# External Credit Assessment Instruments Services for Banks and Financial Institutes-

## *a New Dimension for Capital Adequacy Management Under Basel-II*

**Muzaffar Ahmed** FCMA, FCS
President & CEO
Credit Rating Information & Services Ltd.
The author can be reached through e-mail: mahmedcrisl@gmail.com

## Abstract:

Minimum Capital Adequacy requirement for banks and FIs has been receiving increasing attention globally. Keeping the importance in view the BIS has introduced Basel-II formula for global acceptance. The BIS also suggested to use the services of rating agencies as External Credit Assessment Institutes under certain terms and conditions. Unlike global practice Bangladesh has created a history of having large number of rating agencies established to work as ECAI. The above has created a situation where the ECAI services may be wrongly utilized unless and until the regulators are careful. The competition among ECAI may be used by the banks to its advantage and ultimately lead to a very serious situation where the capital adequacy of the banks may be deteriorated due to improper application of rating.

## 1. Background

Globally credit rating agencies are operating to provide impartial, professional and best -judged opinion for the investment community to decide on investment. However, the Bank for International Settlement (BIS) while deciding on implementing Basel-II capital adequacy for banking groups has decided to use the services of rating agencies in deciding on the credit quality of the banking investment and tied the risk management and capital adequacy of the banks/ FIs with the credit rating services. The Bangladesh Bank has implemented Basel-II capital adequacy framework for banking and non banking financial institutions in the banking sector through a number circulars and prudential guidelines with effect from January 2009 on parallel basis and with effect from 2010 on mandatory basis. The objective of the above action is to bring the banks under an international guideline of maintaining appropriate capital adequacy keeping in view the risk being undertaken by banks in its operation and to maintain such capital as it is required to cover the risk adequately.


The Bangladesh bank, at the preface of the circular says "To cope with the international best practices and to make the bank's capital more risk sensitive as well as more shock resilient, 'Guidelines on Risk Based Capital Adequacy (RBCA) for Banks' (Revised regulatory capital framework in line with Basel II) have been introduced from January 01, 2008. Instructions regarding Minimum Capital Requirement (MCR), Adequate Capital, and Disclosure requirement as stated in these guidelines have to be followed by all scheduled banks for the purpose of statutory compliance.' The objective of this article is to review the impact of the above hall mark step of the central bank on the banking sector specially from the perspective of a) Maintaining Capital adequacy, b) Risk management and above all on the behavior of the banks in carrying out its objectives. However, before going into 'impact', let us review what is a bank's capital adequacy and why it is so important.

## 2. Capital Adequacy- a shock absorbent buffer for banks

Unlike manufacturing organizations banks and financial institutions are highly sensitive to the capital and highly leveraged. Banks are accepting public deposit with 100% guarantee that it will be returned on demand or as per the terms of deposit with appropriate return. These funds are deployed at higher rate of return (difference is called the net interest margin - NIM) in the form of Loans and Advances in a highly risky investment arena. In this deposit receipt (creating 100% guaranteed liability) and investment (vulnerable asset creation) game, the only buffer is the capital, which more or less consists of less than 10% of the assets. Therefore any loan loss has direct impact first on the profitability and then on capital. But considering the volume of investment and risk in getting return of the investment, the capital adequacy of a bank is of utmost importance. The capital adequacy is therefore considered to be one of the very important measurements to judge the financial health of a bank. In order to protect the interest of the stakeholders, the central bank while controlling and monitoring the banks, considers Capital adequacy as one of the most important parameter to be looked into. It also set the criteria that scheduled banks and any bank carrying banking operation need to have minimum capital adequacy otherwise considered to be non compliant. Globally most of the banks failed at the eve of global financial crisis mainly due to lack of capital adequacy and liquidity.

## 3. Measurement of Capital Adequacy

Basel-II is basically a system that advises the banks or banking group to align its capital adequacy with the risks being undertaken through its various activities which are generally clustered in terms Credit Risk, Operational Risk and market Risk. The banks are also urged to disclose as to how the bank is managing risk annually in the annual reports and financial statements. Before the implementation of Basel-II, the Bangladesh Bank was following the principle of Basel -I which was introduced in 1996. Before that, the banks were following a ratio of Liability and equity to maintain its capital adequacy as Bangladesh Bank's instruction was to follow an external liability to equity ratio. Under Basel-I system it was required to convert the banking assets to Risk weighted assets under four category of risk weights such as, cash and cash equivalent at 0 % risk, inter bank borrowing at 20% risk, corporate sector loans at 50% risk weight and all private sector financing at 100% at Risk weight. After converting the assets of a bank with the above category risk weight, the banks were asked to maintain a minimum capital of 10% of the total risk weighted assets calculated under the above system. Under the above system of maintaining capital adequacy, the scheduled banks in Bangladesh were maintaining capital adequacy in the range of 10 to maximum 12% of risk weighted assets on average. In India it was about 14% at that time.

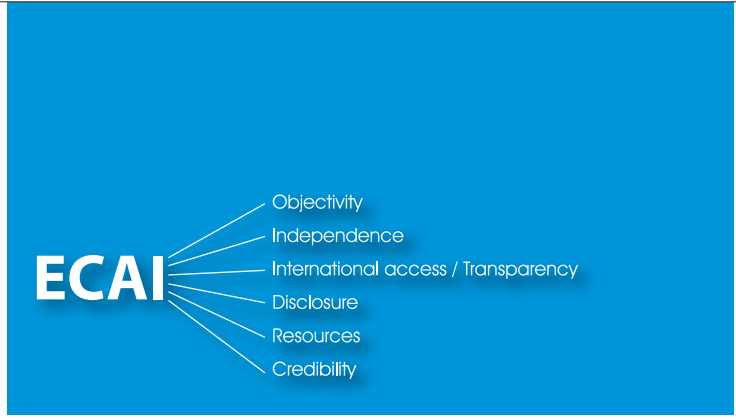
Globally, the banking sector is now not concentrating only on collecting public deposit and granting loan on demand. The sector is involved with many activities- both funded or non funded and also undertaking so much risk that mere 10% capital on risk weighted enough and needed to be more aligned with the risk being undertaken by a bank. In addition, Basel-I had its own flaw of putting all private sector financing at 100% risk weight, which ultimately expedited the revision of the capital adequacy requirement by aligning capital requirement with the risk which is popularly known globally as BASEL-II Capital adequacy framework. Published by the Bank for International Settlement (BIS), BASEL-II has been accepted globally after due consideration to the stage of development in each jurisdiction. The basic philosophy of Basel-II is a three tier approach for risk management such as a) Minimum Capital requirement, b) supervisory approach to assess overall capital adequacy and c) public disclosure of the risk profile. Again under pillar -I capital adequacy, Credit Risk, Operational Risk and Market Risk is to be determined separately. The document provided a number of options and advised the banking regulators to adopt the same with appropriate modifications. The Bangladesh Bank has adopted the Basel-II principle with the three pillar approach as follows:

i. Minimum capital requirements to be maintained by a bank against credit risk, market risk and operational risk;
ii. Process for assessing overall capital adequacy in relation to a bank's risk profile and a strategy for maintaining its capital at an adequate level;
iii. To make public disclosure of information on the bank's risk profiles, capital adequacy and risk management.

Under a road map, the central bank has also decided to go ahead with the calculation of capital adequacy under the following approach:

a) Standardized Approach for calculating Risk Weighted Assets (RWA) against Credit Risk
b) Standardized (Rule Based) Approach for calculating RWA against Market Risk and
c) Basic Indicator Approach for calculating RWA against Operational Risk.

Under the Standardized Approach of the Risk Based Capital Adequacy Framework (Basel II), risk is to be determined on the basis of risk profile as assessed by the External Credit Assessment Institutions (ECAIs) duly recognized by BB through credit rating.




## 4. Role of ECAI in Bankers Capital Adequacy Determination

One of the very important feature of Basel-II capital adequacy framework is the determination of capital requirement on Credit Risk on the basis credit rating of the banking exposure from a credit rating agency recognized by Bangladesh Bank as ECAI. Under Basel-I, the banking capital was determined on the basis of the risk weight which stands after conversion of the Balance sheet assets into risk weighted assets by applying four category of fixed risk weight (0, 20, 50 and 100%). Under Basel-II, determination of risk weight and its onward application towards capital adequacy determination of a bank is a hall mark step taken by BIS. The BIS in its policy statement clarified that credit raters are the risk raters with long experience and by applying standard and scientifically proved methodology, the rating agencies have proved their worth and enjoying the trust of the investment community globally. Although the risk rating of the exposure of banks is to be done by the bankers, it may take some time to develop its own methodology and data to do this job professionally and to ultimately switch over to their own rating popularly known as Internal Rating Based approach (IRB). As in interim arrangement, the BIS has suggested to allowed the rating agencies to carry out the exposure rating and apply the same for capital adequacy determination under certain terms and conditions. The Bangladesh Bank after a long review, recognized two rating agencies of the country to work as ECAI by fulfilling the following six criteria:

### A. Objectivity

The methodology for assigning credit assessments must be rigorous, systematic, and subject to some form of validation based on historical experience. Moreover, assessments must be subject to ongoing review and responsive to changes in financial condition. Before being recognized by supervisors, an assessment methodology for each market segment, including rigorous back-testing, must have been established for at least one year and preferably three years.

### B. Independence

An ECAI should be independent and should not be subject to political or economic pressures that may influence the rating. The assessment process should be as free as possible from any constraints that could arise in situations where the composition of the Board of Directors or the shareholder structure of the assessment institution may be seen as creating a conflict of interest.

### C. International access / Transparency

The individual assessments should be available to both domestic and foreign institutions with legitimate interests and at equivalent terms. In addition, the general methodology used by the ECAI should be publicly available.

### D. Disclosure

An ECAI should disclose the following information: its assessment methodologies, including the definition of default, the time horizon, and the meaning of each rating; the actual default rates experienced in each assessment category; and the transitions of the assessment, e.g. the likelihood of AA ratings becoming A over time.

### E. Resources

An ECAI should have sufficient resources to carry out high quality credit assessments. These resources should allow for substantial on going contact with senior and operational levels within the entities assessed in order to add value to the credit assessments. Such assessments should be based on methodologies combining qualitative and quantitative approaches.

### F. Credibility

To some extent, credibility is derived from the criteria above. In addition, the reliance on an ECAI's external credit assessments by independent parties (investors, insurers, trading partners) is evidence of the credibility of the assessments of an ECAI. The credibility of an ECAI is also underpinned by the existence of internal procedures to prevent the misuse of confidential information. In order to be eligible for recognition, an ECAI does not have to assess firms in more than one country.


## 5. Risk weighting Criterion

It has already been stated that under Basel-I the risk weighing of the balance sheets was through a thumb rule of applying 4 categories of risk weight. But under Basel-II, the risk weighting has become more scientific and more aligned to risk management. Under Basel-II, the Bangladesh Bank suggested some fixed weightage in some categories of assets, while in some other cases different risk weightage have been suggested. For example, the fixed rate of weightage may be given to residential property investment, SME financing, multilateral agency funding etc. while flexible risk weight has been suggested in the corporate sector financing based on credit rating, for example a counterparty financing may get 20% risk weight if it carries AAA rating or may even get 150% Risk weight if the rating is below B, etc.

## 6. ECAI's Credit Rating Categories Mapped with BB Rating Grade

In order grade the provided risk weight of each individual credit Rating, the Bangladesh Bank has mapped each ECAI rating to its six risk grades as follows:

| BB Rating Grade | Risk weight of S&P and Fitch | Equivalent Rating | Equivalent Rating of Moody | Equivalent Rating of CRISL |
|---|---|---|---|---|
| 1 | 20% | AAA to AA | Aaa to Aa | AAA, AA+, AA, AA- |
| 2 | 50% | A | A | A+, A, A- |
| 3 | 50% | BBB | Baa | BBB+, BBB, BBB- |
| 4 | 100% | BB to B | Ba to B | BB+, BB, BB- |
| 5 | 100% | C | Below B | B+, B, B-, CCC+, CCC, CCC-, CC+, CC, CC- |
| 6 | 150% | | | C+ C, C-D |
| S1 | | F1+ | P1 | ST-1 |
| S2 | | F1 | P2 | ST-2 |
| S3 | | F2 | P3 | ST-3 |
| S4 | | F3 | NP | ST-4 |
| S5,S6 | | B,C, D | | ST-5, ST-6 |

## Higher Risk Grade for non-rated Exposures

One of the most important features of Basel-II implementation is that the Bangladesh Bank has made a significant difference in risk weight based on the rating. The higher rated banks and non baking financial institutions face different risk weight depending on its rating. The issue may be further clarified as follows:

| | Credit Rating | BB Risk grades | Risk weight % | Under Basel-I % |
|---|---|---|---|---|
| Public Sector entities | AAA, AA+, AA, AA- | 1 | 20 | 50 |
| | A+, A, A-, BBB+,BBB,BBB- | 2, 3 | 50 | 50 |
| | BB+, BB, BB-,B+,B,B-CCC+, CCC, CCC-CC+,CC,CC- | 4, 5 | 100 | 50 |
| | C+ C, C-D | 6 | 150 | 50 |
| | Unrated | | 50 | 50 |
| Banks and NBFIs | AAA, AA+, AA, AA- | 1 | 20 | 20 |
| | A+, A, A-, BBB+,BBB,BBB- | 2,3 | 50 | 20 |
| | BB+, BB, BB-,B+,B,B-CCC+, CCC, CCC-CC+,CC,CC- | 4,5 | 100 | 20 |
| | | 6 | 150 | 20 |
| | | Unrated | 100 | 20 |
| Claims on Corporate (excluding equity exposures) | AAA, AA+, AA, AA- | 1 | 20 | 100 |
| | A+, A, A- | 2 | 50 | 100 |
| | BBB+,BBB,BBB, BB+, BB, BB-,B+,B,B- | 3, 4 | 100 | 100 |
| | CCC+,CCC, CCC-CC+, CC,CC-, C+ C, C-,D | 5, 6 | 150 | 100 |
| | Unrated 125 100 | | | |

It will be observed from the above table that in case of public sector enterprise financing, there is no significant impact of Basel-II since unrated enterprises are also getting the same risk weight of Basel-I frame work. The only exception is in the case of an enterprise getting AAA rating to get 20% risk weight, which is hardly possible for a public sector enterprise to get such good rating. Rather, risk weight may increase if such enterprise gets poor rating which may attract 150% Risk weight. Therefore, bankers are not interested to get these clients rated at the fear of more capital requirement. Same is the case of Banks and NBFIs where risk weight may increase for credit rating.

The most notable feature is in the case of private sector financing popularly termed as "Claim on Corporate" where risk weight may be reduced through rating with the exception of CCC+ to D, where ratings may increase the risk weight significantly compared to Basel-I system. Another most important feature that have significant impact is the unrated financing where risk weight has been fixed at 125% compared to 100% under Basel-I framework. The above has prompted the banks to think for credit rating.

## 7. Impact of Basel-II Capital Adequacy framework

The banks in Bangladesh have been operating with very minimum capital adequacy. As against minimum capital requirement of 10%, most of the banks (other than foreign banks operating in Bangladesh) were operating with the capital adequacy of 10% to 12% under Basel-I. With the implementation of Basel-II, the capital adequacy of the banks declined by almost 3 to 3.5% mainly due to the fact that most of the clients were remained unrated and facing a risk weight of 125% against 100% risk weight under Basel-I. In view of the above most of the banks became non-compliant to the minimum capital requirement prescribed by Bangladesh Bank, However, finding no alternatives, Bangladesh Bank, at the request of the banks staggered the achievement of minimum capital by two years, initially to achieve at 8% then 9% and finally 10%. At present the minimum capital adequacy remained at 10% or Tk 400 crores whichever is higher.

With the full implementation of Basel-II pillar-I, that is, determination of minimum capital requirement, the initial reactions in the economy were as follows:

### a) Action and Reaction of the Regulators:

Basel-II implementation created opportunity of client exposure rating. Suddenly a large number of people in the private sector started considering it as a good business opportunity. Taking the advantage of easy entry, many of them approached Bangladesh Securities and Exchange Commission for license to start credit rating business. They also convinced the Bangladesh bank that two ECAI is not enough to rate a large number of clients as per the requirement of banks. In view of the above both the BSEC and BB made a great mistake by licensing another 6 rating agencies to operate in the market. The Bangladesh Bank has relaxed its requirement with the wrong understanding that perhaps more rating agencies are required to assist the banks for client. A country like Bangladesh now has 8 rating agencies, all are recognized by Bangladesh Bank to issue ratings for banks' capital adequacy determination. India had 4 rating agencies, Pakistan 2, Sri Lanka 2, Malaysia 2 , China 4, South Korea 3 and globally perhaps 60 in total including global rating agencies like S&P, Moodys Fitch, JCR, etc. This mushroom growth of rating agencies has other impact which is being discussed.

### b) Capital management vs risk management:

Since the market is very competitive (48 banks are operating in a small economy like Bangladesh) the market is still client driven and as such the banks did not like to request the client to go for exposure rating. In order to maintain capital adequacy, the banks started to increase its paid up capital by issuing bonus share and right offer which is against the basic philosophy of Basel-II which has been provided to maintain capital through risk management. Al a later stage they realized that increase in paid up capital will burden the bank with higher requirement of dividend. Some of the banks tried to issue sub-ordinated bonds to meet the tier II capital requirement. But it also appeared that only AA rated banks are eligible for sub-ordinated bonds and the field is not open for all banks.

### c) Client exposure rating

As stated, the main objective of the Basel-II capital adequacy frame work is to minimize the risk through appropriate risk management system. The framework also suggested to determine the credit risk through credit rating of the counterparties. Although, the Basel-II framework as adopted in Bangladesh has advised the banks to minimize the credit risk and measure the same through credit rating from ECAIs, there were serious reluctance from the banks as well as from the counterparties. Banks considered that if the clients are asked to get themselves rated, they may leave the bank, because the private sector parties do not generally maintain appropriate accounts and in most cases, they maintain different sets of accounts to satisfy various interested groups such as banks, tax authorities, In view of the above, clients are reluctant to give any information to the rating agency. There are other points to be considered by the good clients that why should they unnecessarily pay the fee for credit rating, which is basically required by the banks not by themselves. In some cases good clients ask for reduction in interest rate for its premium of having good ratings, which banks are reluctant to agree.

However, over a period of time banks started realizing that making investment without rating will face 12.5% risk weight and for the banks it will seriously hamper capital maintenance. In addition, Bangladesh Bank has recently circulated process

document for supervisory review- the initiative to implement Pillar II of the Basel-II document. The supervisory warrants addition capital requirement for various internal flaws such as inadequate documentation, inadequate provision against non-performing loans etc. Now it is clear that having a marginal capital it is not possible to maintain capital adequacy and banks are required to follow the Bangladesh Bank advice to install risk management system and to get the clients rated by ECAIs which is the basic requirement of Basel-II under standardized approach of capital measurement.

### d) Mushroom growth of rating agencies

One of the basic philosophy of Basel-II is management of risk that are arising from credit operation. The bankers are advised to install risk management system through development of IT system, database and improving internal credit processing. Since the above developments may take time, as an interim arrangement, BIS suggested to use the credit rating from rating agencies who has got long track record of credit assessment. Since the financial sector is very sensitive and risk may arise from various operations, BIS suggested to recognize only existing rating agencies whose track record shows absolutely minimum default rate say for example 0.02% at AA scale over a time horizon of 5 years. Keeping the above in mind, the BIS suggested six criterions as stated earlier.

But the philosophy has been misunderstood by the concerned authorities. Taking the advantage and misunderstanding the credit rating objectivity a large number of private sector entrepreneurs applied to establish new rating agency in the country to do bank exposure rating. Taking the advantage of the shallow knowledge of the rating concept six more rating agencies got ECAI license and immediately started business of client exposure rating. There is no where in the world as per my knowledge goes that rating companies have been licensed to carry out the client rating. Rather BIS wanted the regulators to be careful even allowing the existing rating agencies to work as an ECAI by strictly following the criterion and default ratio and transition metrics during a time horizon of 3 to 10 years of its operation. There is hardly any country in the world which has 8 rating agencies in operation. The above mushroom growth of credit rating agency and its subsequent recognition has changed the total philosophy of BIS. The impact of this mass recognition of ECAI has serious immediate and far-reaching impact on the banking sector in particular and economy as a whole in general which is now visible clearly.

### e) Rating shopping:

Having a capital adequacy level at minimum and in order to remain compliant, banks need to invest in good rated business. Therefore, they are advising the clients to get them rated and bring good rating from any rating agency which gives good rating. These clients are approaching all rating agencies and negotiating on rating before the assignment is awarded. If they get rating which is not in line with the advice of the bank managers, they are switching to other rating agency for better rating. Although the BSEC promulgated Credit Rating Rules 1996 clearly provides that once a rating contract is signed, the client cannot switchover to other rating agency for at least four years. These rating shopping have been resulting poor quality of rating and these garbage is being used by the banks knowingly to reduce their capital requirement. Its ultimate consequence is extremely serious.

### f) Unhealthy price competition:

The newly floated rating agencies are now in severe competition with the old rating agencies to procure business and influencing the banks, bank managers by dint of relationship or by using the political relationship at whatever price. The old rating agencies are also reducing prices to match with the price being offered by the new rating agencies. It has declined to such an extent that it does not even cover the traveling cost of the professionals to visit the client factory establishment. With such fee it is hardly possible to do justice to this high level profession.

### g) Financing pattern of banks

Banking sector in Bangladesh now is in cross road and beset with many problems including high Non Performing Loans (NPL), loan provisioning, turbulent garments sector financing. The profitability of the sector has declined significantly. However, it is now understood that the internal capital generation after dividend is quite insufficient to maintain the existing business growth. The alternatives of capital maintenance other than exposure rating are very costly and time consuming. Having the above in mind and the requirement of new financing with 125 % risk weight for unrated clients has impact on the financing pattern. Some of the banks have already instructed to get the clients rated before loan is sanctioned.

## 8. Conclusions

Bangladesh banking sector is now at a cross-road for moving forward. The central bank has taken a number of steps to bring the sector in line with international requirement and Basel-II adoption through prudential circular is a hall-mark step towards that direction. One of the main objectives of Basel-II implementation was to put the banks in sound health by incorporating capital convergence standards and risk management system in banking sector. Our neighbouring country India has progressed significantly by introducing Basel-II framework. Our economy has huge potentials to be a middle income country within foreseeable future. Banking industry being the backbone of the economy takes the lead-role to pilot the economy through policy guidelines and supervision. Before introducing BASEL-II in Bangladesh, the central bank issued a road map, carried out impact assessment. Immediately after implementation, the capital requirement of the banks has increased significantly. In order to keep the banks at least minimum capital compliant, Bangladesh had to stagger the minimum Capital. Keeping the above requirement and its importance there chances to use the short-cut road that may take the sector in wrong direction. Basel-II being an international guideline is suppose to bring positive change in the banking industry in the areas of risk management and thus to make the industry healthy. But our industry is yet to be aware of the result of the above medicine. The inner meaning and philosophy of Basel-II capital adequacy framework is still not clear to many related professionals and management, specially at branch banking management level. In view of the above there are many chances of misinterpretation and misunderstanding that may lead to wrong directions and actions.

"The regulators are the doctors who must see that the medicine is working properly to make the sector as healthy and wealthy as it has been contemplated."

Banking being a very sensitive industry dealing with liquid asset, it needs appropriate attention and action all the time and in time. The regulators should carefully review the impact of the BASEL-II implementation and to see whether it is moving as per the road map. The regulators are the doctors who must see that the medicine is working properly to make the sector as healthy and wealthy as it has been contemplated. Since the banks in Bangladesh are operating at minimum capital and there are practices to declare profit and dividend even without providing for required provision against ever increasing non-performing loan, the internal capital generation and recoveries are insufficient to finance growth, there may have tendency to keep the banks capital compliant through unwarranted actions. The use of the services of ECAIs who are under serious competition for survival may be used as a tool to ultimately to reduce the capital adequacy in disguise. This type of disease-in disguise may work as an un-curable cancer and will be known when the bank is in the death bad and not at recoverable stage. In order to reap the benefit of Basel-II, a strong supervisory guidance is essential. We hope that the Bangladesh Bank is aware of the above and will provide appropriate policy direction in appropriate time.