td>
</tr>
<tr>
<td>--------</td>
<td>--------------------------------------------------------------------------------------------------</td>
<td>-------</td>
<td>-------------------</td>
<td>----------------</td>
</tr>
<tr>
<td>21</td>
<td>Whether balancing of ledgers, books of accounts are done properly.</td>
<td>3</td>
<td>Yes</td>
<td>5</td>
</tr>
<tr>
<td>22</td>
<td>Whether Account Opening Forms (AOF) are duly signed or not by the depositor(s).</td>
<td></td>
<td>No</td>
<td>5</td>
</tr>
<tr>
<td>23</td>
<td>Whether separate female counter is arranged/made for the woman depositor/customer.</td>
<td></td>
<td>Yes</td>
<td>4</td>
</tr>
<tr>
<td>24</td>
<td>Whether Sundry deposits arising from Mudaraba Accounts are utilized.</td>
<td></td>
<td>Yes</td>
<td>4</td>
</tr>
<tr>
<td>25</td>
<td>Whether profit is given to the concerned A/C holder for the amount held in Sundry Deposit A/C after settlement of the case.</td>
<td></td>
<td>Yes</td>
<td>4</td>
</tr>
<tr>
<td>26</td>
<td>Whether the amount of Sundry Deposit A/C is surrendered/deposited after expiry of the stipulated period to Bangladesh Bank as per section 15/22 of Bank Company Act 1991.</td>
<td></td>
<td>Yes</td>
<td>4</td>
</tr>
<tr>
<td>27</td>
<td>Have the stop payment letters been maintained properly as per Shariah principle of Amanah?</td>
<td></td>
<td>Yes</td>
<td>4</td>
</tr>
<tr>
<td>28</td>
<td>In case of partnership firm's A/C, are letter of authority form and signatures of all the partners obtained?</td>
<td></td>
<td>Yes</td>
<td>4</td>
</tr>
<tr>
<td>29</td>
<td>Is balance confirmation letter sent to all the depositors/investment account holders/clients timely twice a year i.e. on 30th June and 31st December each year?</td>
<td></td>
<td>Yes</td>
<td>4</td>
</tr>
<tr>
<td>30</td>
<td>Whether A/C opening forms/specimen signature cards, photograph and KYC form are filled in and obtained and maintained properly.</td>
<td></td>
<td>Yes</td>
<td>4</td>
</tr>
<tr>
<td>31</td>
<td>Whether books of accounts, records are maintained properly complying with Banking and Shariah norms.</td>
<td></td>
<td>Yes</td>
<td>4</td>
</tr>
<tr>
<td>32</td>
<td>Whether the profit in the Savings Deposit A/C has been calculated on the basis of monthly minimum balance method or monthly average balance method.</td>
<td></td>
<td>Yes</td>
<td>4</td>
</tr>
<tr>
<td>33</td>
<td>Whether the daily cash are sorted daily (issue/non-issue). Is the mutilated, non-issue surplus…notes are remitted to feeding branch promptly?</td>
<td></td>
<td>Yes</td>
<td>4</td>
</tr>
<tr>
<td>34</td>
<td>Is the arrangement of the cash department sufficient to ensure 100% safety of the funds-in-transit when cash is brought from or taken to the Bank's branches or other places?</td>
<td></td>
<td>Yes</td>
<td>4</td>
</tr>
<tr>
<td>35</td>
<td>Where the cash balance book is kept overnight? (It should not be placed in the cash safe).</td>
<td></td>
<td>Yes</td>
<td>4</td>
</tr>
<tr>
<td>36</td>
<td>Whether the lists of lost tokens and stopped cheques are displayed at cash counter, ledger/token counters.</td>
<td></td>
<td>Yes</td>
<td>4</td>
</tr>
<tr>
<td>37</td>
<td>Whether cheque books have been issued in the name of the account holder but kept undelivered.</td>
<td></td>
<td>Yes</td>
<td>4</td>
</tr>
<tr>
<td>38</td>
<td>Whether less profit has been paid on deposit accounts.</td>
<td></td>
<td>Yes</td>
<td>4</td>
</tr>
<tr>
<td>39</td>
<td>Whether the amount lying in sundry deposit account (sundry creditors) has stayed for long period due to difference in 'Name and Account Number'.</td>
<td></td>
<td>Yes</td>
<td>4</td>
</tr>
<tr>
<td>40</td>
<td>Are all the manuals read out by the officials of the branch and the same are preserved properly?</td>
<td></td>
<td>Yes</td>
<td>4</td>
</tr>
<tr>
<td>41</td>
<td>Are cheques/vouchers kept as a part of cash?</td>
<td></td>
<td>Yes</td>
<td>4</td>
</tr>
<tr>
<td>42</td>
<td>Are balance confirmation letter sent to all the account holders at regular interval, i.e., at the end of June and December each year?</td>
<td></td>
<td>Yes</td>
<td>4</td>
</tr>
<tr>
<td>43</td>
<td>Whether Branch checks Suspense &amp; Sundry Deposit statement and arrange for reversal of old entries regularly.</td>
<td></td>
<td>Yes</td>
<td>4</td>
</tr>
<tr>
<td>44</td>
<td>Is the General Account reconciled upto date?</td>
<td></td>
<td>Yes</td>
<td>4</td>
</tr>
<tr>
<td>45</td>
<td>Are Bankers' Account reconciled upto date?</td>
<td></td>
<td>Yes</td>
<td>4</td>
</tr>
<tr>
<td>Sl. No.</td>
<td>2</td>
<td></td>
<td></td>
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<tr>
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<td></td>
</tr>
<tr>
<td>46</td>
<td>Whether the expenses under the following heads are within H.O approved limit and commensurate with the size of the branch. a) Lighting charges, b) Telephone (office) including mobile, c) Telex/Telegrams, d) Motor Car maintenance, e) Fuel cost, f) Telephone expenses (residence), g) Paper and table stationery, h) Local conveyance, i) Entertainment, j) Photocopying, j) Miscellaneous expenses (with full explanation of expenses).</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>47</td>
<td>Are the instruments received for collection lying with the branch without taking action for unduly long period?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>48</td>
<td>Has the amount of commission and service charge been properly calculated and realized as per the formula prescribed by the OIC Fiqh Academy for issuing DD, TT, MT, Payment Order etc.?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>49</td>
<td>Is placing of lockers by the branch satisfactory from security point of view?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>50</td>
<td>Is the locker key securely maintained?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>51</td>
<td>Whether the bank guarantees are issued against proper authority.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>52</td>
<td>Has the bank realised remuneration/commission for issuing bank guarantee considering the amount of guarantee and the duration of guarantee?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>53</td>
<td>Has the bank realised only service charge for issuing bank guarantee?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>54</td>
<td>Is the basis of calculating service charge on bank guarantee in line with the formula given by the Islamic Fiqh academy?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>55</td>
<td>Has the bank issued any bank guarantee in favour of the applicant who used those to acquire interest based loans or to conduct prohibited transactions?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>56</td>
<td>Whether the required cash margin/security is obtained before issuing the bank guarantee.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>57</td>
<td>Whether the bank has given profit on the cash margin/security deposits maintained with the bank.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>58</td>
<td>Whether bank's service charges on bank guarantee are recovered properly.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>59</td>
<td>In case of minor accounts operated by guardians: a) are the accounts opened on the Manager's approval only? B) Does caution &quot;Care Minor Account&quot; or any caution word appear on AOF? SS Card in red ink/in computer with date of birth of the minor?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>60</td>
<td>Are all accounts in the names of Trusts, Executors, Societies, Associations, or Administrators or any estate opened with the permission of the Head Office?</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
There is no theoretically optimal system for the structure and process of regulating and supervising financial institutions. PATROL Rating System, introduced by Bank of Italy in 1993, gives a systemic representation of the financial health of individual banks and provides support in prioritizing the use of supervisory resources in scheduling on-site examinations.

In the context of Bangladesh, developing a supervisory guideline and rating framework for evaluating the overall performance of Islamic banks and financial institutions is of great importance since the Islamic banking system has been growing at a rapid rate. Therefore, it is imperative to develop a systematic rating framework for the Islamic banks and Islamic non-bank financial institutions to help central banks take follow-up measures to ensure Shariah compatibility and also to ensure public confidence towards the Islamic banking system. The camel rating system in banking supervision: a case study.

In the context of AIA, the CAMEL rating is used as a private rating framework in bank analysis for its own investment purposes rather than that used by regulatory bodies in supervising the banks. It may be similar in the way that applying CAMEL rating in AIA aims at protecting itself as a depositary from losses. A real case done by AIA has been included in the empirical section in order to clarify the objectives of the paper.

1.2 Aim of research and research questions.