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**Issues, Challenges, and Opportunities for the Development of  
Domestic Credit Rating Agent (DCRA) in Ethiopia**  
**(A comparative study)**

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## **Glossary and Acronyms**

**APEC:** Asia Pacific Economic Cooperation, a cooperative grouping of Asian, North American, Latin American economies and Australia and New Zealand

**LDCs:** Less Developed Countries

**CRAs:** Credit Rating Agency, Private institutions established with closer government oversight that provide credit risk assessment services for capital market participants.

**DCRA:** Domestic Credit Rating Agency, a credit rating Agent developed domestically and usually giving domestic service.

**GCRA:** Global Credit Rating Agency, reputable credit rating agencies providing rating services globally.

**SEC:** Securities and Exchange Commission, the US regulatory body responsible to oversee the operation of the securities market and related organizations.

**NRSRO:** Nationally Recognized Statistical Rating Organizations, a designation that the Securities Exchange Commission (United States) confers to a reliable credit rating organization.

**Sovereign rating:** A rating on a government's willingness and ability to service its debt. Ratings are assigned for foreign currency debt and local currency debt by GCRA's.

**ABS:** Asset Backed Securities,

**Potential Investors:** potential institutional investors in the Ethiopian bond market; these include insurance companies and the Ethiopian Social Security Agency

**HPAEs:** High Performing Asian Economies, a name referring to Asian countries with well performing Asian countries

CRD: Capital Requirements Directives, a proposal for the implementation of risk based capital requirement in banks.

CESR: The Committee of European Securities Regulation,

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## Part One

### 1.1: Introduction

The credit relationship, whether it is through security issuance or term loan, is a longstanding commitment. It implies an assessment of the present and future behavior of the borrower. In a world of imperfect information the availability of information on potential borrower's capacity to repay a loan and on its financial discipline are key variables in risk analysis and the decision for credit grants.

The theoretical analyses of the 70s-80s (Jaffee and Russell (1976), Stiglitz and Weiss (1985)) demonstrate that the difficulties for the lenders to differentiate ex-ante the risks of projects to finance end up in phenomenon of quantitative credit rationing. Borrowing is difficult to some loan applicants (or financial security issuers) even though they need funds and are willing to pay the price asked for. More generally speaking, when transparency of the credit market players is not complete and the reinforcement mechanisms of loan contracts are not perfect (which gives rise to moral hazards), a few holders of potentially profitable investment projects do not manage to obtain their financing. Theoretical and empirical seminal papers like Geltler and Gilchrist (1994) and Calomiris and Hubbard (1998) reveal that companies are concerned by this problem in different degrees. The size, age, and asset pledging capacity of a company are assumed good grounds to lend money; small newly created businesses are first to suffer from these.

The problem of very delicate credit information system is boldly visible in Africa. Theoretical study by Nataliya Mylenko (2008) affirms that Africa credit markets are underdeveloped with

the lowest levels of credit penetration in the world. Lending in Africa is challenging- poor political and economic stability, undeveloped corporate disclosure culture, and paucity of competent analysts makes the situation tough. The intensity of credit information asymmetry and extent of untapped credit market is variant among the different regions in the continent; east Africa being cited primarily.

In Ethiopia where the credit infrastructure itself is less developed, the problem of credit information system is getting obstacle to the nascent credit market. Banks and MFIs reported a considerable amount of loan arrears periodically. The primary reason for such loan default is lack of reliable debtors' information. Due to such problems banks and MFIs are obliged to give very restrictive loan provisions, which will negatively affect access to capital. In spite of this fact, a study, like that of Gebrehiwot Ageba (2004), has revealed the importance of increasing access to debt securities for savers as means of investment. Therefore, the objective of increasing a good flow of funds in the economy needs the availability and operation of a good credit information system.

In the light of all the above facts, borrower companies can be interested to communicate the information about them to potential lenders (in the case of financial market financing- to the general public). But the issue of creditworthiness will demand such companies (borrowers) to forward information about them through established credit information providers, credit rating Agencies (CRAs).

Credit rating firms evolved in U.S in early 19<sup>th</sup> century when the financial market has undergone through a remarkable improvement. Though CRAs currently provide various

services, according to White JL (2001), the historical logic underlying the existence of these firms has clearly resided with in a basic problem of finance: How do lenders determine the creditworthiness of potential borrowers and assure themselves of the continued soundness of borrowers after a loan has been extended? Besides the capability of renders (both financial institutions and public investors) in making thorough creditworthiness analysis is limited, especially whenever there are new fund raisers. Financial institutions who have limited experts and information may use the testimonies of credit rating firms to complement their own credit analysis.

In sum, credit rating firms according to white JL. (2001) can help renders pierce the fog of asymmetric information that surrounds lending relationship. Equivalently, credit rating firms can help borrowers (and their credit qualities) emerge from that same fog. Financial institution lenders and public debt investors may make use of information disseminated by specialized credit raters so that reducing or eliminating the duplication of information-generation efforts.

The stimulated and interrelated world economy and the ever increasing investment have necessitated the formal operation of credit rating firms. However, the development and operation of credit rating industry is not without challenges.

### **Framework of the study**

This paper is organized in the following pattern:

*Chapter one: Introduction, problem statement, Importance of the study, and research methodology*

The first chapter of the study illuminates on the problem, objective, and importance of the

study. Research design and plan (framework) of the study are also parts of this chapter. This research is designed apparently to be an exploratory study— graph and tabular presentation. But certain descriptive techniques are used to more crystallize the research questions and review different models.

***Chapter two: Review of theoretical framework and Empirical literature***

This part of the study emphasizes the theoretical framework of the study. It sheds light on the development of Credit Rating Agencies (CRAs). The operation of CRAs and the issue of regulation and sovereign rating are also subjects in this part. The extent of this chapter transcends to the role of CRAs and the importance of CRAs in market based credit [information] system.

***Chapter three: Presentation and Analysis of Empirical literature and collected data***

This section dwells on an analytical review of both primary and secondary data using simple qualitative and quantitative tools. Major findings discussed in this chapter gear towards the importance of CRAs in Ethiopia; and the challenges towards the efficient operation of those agencies. Empirical studies will review the issue of sovereign rating and regulation of CRAs.

***Chapter four: summary of major findings, conclusion, policy implications***

Here summarization is given to major findings and concluding remarks are also forwarded. Finally recommendation is given by paying due attention to policy implications.

## 1.2: Statement of the problem

The existence of a dependable credit information system is essential for the viability and efficiency of a nation's financial system, at large and the securities market, in particular. Principal asymmetry of information between fund savers and fund seekers is detrimental for

the operation of the credit market players.

Most lending failure histories around the world mainly resulted from poor assessment of borrowers' position by fund providers. For instance the fact that mortgage lending is not an exclusively secured loan is revealed by the failure of **Washington Mutual** (WaMu). Ethiopia, not exceptional to these problems, has most of its banks and micro finance institutions reported considerable loan arrears. For example the **commercial bank of Ethiopia** reported default rates ranging from 65-70% in the year 2002-2003 .This over-indebtedness of some borrowers mainly resulted from lack of appropriate borrower-information by lenders.

This lack of creditworthiness by borrowers (or issuers of debt securities) has compelled most lenders to demand collaterals and high return for the funds they provide. Besides, due to the currently existing large number of borrowers, banks (or lenders) will be required to devote a considerable time and capital to assess borrowers' credit standing. The cumulative out come of all these is inefficient funds flow and below average economic growth.

An important logical deduction from the above facts is that the prevalence of credit information providers, typically credit rating Agencies will no doubt contribute by helping lenders "pierce the fog of asymmetric information that surrounds lending relationships and help borrowers emerge from that same fog." (White LJ, 2008)

Nevertheless, the establishment of credit rating agencies is not as such an easy undertaking especially for less developed counties like Ethiopia. Establishing credit-rating agencies without lying down appropriate grounds will have devastating consequences on the financial system of the country.

### 1.3: Objectives of the study

The very objective of this project paper is to discern the potential challenges and opportunities for initiating and developing credit rating Agency, and remarkable credit information system thereby, in Ethiopia. The very need to initiate DCRA is also importantly investigated. Regulating DCRA, once established, is also the theme of the study. The paper tries to address benefits going to be reaped with regard to enhanced credit information system by using local Credit Rating Agency (DCRA). supplementary benefits of DCRA, apart from rating borrowers is also slightly investigated. The study further considers the experience of countries that have already made use of credit-rating agency operation one way or another.

#### *Research Questions*

The following research questions can be hypothesized to address the above general objective:

1. What are the opportunities and challenges for the development of credit rating Agency in Ethiopia?
  - 1.1 What should be done before effecting credit-rating Agency in Ethiopia?
  - 1.2 Does DCRA help for attracting investment, especially DFI?
  - 1.3 Does DCRA help in increasing the access of small enterprises to credit?
  - 1.4 Does DCRA have to do with Sovereign rating?
2. Is the existing credit-market working efficiently?
3. Does Ethiopia need credit-rating Agency?
4. How the existence of credit rating Agency is helpful for lenders and/or borrowers in Ethiopia?
5. How is government going to benefit from the existence of Domestic credit-rating

Agency?

6. What will be the role of government in operation of the credit rating industry?
7. Will the development of credit-rating agency enhance the consolidation and institutionalization of the security market?
8. Is there relationship between country's credit rating and its cost of borrowing and investment attracted?
9. Is there relationship between good credit information system and level of financing by businesses?

#### 1.4: Importance of the study

The following significances may accrue from the results of this project undertaking:

- The results of this paper will provide important background information for those researchers who want to probe the subject in detail.
- This undertaking by itself helps to create awareness among stakeholders about the uses and operation of credit rating Agencies. And each may strive for its accomplishment by noticing the benefits that it is going to reap from the system.
- It can be used as a good initiation for government to workout possible policy frameworks for the development and operation of credit rating agencies
- It supplements the government's ongoing project of enhancing and institutionalizing security (bond & capital) markets in Ethiopia
- It contributes for the flourishing of efficient financial market and swift flow of funds in the economy.
- Promotes international fund raising both by government and businesses.

- A good credit rating industry that fills the gap of poor credit information system

### 1.5: Scope of the study

Most of the established international and local CRAs around the world provide a wide range of services to their clients. However, this paper emphasizes the common CRA'S service of enhancing the efficiency of credit markets by making opinion on borrowers' credit worthiness. But some ancillary services provided by CRAs are slightly reviewed. As a reference the study initiator used only the experience of countries whose capital market and credit rating industry is developed recently that correlation will be feasible— those of Asian countries.

### 1.6: Limitations of the study

The study has designated the following to be the basic limitations of this study.

- There is a limited body of literature covering the theoretical frame work of credit information systems and operation of CRAs.
- The exotic nature of the issue under study creates difficulty in collecting primary data from subjects for the study.
- Some secondary data are used to show the experience of some countries regarding credit rating and credit information. But lack of access to the complete economic and political make up of those countries may compel the researcher to take those experiences at a slight discounting from face value to show how best practices are useful to Ethiopia.
- Questionnaire is distributed only to possible institutional investors of the bond market. The study does not include potential retail (individual and corporate) investors. This is because one to keep the scope the study manageable and secondly due to the fact that

most emerging capital markets are served by institutional investors.

- Information about potential corporate bond issuers and companies potentially eligible for securities market listing are indirectly assessed by data that come from earlier researches and also sourced from National Bank of Ethiopia (NBE).

## 1.7: Research Design and Methodology

This research is designed apparently to be an exploratory study. But certain descriptive techniques are used to more crystallize the research questions and to review different CRA-models.

### **1.7.1: Types of data and method of collection**

This research undertaking makes use of both primary and secondary data. The major emphasis of the study is on data collected from secondary sources which can reveal the salient benefits of credit rating agencies for a country. This secondary information includes those generated locally as well as those showing the experiences of other nations with this regard.

Primary data are also collected from various subjects who are assumed to be directly related to the issue under study. Interview and questionnaire are the instruments used to procure primary information. Structured interview is held to obtain a deep implication and prospects about the development of credit rating Agency in Ethiopia. Deep Personal Interview (DPI) with credit experts and policy formulation officers of National Bank of Ethiopia is conducted to reflect on the multifacets of credit-rating & CRAs. Questionnaires are also designed and distributed for those potentially active players in the credit market. Different questionnaires are formulated for potential creditors and potential borrowers in debt securities market in Ethiopia. The questions are prepared in three themes— the first part of the questionnaire to each respondent is about

subjects' awareness regarding credit rating business, the second part deals with the functioning of the existing bank-based system, where as the last part investigates the need for and role of credit rating in Ethiopia. Banks & Insurance companies are assumed potential lenders that will make use of credit rating agency's service. Hence eight banks (Commercial Bank of Ethiopia, Dashen Bank, Wegagen Bank, Awash International Bank, United Bank, Abyssinia Bank, Nib International Bank, and cooperative bank of oromia) and potential institutional investors (Africa Insurance Sc., Awash insurance Sc., Nyala Insurance Sc., Ethiopian Insurance company, NIB Insurance co., NICE Insurance co., United Insurance co., and the Ethiopian Social Security Agency) are **purposely** selected due to their firm establishment in their respective industries. These questionnaires are generally designed to elicit responses on readiness to use credit rating Agency's service and their awareness towards credit rating.

### 1.7.2: Method of Data analysis

Analysis is made based on the nature of data gathered through the designed techniques. The analysis emphasizes on the following materials: prospect for the development of bond market and effectiveness of the existing banking industry in Ethiopia, benefit from credit rating in Ethiopia, and regulation of the rating business. Accordingly, secondary data is analyzed by **exploratory data analysis** (EDA) which makes use of critical review of prior works and visual representations and graphical techniques. **Confirmatory Data analysis** (CDA) is used to complement the exploratory analysis by statistical summary— by reviewing different models pertinent to the regulation and operation of CRAs. Where as, results of interview and responses to open ended questions are analyzed by using manual **content analysis to give further** confirmation to findings.

## **Part Two**

### **Review of Theoretical framework and Empirical Literature**

#### **2.1: Need for capital markets and the Role of Credit Rating Agencies**

There is a century old policy debate among economists: Are bank-based or market-based financial systems better for promoting long run economic growth, (Ross Levin, 2001)? Since the 19<sup>th</sup> century proponents of the bank-based financial system have argued that this system is better in mobilizing savings, identifying good investments, and exerting sound corporate control. Whereas those arguing in favor of market-based financial system, however, put market-based system at the far front in allocating capital, providing risk management tools, and mitigating the problems associated with excessively powerful banks.

Nonetheless, with the advent of the financial liberalization, privatization, and structural adjustment as crucial inputs for long-term economic development, the market-based system has become the linchpin of economic progress. The mal-practices of powerful banks and the direct intervention of government in financial system has also resulted in inefficient financial allocation, restricted growth of financial assets, and credit rationing in the bank-based system.

Eyob Tesfaye and Felleke Mammo (1996), financial liberalization, among other things, refers to reforms leading to free functioning of the domestic financial market, and the elimination of credit rationing. It also includes the elimination of interest rate ceiling and differentiated reserve requirements that drastically curtail the free entry of local participation in to the domestic market.

Financial liberalization is effected through official policy measures with the aim to promote greater efficiency in domestic financial markets and to increase the access of domestic institutions to available or “idle” financial resources for their investment needs; thereby enhancing private investment which is assumed to be the corner stone of economic development. The most important and yet relevant policy measures especially in the case of developing countries, like Ethiopia, include the relaxation of restrictions on the right of establishment on financial activities with certain sectors of the economy. And on the portfolio that financial institutions may hold, especially in terms of maturity and type of instrument. According to Eyob Tesfaye and Felleke Mammo (1996), to enhance the financial sector’s role in strengthening the generation and allocation of domestic savings, additional structural measures are required: Development of money market, streamline of selective credit controls, improved supervision of financial institutions, introduction of deposit insurance, development of term finance and capital market, creation of new financial institutions and instruments.

With regard to financial markets, a distinction is necessary between capital and money markets. ‘Capital markets’ refers to transactions in long-term debt and equity securities, whereas money markets embrace short-term debt instruments such as bank deposits, commercial and other bills, and other short-term papers.

Capital markets have two main functions. One is to reconcile the financing requirements of economic agents with an excess of planned physical investment over their own savings (a financial deficit) with the needs of those having an excess of saving over physical investment (a financial surplus). The other is to facilitate the rearrangement of financial assets and

liabilities.

Capital markets are often considered the result of financial liberalization particularly in developing economies, where the level of overall advancement is lagging behind from those of industrialized ones.

It is quite conceivable that designing workable policy is the milestone of capital market development. However, apart from the formulation of favorable policies, a sound and rational development of capital markets requires the establishment of the legal and institutional infrastructure to support the operation of such markets. And one of such legal and institutional infrastructure entails the development a mechanism by which market players will get necessary market information – developing efficient market. One, and actually the most important, of those measures of enhancing market efficiency is the development of credit rating agency that plays a pivotal role for the operation of the securities market, especially the debt market.<sup>1</sup> Development of domestic credit rating Agency is considered the foundation of the debt securities market (Scott Kennedy, 2007)

Scott Kennedy (2007), Credit rating agencies (CRA) are one of the most powerful organizations in capitalist countries and central to the world's global financial system. The lower their ratings of bonds issued by governments, financial institutions, and corporations, the greater the probability the issuer will default. The greater risk is reflected in a higher interest rate, which acts as an added attraction to potential buyers and, conversely, as a penalty to the issuers.

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<sup>1</sup> Capital markets can be the debt securities market or the equity securities market. And the function of credit rating agencies is prevalent in debt securities market.

Given their effect on global financial markets, CRAs are one of the most important examples of the growing privatization of public authority in the global political economy (Scott Kennedy, 2007). As Virginia Haufler notes, authority is not only moving down, it is also “moving sideways,” into the hands of non-state actors<sup>2</sup>. Although there is a consensus that credit rating agencies (CRAs) are powerful private actors in advanced industrialized countries, the source of their influence is still under debate. Some stress the importance of the leading firms’ excellent reputations developed over a century. Others argue that CRAs are powerful because governments make them so, and have turned raters into surrogate regulators, forcing the investment community to obtain and act in accordance with ratings

## **2.2: What is credit rating?**

Credit rating is a mechanism whereby an independent third party (credit rating firm) makes an assessment based on different sources of information on the likelihood of a default on the debt payment of a corporate or government issuer. A credit rating traditionally focuses on the specific debt instrument and not on the overall creditworthiness or financial standing of the corporate issuer (although these factors may to a certain extent influence the rating assigned). A rating also takes in to consideration various credit enhancement tools like guarantee, sinking fund, letters of credit or any other mechanism devised to reduce the default risk on specific issue. Thus a corporate issuer may have different grades of rating for different issues. These ratings are expressed by alpha-numeral symbols, indicating the degree of certainty regarding punctual payment of principal and interest on the rated debt instrument.

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<sup>2</sup> Virginia Haufler, *A Public Role for the Private Sector: Industry Self-Regulation in a Global Economy* (Washington, DC: Carnegie Endowment for International Peace, 2001); Miles Kahler and David A. Lake (eds.), *Governance in a Global Economy: Political Authority in Transition* (Princeton: Princeton University Press, 2003).

Once a rating is assigned, the Credit Rating Agency (CRA)<sup>3</sup> is obliged to monitor the rating throughout the life of the rated instrument. As part of its surveillance, a rating agency may publish a “rating alert” to inform the market of developments which may impact on the status of the rated instrument such as a proposed merger or takeover, changes in government policies, economic environment and the like. On analysis the rating would either be revised or reaffirmed. The surveillance mechanism is a useful device to indicate the current quality of the rated debt instrument and allows investors the opportunity, if they so wish, to realign their investment portfolio<sup>4</sup>.

### **2.3: Development of Credit rating Agencies**

In the past twenty years, the role and complexity of financial markets have grown tremendously, causing a dramatic change in the financial services industry. Issuers, investors, and government regulators have increased their reliance on the opinions of credit rating agencies for corporate financing, investments decisions, attracting direct foreign investment, and risk management. According to Jewell and Livingston (1998), these parties have long considered bond ratings an important part of credit-certification process in the issuance of public corporate debt. Although conflicting views exist on the importance of bond rating, evidence provided by Reiter and Zeibart (1991), Ederington, Yawed, and Roberts (1987), and Lui and Thakor(1984) shows that ratings bring information to the marketplace beyond that conveyed by publicly available financial information alone. In contrast to equity issuance

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<sup>3</sup> Credit rating firms are customarily termed Credit Rating Agencies (CRAs) to reflect the fact that they are working under well government oversight. Throughout this presentation these names may be used interchangeably.

<sup>4</sup> See section 2.5.1 of this paper for the procedural functioning of credit rating agencies.

where investment bankers set the initial price for stock, more than one rating agency often independently certifies the credit quality of a bond issue.

Credit rating has its origin in USA in the late 1900's. The dominant issuers of corporate instruments then were the privately owned railroad companies. Investors purchased these instruments based on 'name' recognition or friendly advice from brokers. Mr. John Moody, the founder of Moody's Investor services, a statistician in a private banking firm, capitalized on the need for a manual which would provide potential investors with pertinent information on industrial companies. In 1909 he published 'Moody's Manual of Industrial and Miscellaneous securities'. Its success led him to introduce 'Moody's weekly Review of financial conditions' in 1909' where among others, he started rating railroad bonds. His ratings were expressed in easy-to-understand alpha-numeral symbols ranging from Aaa (colloquially referred to as 'Triple A') through 'C'. These symbols indicated his assessment of the degree of certainty regarding the punctual payment of principal and interest on the rated bonds. Bonds which are rated 'Aaa' implied the highest degree of certainty of timely payment. Those rated 'C' indicated the highest degree of the risk of default in the payment of interest and principal. The in-between grades (Aa,A,Baa,Ba,B,Caa,Ca) signified relative levels of graduation of risk with regard to the likelihood of timely payment of principal and interest<sup>5</sup>. In 1914 John Moody formed 'Moody's Investor Service', the world's first credit rating agency.

Credit rating was institutionalized as a result of a rule enacted in 1933 by the United States controller of currency that stipulated banks could purchase only securities rated BBB or Baa or

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<sup>5</sup> The prominent rating agencies currently in operation, like the Standard and Poor's, use similar alpha-numeral symbols with the same conceptual implication like that of Moody's Investors services to designate the creditworthiness status of issuers. The symbolic ratings of Moody's and Standard and Poor's are given as an appendix.

above. The concept of rating was reinforced in 1970 to inculcate other instruments like commercial papers and certificate of deposits. Today in USA virtually 100% of debt issued by corporations carries a credit rating assigned by one or more rating agencies (Reiter and Zeibart , 1991).

In essence, a credit rating reflects a rating agency's opinion, as of a specific day, of the creditworthiness of a particular company, security, or obligation<sup>6</sup>. For almost a century, credit rating agencies have been providing opinions on the creditworthiness of issuers of securities and their financial obligations. During this time, the importance of these opinions to investors and other market participants, and the influence of these opinions on the securities market, has increased significantly. This is due in part to the increase in the number of issuers and the advent of new and complex financial products, such as asset-backed securities (ABS) and credit derivatives. The globalization of financial markets also has served to expand the role of the credit ratings to countries other than the United States, where the reliance on credit ratings largely was confined for the first half of the twentieth century.

### **2.3.1: Global overview of the current structure of the credit rating Industry**

according to White LJ (2001)The current structure of credit rating industry can be viewed by dividing the whole global industry into two domains: in the United States and out of United States.

#### ***i. The United States***

There are currently three major bond rating firms in the US: Moody's Investor service, Inc. ("Moody's"), Fitch, Inc. ("Fitch"), and the Standard and Poor's Division of the McGraw Hill

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<sup>6</sup> SEC report, (2001:1). "Report on the Role and Functioning of credit rating agencies in the operation of the securities market."

companies Inc. (“S&P”)<sup>7</sup>. Moody’s is currently a freestanding company that is highly specialized on rating activities. S & P credit rating activities are only part of the larger financial information services that are provided by S & P, which in turn is owned by McGraw Hill. Fitch is owned by a French company, FIMALAC<sup>8</sup>. These as rating firms have substantial rating presence outside the US. They operate in rating activities (especially sovereign rating) in Europe, Asia, Latin America and Africa. Of the three rating firms, Moody’s and S & P are by far the largest.

ii. *Outside the US*

In addition to the major U.S firms, there are at least 55-60 additional credit rating firms in operation outside the U.S that can be readily identified. A cursory look at the list of the credit rating firms currently in operation around the world (see appendix) reveals their fewness. The apparent reason for this is the very intention of governments to clearly control and recognize credit rating firms which precludes a free-riding entry in to the industry; in U.S recognition under NRSRO<sup>9</sup> is essential for competitive operation of a credit rating firm. The huge capital and professional requirements also restrict easy entry in to the business.<sup>10</sup>

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<sup>7</sup> In addition to the three major firms, which are recognized as NRSROs, there are specialized and small firms: A.M.Best devotes itself solely to the insurance industry and the ability of insurance companies to honor their insurance obligations and their debt obligations; Lacle Financial Focus on a mix of banks, other depositories, and title insurance companies; KMV provides estimates of borrower companies’ default probabilities for banks, insurance companies, and other lending institutions in North America, Europe, and the Pacific Rim; and Egan-Jones ratings company provides credit ratings and research on US corporate debt.

<sup>8</sup> Until the end of 2000 Fitch referred to itself as Fitch IBCA, but now seems to prefer Fitch. Fitch merged with IBCA (a UK firm) in 1997, and the combined entity was subsequently bought by FIMALAC. In June 2000 Fitch bought Duff & Phelps. As February 2001 Duff & Phelps was still being maintained as a separate brand name, within Fitch. In December 2000 Fitch absorbed Thomson Bank Watch.

<sup>9</sup> NRSRO stands for “Nationally Recognized Statistical Rating Organizations”. It is a recognition-based regulatory mechanism used in U.S. to accredit CRAs as nationally recognized rating agents

<sup>10</sup> This excludes the narrower and smaller firms

## **2.4: Role and functioning of credit rating Agencies**

The historical logic underlying the existence of credit rating firms has clearly resided with in a basic problem of finance: How do lenders determine the creditworthiness of potential borrowers after a loan has been extended, (White L.J, 2001)? This question will bring the role of credit rating firms to the scene. Credit rating firms can help lenders pierce the fog of asymmetric information that surrounds lending relationship (Fridso, 1999). Equivalently, credit rating firms can help borrowers (and their credit qualities) emerge from that same fog.

### **2.4.1: Functioning of Credit rating Agencies**

Credit rating agencies rate a wide range of debt securities issued by borrowing firms: corporate bonds, commercial papers, certificate of deposit, and many asset-backed securities<sup>11</sup>. Such ratings assigned may either be solicited by issuers (borrowers) or the rating agent may just rate an issuer did not request<sup>12</sup>. In all the cases the raters, unlike auditors, don't conduct formal audits of rated companies or search for fraud, the nature of their analysis is largely dependent on the quality of information provided to them.

Regarding the source of finance, credit rating agencies are largely financed by issuer fees and the subscription fees paid by investors and other users of credit ratings. A rating agency also derives a portion of its revenue from the consultation and advisory service it offers to issuers it rates.

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<sup>11</sup> Rating agencies also rate banks and insurance companies based on their capacity to discharge their financial liabilities to their respective clients. As it is discussed in the upcoming sections, raters are also recently highly engaged in rating governments – sovereign rating.

<sup>12</sup>Even if an issuer decides against seeking a credit rating, a rating agency may nonetheless issue a rating with or without the issuer's involvement. Ratings not initiated at the request of an issuer commonly are known as "unsolicited" ratings.

The major credit rating agencies engaged in the traditional, fundamental credit analysis generally approach the rating process with similar procedures and organizational structures. Organizationally, the larger rating agencies divide the rating universe into separate categories by industry (e.g. energy or banking) and type of instrument (e.g. corporate debt, municipal securities, structured finance). At the center of the rating process is the ad hoc *rating committee* comprised of lead credit analysts, managing directors or other area supervisors.

Rating committee typically convene at the behest of a lead analyst or sector supervisor to, among other things: (a) rate a new issuer or instrument (b) assess a major transaction or event that might impact a current rating; or (c) putting a rating on review for change. The lead analyst frames the issues and presents most of the data under consideration. Opinions of all members are considered and vetted.

Committee deliberations are preceded by regular on-going contacts with issuers and information gathering. Ratings are based on a variety of public and non-public information. Public information reviewed in ratings process typically includes filings with government organ, news reports, industry reports, bond and stock price trends, data from central banks, and proxy statements. Non-public information can include credit agreements, acquisition agreements, private placement memoranda, and business projections and forecasts. The CRAs should pursue confidentiality agreement in the case of non-public information.

Finally an agreement upon symbol of rating (alpha-numeral symbol) that represents the creditworthiness of the issuer is decided. Before publicizing the rating decided, the issuer is given an advice to appeal on the rating decided. However, the right of appeal is limited both in

time and to the submission of new and important information. The time between committee decision and publication varies from a few hours to a few days in order to minimize the inappropriate and premature disclosure of information to the marketplace.

Rating agencies generally surveil ratings overtime by reviewing corporate filings, monitoring industry trends, and maintaining a dialogue with corporate management. Rating agencies communicate the results of this rating surveillance on occasion to the marketplace through the use of “watch lists”. Watch lists signal to the market that a rating is under active review for a change (in any direction).

#### **2.4.2: Role of credit rating**

Credit ratings can play a significant role in the investment decisions of investors, and the value investors place on such ratings is evident from, among other things, the impact ratings have on an issuers’ ability to access capital. Set forth below is a function rating (and rating agencies for that matter) delivers to various market participants (Journal of Malaysian and comparative law -2002: p 3-6).

##### **I) Investor protection**

The independent and objective analysis of the credit quality of debt instruments aids the investors<sup>13</sup> in making informed choices to determine the level of risk and associated returns they are willing to undertake for their investment. Investors, including the buy-side firms – pension funds, insurance companies, mutual funds – may make their own internal credit assessment and investment analysis, but the credit ratings are used as an important professional

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<sup>13</sup> Investors in debt instruments can be individual investors or institutional investors – mutual funds, pension funds, banks, insurance companies etc.

input. Besides the predictive value of ratings, the continuous surveillance of a rating instrument acts as an early warning system to alert investors to any changes in the quality of the rated debt so that investors may reassess their position and realign their portfolio accordingly. Thus if a particular debt is downgraded, investor may decide to sell the investment if they are not prepared to assume the added risk involved.

#### II) Enlarged Investor pool

The alpha-numerical symbol used to show the relative riskiness of a variety of debt instruments are analytical skills which provide access to essential corporate information which is necessary to an informed investment decision. Thus this simple yardstick of evaluation widens the pool of investors.

#### III) Information disclosure

As the corporate debt market develops and the nature and variety of debt instruments increase, even the experienced investors may find increasingly difficult to make informed choice because of the lack of accessibility or complexity of information about the corporate issuer. The nature and specialization of the credit rating agency puts it in a position where it has access to public as well as private, even confidential, information pertinent to the assessment of credit risk. Such information is not usually accessible to the investor. Furthermore, in an environment where public disclosure and accounting standards are not stringent, a competent rating agency bridges this information gap between the issuer of debt and the investor.

#### IV) Efficient capital market

Rating agencies help create an efficient capital market. In theory an efficient capital market is one in which all information required to determine the economic value of an asset is available to all market participants and is in turn reflected in the market price of the asset. Conversely, if markets are not efficient, this reflects the limited information content of securities whose prices

do not reflect the fundamental values of assets. By providing information on default risks, helps investors have access to information to enable them to establish benchmarks for comparing the risk and return on their investment.

#### V) Lower cost of borrowing

A high rating assigned to corporate borrower translates a lower cost of borrowing for the issuer as the credit risk premium demanded by investors is lower. Thus corporate borrowers are motivated to improve financial structures and operating risk to obtain a high rating for their corporate debt. This enables such companies to raise more funds to finance expansion and management of its activities, resulting in higher allocation efficiency.

#### VI) Aids issuer in pricing decision

The interest payable on corporate debts is linked to the rating assigned. Thus a credible and objective rating is an invaluable aid to sell-side firms like investment bankers, underwriters, and brokers to determine the price of the debt. The burden of determining the credit quality of corporate debt is thus shifted to the rating agency.

#### VII) Regulatory use of ratings

Credit ratings/CRA's are used for regulatory purpose – financial regulation. The regulatory use of credit ratings increases their importance to certain market participants. For example ratings play an important role in the commercial paper, bond, and preferred stock markets in restricting investment below a certain level of rating.

#### VIII) Use of ratings in private contracts

The extensive use of ratings in private contracts also has enhanced the importance of credit ratings/CRA's to the marketplace. For example the wide use of “ratings triggers” in financial contracts recently have received considerable attention as certain high profile bankruptcies, such as Enron and Pacific Gas and Electric company (“PG&E”). In essence triggers are

contractual provisions that terminate credit availability or accelerate credit obligations in event of specific rating actions, with the result that a rating downgrade could lead to an escalating liquidity crisis for issuers subject to rating triggers.

#### IX) Helps to attract funds

This is typically observable in sovereign rating – rating a government by considering different macro factors –, in that a country assigned desirable rating could be able to attract more less cost funds and foreign investors.

### **2.5: Uses and Types of Sovereign Ratings**

Apart from rating private issuers, CRAs also are highly working in rating government issuer or borrowers. Like other credit ratings, sovereign ratings are assessments of the relative likelihood a borrower will default on its obligations. Governments generally seek credit ratings in order to ease their access to international capital markets, where many investors, particularly U.S. investors, prefer rated securities over unrated securities of apparently similar credit risk. In the past, governments tended to seek ratings on their foreign currency obligations exclusively, because foreign currency bonds were more likely to be placed with international investors than domestic currency offerings. But in recent years, as international investors have increased their demand for bonds issued in currencies other than the traditional global currencies, more sovereigns have been obtaining domestic currency bond ratings as well.

The credit ratings on a sovereign's foreign currency bonds at present never exceed, and are often lower, than the ratings on its domestic currency obligations( A Jacker, 2005). The rating agencies and investors reason that because governments have broad-ranging powers to tax domestic income and print domestic currency, they may be better able to fulfill their domestic

currency obligations. Nonetheless, domestic currency bond defaults do occasionally occur when the authorities choose to avoid the political consequences of increased tax rates or debasement of the currency.

Sovereign ratings are accorded considerable attention not only because some of the largest issuers on the international capital markets are national governments, but also because these assessments affect the ratings of a large number of other borrowers of the same nationality. The agencies generally do not assign ratings to public or private sector issuers that are higher than their home country's sovereign rating; therefore, sovereign ratings influence the ratings given to local municipalities, provincial governments, and private companies headquartered within the same country.

### **2.5.1: The Development of the Sovereign Ratings Business**

Although the rating agencies' current practice of assigning overall ratings for sovereign risk began only a few decades ago, Moody's has been rating bonds issued by foreign governments since 1919. International bond markets were very active in the early part of the twentieth century: by 1929, Moody's was rating bonds issued by roughly fifty central governments. The demand for sovereign ratings, however, abated with the onset of the Great Depression, and after World War II, the international bond markets came to a standstill. In the 1970s, international bond markets revived, but demand for sovereign ratings was slow to materialize. As recently as ten years ago, only fifteen foreign governments borrowed in U.S. capital markets and felt the need to obtain credit agency ratings. Because these governments were almost all pristine credits, their sovereign risk assessments were quite straightforward and noncontroversial. Other governments were able to obtain credit through other means. A few

financially strong governments gained access to international capital through the Euromarkets without ratings. Less creditworthy sovereigns generally obtained international credit from banks, and a few issued privately placed bonds without credit ratings.

The sovereign ratings business took off in the late 1980s and early 1990s when weaker credits found market conditions sufficiently favorable to issue debt in international credit markets. These governments increasingly tapped the Yankee bond market, where credit ratings are a de facto requirement. Consequently, the growth in demand for rating services has coincided with a trend toward assignment of lower quality sovereign credit ratings. Before 1985, most initial ratings were AAA/Aaa; in the 1990s, the median rating assigned has been the lowest possible investment grade rating, BBB-/Baa3.

With the increase in demand for ratings, agency sovereign rating activity has returned to pre-Depression levels. Today Moody's and Standard and Poor's are major sovereign raters. In the last few years, three additional rating agencies—Duff and Phelps, IBCA, and Thomson Bank Watch—have ventured into the sovereign rating business as well.

### **2.5.2: Sovereign rating procedures**

The process and methods used to establish or assign credit ratings varies widely among CRAs. However, the procedures followed are not quite different from the methods used in private-issue rating. Sovereign rating takes in to account both the willingness and ability of a government to repay its debt in a timely manner.<sup>14</sup> It considers both Probability of Default (PD) and the Recovery Rate (RE) after default has occurred.

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<sup>14</sup> Moody's special comment (August 2006:1). "A Guide to Moody's sovereign Ratings"

In assessing sovereign risk, CRAs highlight several risk parameters of varying importance: (i) economic; (ii) political; (iii) fiscal and monetary flexibility; and (iv) and the debt burden. Economic risk addresses the ability to pay its obligations on time and is a function of both qualitative and quantitative factors. Political risk addresses the sovereign's willingness to repay debt. Willingness to pay is a qualitative issue that distinguishes sovereigns from most other types of issuers. Partly because creditors have limited legal redress, a government can (and sometimes does) default selectively on its obligations, even when it possesses the financial capacity for debt services. In practice, political risk and economic risk are related. A government that is unwilling to repay debt is usually pursuing economic policies that weaken its ability to do so. Willingness to pay, therefore, encompasses the range of economic and political factors influencing government policy (see box in the annex).

Bhatia (2002), notes that CRAs analyses prior to the Asian financial crisis focused on traditional macroeconomic indicators with limited emphasis on contingent liability and international liquidity considerations. Moreover, private sector weaknesses were not included in the analyses of sovereign rating.

## **2.6: Credit Rating Agencies in the light of Regulation**

Governments remarkably consider credit rating in their regulatory endeavor from two important, but interrelated, views. First, credit rating agencies contribute a great deal to the financial oversight of a particular nation. Rating-based regulations not only partly curb possible financial instability but also enhance the demand for the existence of CRAs. Secondly, there should also be legislative regulatory solutions that dictate or guide the operation of credit

rating agencies themselves. These two issues are detailed in the following two sections.

### **2.6.1: Need for regulation**

Credit rating agencies (CRAs) play a very meaningful role in today's financial markets. According to Moody's (2006) - one of the largest CRAs worldwide - , the volume of rated debt issues increased globally from US\$ 3,500 billion in the year 2002 to over 8,000 billion in 2006. In principle, credit ratings should serve as third-party opinions about the solvency of a debt instrument and should reduce the information asymmetry between an issuer of a debt instrument and the potential investors, and therefore improve efficiency and transparency in financial markets. The CRAs pronounce that their credit ratings should not be interpreted as default probabilities and that credit ratings are rather opinions about risk only. The higher is the credit rating of a debt instrument, the less likely it should be to default and the longer it should take to default. A closer look at corporate scandals and financial crisis during the last years reveals that CRAs have been involved several times and have been confronted with heavy criticism for publishing inaccurate credit ratings. Examples are the Asian crisis, where the CRAs gave Thailand an investment-grade rating until five months after the start of the crisis or the Enron case, where the CRAs gave Enron investment-grade until days before it went bankrupt. Another recent example for public discussion about the behavior of CRAs is the debacle of subprime lending in the USA with its impact on financial markets globally.

Furthermore, as ratings are generally issued at the request of the issuers, who are the ones paying for the rating service, there arises conflicts of interest. This conflict of interest arises insofar as issuers may be tempted to pressure the CRA into issuing a higher rating. CRAs have however generally taken steps to prevent such conflicts, by either disclosing them, or ensuring

that they are independent as regards their ownership structure and not letting any single issuer account for more of a certain percentage of their revenue.<sup>15</sup> However, the fact that CRAs sometimes provide certain ancillary services in addition to credit ratings is considered as the greatest potential source of conflict of interest in the CRA-issuer relationship insofar as, as it happened in the financial analyst and accounting sectors, issuers may use the incentive of providing the CRA with more ancillary business in order to obtain higher ratings.<sup>16</sup> CRAs indicate that they deal with this issue by either refusing to provide ancillary services or setting up firewalls between the two lines of business.<sup>17</sup>

Conflicts of interest may also arise in the CRA's relations with its subscribers. CRA have access to confidential information on issuers and may be tempted to "sell" it to their subscribers. In the E.U., this issue is dealt with under the Market Abuse Directive. In the U.S.,

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<sup>15</sup> See SEC Report, p. 23: "In general, hearing participants did not believe that reliance by credit rating agencies on issuer fees leads to significant conflicts of interest, or otherwise calls into question the overall objectivity of credit ratings. While the issuer-fee model naturally creates the potential for conflict of interest and ratings inflation, most were of the view that this conflict is manageable and, for the most part, has been effectively addressed by credit rating agencies. The rating agencies take the position that their reputation for issuing objective and credible ratings is of paramount importance, and that they would loathe to jeopardize that reputation to mollify a particular issuer. Furthermore, the rating agencies have implemented a number of policies and procedures designed to assure the independence and objectivity of the ratings process, such as requiring rating decisions to be made by a ratings committee, imposing investment restrictions, and adhering to fixed-fee schedules. (...) While most hearing participants agreed that, for the most part, the rating agencies had effectively managed this potential conflict, they stressed the importance of credit rating agencies implementing stringent firewalls, independent compensation, and other related procedures."

<sup>16</sup> The AMF Report indicates that these services include (i) comprehensive analyses of ratings for investors and market professionals, who are often paying subscribers; (ii) access to databases and tools for research and credit risk modeling (although these services may be spun off in a subsidiary); (iii) general information services, such as general news, macroeconomic and industry analysis, impact of current events, market trends, and credit default surveys; and (iv) "rating assessment services" for strategic projects, which involve giving an opinion on potential ratings, given scenarios described by the issuer for strategic acquisitions, mergers and spin-offs. These opinions are not published and CRAs providing these services reserve the right to change the rating once the transaction has been completed.

<sup>17</sup> AMF (French securities regulator) Report, p. 18. CRAs consider that rating assessment services are different from "rating advisory" services provided by banks in that CRAs do not advise issuers on what structures to implement in order to obtain or maintain a given rating. However, one CRA stated that "in some cases, a request from an issuer could create an inappropriate level of conflict", in particular in the case of hostile takeovers. It has been pointed out that the provision of rating assessment services may be particularly critical in terms of potential conflicts in the business of rating securitization and other structured finance vehicles, since the vehicle's rating is crucial to the way the operation is structured. However, neither CESR nor the SEC are of the opinion that, despite this increased conflict of interest risk, this type of rating merits a special regulatory treatment other than an organizational structure and rules and procedures designed to avoid such conflicts in general.

SEC Regulation FD prohibits the disclosure of selective information by issuers but exempts NRSROs. As a result, the SEC's Proposed Rule suggests that this issue be dealt with through internal procedures preventing conflicts of interest and the misuse of confidential information, including confidentiality agreements. The IOSCO Code states that: "the CRAs should use confidential information only for purposes related to their rating activities or otherwise in accordance with their confidentiality agreements with the issuer".

The competence level of the credit analysts, maintenance of adequate capital, and promotion of competitive business environment are also concerns requiring regulatory oversight in the credit rating industry.

Despite all the above propositions for regulation, CRAs remained themselves largely unregulated<sup>18</sup>, but the discussion on further regulation is active in the media as well as in institutions of financial market supervision.

### **Alternative Regulatory parameters**

"In view of the discrepancy between reliance and reliability (what credit ratings are and what they should be or what the marketplace expect them to be) and the dangers of reliance per se, alternative regulatory policies may be adopted<sup>19</sup>".

#### **A. Regulating credit ratings**

Taking into account the increasing reliance of market participants and regulators on credit ratings, a first option would have been to regulate credit ratings themselves in order to guarantee that they were reliable. This could be described as an "accounting standards" type of

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<sup>18</sup> Amelie Champsaur (May 2006:35). "The Regulation of Credit Rating Agencies in the U.S. and the E.U.: Recent initiatives And Proposals"

<sup>19</sup> Amelie Champsaur (May 2006:35). "The Regulation of Credit Rating Agencies in the U.S. and the E.U.: Recent initiatives And Proposals"

regulation. It would entail precise substantive rules governing credit rating methodologies in order to ensure that credit ratings are accurate.

Nevertheless, this option raises serious legal and practical issues. The first is that, although investors and regulators perceive credit ratings as accurate indicators of credit risk, legislators, courts and regulators (both in the U.S. and the E.U.) consistently define them as opinions and consider that there should be no substantive regulation of credit rating methodologies.<sup>20</sup> U.S. courts even have considered that investors' reliance on credit ratings as though they were "guarantees" of a certain level of credit risk was "unreasonable".

Treating credit ratings as opinions makes sense from a policy point of view. First, CESR, SEC and IOSCO as well as most commentators agree that requiring credit ratings to meet certain substantive standards would discourage innovation and would be excessively burdensome and costly. Second, it is consistent with the way credit ratings are produced and the fact that they comprise both objective information and subjective, sometimes even predictive assessments. As opposed to financial statements, credit ratings do not seek to present existing information according to certain conventions, in order to make them comparable, they seek to produce new information, by analyzing a set of different factors (CRAs will not all use the same relevant factors) using CRA-specific and constantly evolving methodologies. Of course financial statements are also to a certain extent opinions, but they are based on conventional accounting rules, whereas there is no convention between CRAs as to what credit risk actually is. CRAs produce not only credit ratings, but their own definition of what credit risk means in the context of a particular entity. Absent a consensus on the definition and measurement of credit risk, regulating credit ratings substantively seems difficult at this stage.

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<sup>20</sup> See *supra* n.38

However, the fact that credit ratings should be considered as opinions for the time being does not necessarily entail that CRAs should not be regulated at all. It is possible to take an analogy with journalism ethics: not regulating contents does not mean not regulating at all. Enacting and establishing a professional code of conduct is a way, if not of guaranteeing accuracy of the result, at least of ensuring integrity of the process. Opinions cannot be required to be “accurate”, but it does not mean they can be allowed to be random or unreasonable and that CRAs should not be responsible for the process through which they are assigned and published.

**B. Regulating CRA activities: establishing conduct of business rules**

Instead of regulating credit ratings, it may be possible to regulate CRA activities, as a means to ensure credit rating reliability. This could be described as the “financial analyst” type of regulation. It acknowledges that credit ratings are opinions and does not require that credit ratings be substantively accurate or comply with certain specific conventions. It merely imposes conduct of business rules in order to ensure the integrity of the credit rating process, with respect to the establishment of contacts and commercial relations with the issuer, the collection of information from the issuer, the fair and skilled treatment and analysis of such information, including the provision of adequate and sufficient information on how the rating was determined, and the disclosure of credit ratings to the issuer and the market. In addition, reliability implies independence of CRAs from outside influences that may “corrupt” this process: CRAs should therefore avoid impropriety as well as the appearance of impropriety, which implies dealing with conflicts of interests which may arise in the CRA’s relation to both issuers and subscribers.<sup>21</sup>

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<sup>21</sup> See supra Section I.C

### C. Enforcing conduct of business rules

The surest way to ensure CRA compliance with the IOSCO Code or with IOSCO Code-type principles would be to require CRA registration and ongoing oversight as a condition of conducting their activities in the E.U. (with a E.U. passport/mutual recognition system) and in the U.S. as is the case for banks, thus acknowledging that CRA activities involve public interest and systemic risk issues.<sup>22</sup> Mandatory registration would give regulators the opportunity to examine CRAs' capital structure, resources, level of staff competence, record-keeping, etc and the threat of temporarily or permanently losing the CRA license upon periodic examination of IOSCO Code compliance would likely be the strongest possible incentive for CRAs to comply with those rules and would allow regulatory elimination of non-performing CRAs. However there are strong objections to this solution, which may reflect more than just industry capture. First, in the E.U. there is already a recognition/ongoing oversight procedure under the CRD<sup>23</sup>, and creating another structure for the purpose of enforcing the IOSCO Code would be to a large extent duplicative and burdensome for CRAs and regulators. On the other hand, CESR points out that relying solely on the CRD procedure – integrating IOSCO rules as an element of CRD recognition/oversight – might not be a sufficient incentive for CRAs to comply with IOSCO rules, since (i) not all CRAs might seek CRD recognition, and (ii) criteria examined for the purpose of CRD recognition<sup>24</sup> are used only to ensure that CRAs can be relied on to determine risk-weighting exposures, and thus that they are reasonably reliable, whereas IOSCO and securities regulators are concerned with a wider range of issues, such as credit ratings' impact on the market, and thus with disclosure, presentation and information flow matters. CESR argues however that those “securities” concerns can be for the most part

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<sup>22</sup> See the E.U. Parliament Report (and *supra*, n.16)

<sup>23</sup> CRD refers to “Capital Requirements Directives”

<sup>24</sup> High-level principles are included in the CRD (see *supra*, n.71) and CEBS (the Committee of European Banking Supervisors) is currently working on a more specific set of criteria.

dealt with under the Market Abuse Directive.<sup>25</sup> A second objection is that a registration system would create additional barriers to entry in an already oligopolistic market, and further decrease the possibility of CRA market self-regulation. Interestingly enough however, the smallest CRAs, who should be advocating lower barriers to entry, are the only market participants in favor of a registration procedure, insofar as it would place more importance on tangible, immediately attainable factors (staff competence, resources, etc) rather than the credibility criteria. Hence, CESR notes that a lighter form of registration (i.e. a voluntary, periodically renewable recognition system including reporting mechanisms) might be more efficient in terms of balancing compliance, competition and regulatory costs concerns and that, in any case, competition concerns should be dealt with not by securities or banking regulators, but by competition authorities. The third and main objection to a registration or even voluntary recognition procedure, especially in the U.S. and in the E.U., is that there have not been market failures great enough to justify such a pervasive level of CRA regulation.<sup>26</sup>

The CRAs' auditors could be in a position to assess compliance; however, assessing effective compliance would require a type of expertise – if it is not to be a merely formal assessment – that is not part of auditors' missions. Therefore, the issue of CRA compliance remains open, even in the U.S. and in the E.U., in the form of a common “wait and see” approach.

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<sup>25</sup> CESR Technical Advice, n. 235-245 (arguing against the inclusion of the IOSCO Code within the CRD's recognition procedure)

<sup>26</sup> See CESR Technical Advice, n. 260. The SEC merely states in the Proposed Rule (p.4) that “ this proposal is intended only to address the meaning of the term “NRSRO” as it is used by the Commission; it does not attempt to address many of the broader issues raised in response to the 2003 Concept Release”. However, there may also be legal issues preventing pervasive regulation of CRAs in the U.S.. Commissioner Paul S. Atkins noted in a March 3, 2005 speech (Statement before the Open Meeting regarding NRSRO Proposing Release) that “ the limited approach taken in the current proposal reflects the SEC's lack of statutory authority over NRSROs”

### **2.6.2: The regulatory value of credit ratings**

Despite the fact that CRAs faced a series of scandals, issuers, investors, and regulators continuously use products of these agencies; and even getting double rating as a means of winning more investor reliability is customary in today's business environment. This is due to the ever-mentioned multiple values CRAs deliver to the various users: *Informational value* (reducing the informational asymmetry in the securities market), *Transactional value* (the "guarantying" function to facilitate easy sale of securities due to the rating assigned), and *Regulatory value* (using CRAs as a tool of regulating the financial sector) (Amelie Champsaur, 2006). The regulatory value of the CRAs is dealt in a more detail below

Securities and banking regulators in the U.S. and the E.U. rely increasingly on credit ratings. In the U.S., the NRSRO designation has been in place since 1975. The SEC initially created it in order to facilitate the application of the net capital rule to broker-dealers. Rule 15c3-1 provides that favorable net capital requirements apply to "investment grade" securities held by broker-dealers. In order to determine whether a security was "investment grade", the SEC elected to rely on CRAs that were widely and reasonably relied on by the marketplace instead of making its own credit risk assessments.<sup>27</sup> The SEC, other state and federal regulators and the legislator have since then incorporated reliance on NRSROs for an increasing number of regulatory purposes, the most important of which are (i) Rule 2a-7 of the Investment Act, that limits money market fund investments to high quality short term securities, NRSRO ratings being

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<sup>27</sup> SEC Report, p. 6: "The net capital requires broker-dealers, when computing net capital, to deduct from their net worth certain percentages of the market value of their proprietary securities positions. A primary purpose of these "haircuts" is to provide a margin of safety against losses that might be incurred by broker-dealers as a result of market fluctuations in the prices of, or lack of liquidity in, their proprietary positions. The Commission determined that it was appropriate to apply a lower haircut to securities held by a broker-dealer that were rated investment grade by a credit rating agency of national repute, because those securities typically were more liquid and less volatile in price than securities that were not so highly rated. The requirement that the credit rating agency be "nationally recognized" was designed to ensure that its ratings were credible and reasonably relied upon by the marketplace"

used to establish minimum quality standards, and (ii) Form S3 of the Securities Act of 1933, which is a “short form” registration statement eligible only for nonconvertible debt, preferred securities, and asset-backed securities rated investment-grade by at least one NRSRO.

Regulatory reliance on CRAs is not as developed in the E.U. as it is in the U.S.<sup>28</sup> As opposed to the first Basel agreement, the Basel II Agreement seeks to implement capital requirements based on the bank counterpart’s actual credit quality, instead of *a priori* credit assessments based solely on the debt belonging to a certain category. The “standardized approach” under the Basel II Agreement thus provides that banks will have the option of determining credit quality on the basis of credit ratings provided by external rating entities, including CRAs<sup>29</sup>. At this stage, the implementation of Basel II in the U.S. has not given rise to discussions on the need to reassess the NRSRO designation in this particular context. In the E.U., Basel II is being implemented in the form of the CRD, which was adopted by the E.U. Commission in July 2004.

In addition to being valuable to regulators, credit ratings used in a regulatory context are valuable to issuers insofar as they guarantee access to favorable, lighter regulatory treatment either directly (access to the integrated disclosure system, for instance), or indirectly, by rendering them more attractive to their counterparties (e.g. banks and money market funds...).

CRAs have even been considered as being principally engaged in the business of “selling

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<sup>28</sup> See Basel Committee on Banking Supervision, Credit Ratings and Complementary Sources of Credit Quality Information, *Working Papers No. 3 (2000)*. Most E.U. countries do not rely on CRAs for regulatory purposes, except for the purpose of evaluating market risk, as provided in the Basel I Agreement.

<sup>29</sup> See Howell E. Jackson, The Role of Credit Rating Agencies in the Establishment of Capital Standards for Financial Institutions in a Global Economy, in *Regulating financial services and markets in the 21<sup>st</sup> century*, Ed. Eilís Ferran and Charles A.E. Goodhart. Oxford, Portland, Or., Hart Pub (2001).

regulatory licenses”.<sup>30</sup> Although this view has been challenged,<sup>31</sup> the regulatory value of credit ratings nonetheless provides at least a partial explanation for the persistently high demand for credit ratings despite proven shortcomings in their informational input and predictive capability.

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<sup>30</sup>See in particular Frank Partnoy, *The Siskel and Ebert of Financial Markets?: Two Thumbs Down for the Credit Rating Agencies*, 7 *Wash. U. L. Q.* 619, 658 (1999) and *The Paradox of Credit Ratings*, in *Ratings, Rating Agencies and the Global Financial System* (Richard M. Levich et al. eds., 2002).

<sup>31</sup>Claire A. Hill, *Regulating the Rating Agencies*, 82 *Wash. U.L.Q.* 43 (2004).

## **Part Three**

### **Presentation and Analysis of Empirical literature and collected data**

This part is meant for presentation of analysis made based on primary data procured by questionnaire and interview, secondary information tapped from various sources and the review of empirical studies. The presentation mainly uses secondary data and relevant earlier findings regarding the rating experience of peer countries considered for reference. However, responses gathered from potential stakeholders of “credit rating industry in Ethiopia” are used to give a contextual foundation to the theoretical arguments raised by secondary data with the standpoint of credit rating business.

It is entirely a comparative analysis made by taking account of the good experience of Asian countries who registered remarkable achievement in the development and operation of capital market and credit rating business. This region is selected because most of the countries in the area have witnessed remarkable developments with this regard, though the capital markets and the rating industry is not so long-standing. Where as, in most of the African nations this concept is new without depicting noticeable development; so is barely used as a reference for best experience. Moreover, the credit market and rating industry of the US and Europe is slightly traced due to the long-standing nature of the markets and wider socio-economic gap between those nations and Ethiopia.

The analysis begins with highlighting on the subjects of the study, limitations of the study, and respondents profile. Thereafter analysis is made regarding the status, prospect, and contribution of capital market (especially bond market) in Ethiopia to give a plausible ground for my

argument in favor of establishing Credit Rating Agent in Ethiopia. In this section, analysis is also made with respect to the short-comings of the existing banking system. Then a section is allotted to describe the potential role credit rating industry is assumed to play in the Ethiopian Economy. Sovereign rating, regulating domestic Credit rating Agency (DCRA), and challenges for the development of DCRA are presented in the subsequent sections.

### *I. Sample*

The sample consists of two groups: (1) potential investors represented by 7 insurance companies and the Ethiopian Social security Agency and (2) the lending side players assumed to be potential investors (or issuers), represented by 8 commercial banks.

Two questions are developed for the groups each with 12 close-ended questions and four open ended questions. The two questionnaires have five common questions which are analyzed together. All questionnaires sent to the potential investors are returned, therefore, 100% response rate. Likewise, in the other group, from eight surveys eight usable responses are returned, again yielding 100% response rate.

Besides, an interview is held with the head of Banking Supervision and the Research and Development director of National Bank of Ethiopia (NBE) to procure supplementary information in bank operation and policy matters.

### *II. Potential Limitation*

Insurance companies are not the only potential investing players in the capital market. However, manageability and unavailability of clear-cut parameters to select individual retail inventors compelled the study to lean totally on the aforementioned subjects.

Secondly, the existence of potential corporate bond issuers or small and medium size Enterprise (SME) issuers is just taken for granted. Therefore, such capacity is not investigated apart from referring earlier studies confirming such fact.

Lastly, due to unavailability of compiled data, for example on bond market capitalization and number of bank credit accounts; indirect plausible estimates are made for the sake this analysis.

### *III. Respondents profile*

Virtually all respondents to the questionnaire sent to banks (lending-players) hold senior credit management and finance positions— credit officer (75%), finance head (12.5%), and Other (12.5%). The most common positions held by respondents to the survey of institutional investors are finance head (75%), portfolio manager (12.5%), and Other (12.5%); see table 1. Therefore, responses are obtained from targeted and appropriate personalities in the respective organizations.

**Table 1: Respondents profile**

<i><b>Position</b></i>	<i><b>Banks</b></i> <i>N=8</i>	<i><b>Potential investors</b></i> <i>N=8</i>
<b>Credit officer</b>	6	-
<b>Finance head</b>	1	<b>6</b>
<b>Portfolio manager</b>	-	<b>1</b>
<b>Other</b>	<b>1</b>	<b>1</b>

Source: compiled from primary data

## **Section 3.1. Prospects for bond market development and the Emergent need for credit Rating agency in Ethiopia**

Demand for the existence of the credit rating agent can be naturally argued indirectly by shedding light on the impetus for the development of securities market (especially the bond market) (Kazumi Takemoto, 2004). Moreover, the credit rating industry also augments the banking sector by disseminating information about borrowers thereby minimizing the prevailing systematic risk in the credit market. Bond market also has a lot to do for Ethiopia in the present ignited economic development of the country.

### **3.1.1 Promotes general growth**

Empirical studies to buttress whether capital market establishment and development has a positively significant effect on economic growth of a nation or not were made for years by different financial architects. Albeit the scholars failed to agree on the specific country-wise circumstances that optimally call for the development of capital markets, a good number of them advocate the sheer contribution this market makes to develop a robust economy.

In Ethiopia too, various works (Amare, 2008; Tessema, 2003) took a crack to signify the importance of development of capital market, especially bond market, in the country. And this part of the paper is meant for complimenting the same proposition — Ethiopia will probably have efficient allocation of funds between savers and seekers with the supplementation of the banking sector with active bond market and conception of a credit rating agent.

As per( Murinde, 1999), Levine (1997) looked the contribution of financial sector to economic growth in Africa from the macroeconomic point of view and Levine and Zeros(1998) interms of the specific roles played by capital markets and banks in economic growth; the supply “leading hypothesis” and the “demand following hypothesis”. The “supply leading hypothesis” predicts that growth in the financial system (e.g. banking and capital markets) induces further growth in the real economy. It is implied that developed financial system (e.g banks and capital markets) hinders economic growth of nations. On the other hand the “demand following hypothesis” predicts that economic growth in the real economy induces financial development. That is, increased growths as well as the commercialization of agriculture and other traditional subsistence sectors create demand for financial services.

The study of St. Hill (1992), cited by Murinde(1999) finds moderate support for the supply leading hypothesis for a sample of 37 least developed countries (LDCs) which is in line with the positive correlation between capital market and economic growth linkage. The demand following hypothesis is established for a sample of 19 industrial countries.

Murinde(1999) mentioning the seminal paper by Patrick (1996: 176-7), suggests that in the early stage of economic development a supply leading pattern is the more likely, because a direct stimulus is needed to garner savings for investment. During the later stages, when the financial sector is fully developed, the demand following pattern takes over. This finding provides a reasonable basis to the point that Ethiopia, with a nascent financial sector, needs a viable capital market to further ignite the simulated economic growth.

The World Bank's well-known 1993 report on the East Asian Miracle; Economic growth and Public Policy, fosters the above argument. According to this report:

*The eight 'High Performing Asian Economies' (HPAEs) — Japan, South Korea, Hong Kong, Taiwan, Thailand, Malaysia, Singapore, and Indonesia — had succeeded by a number of common means: by insuring low inflation, effective banking system, financial liberalization and institutionalization, education etc.*

Therefore, Ethiopia who is in the midst of economic transformation from a centralized to a market economy should give due emphasis to the effective operation of, particularly, the financial sector by considering good-experiences of other countries. These experiences of other countries may not be taken as a blueprint because of differing country needs, but used as general roadmaps.

### **3.1.2 Filling the financing gap**

In most countries the development of bond markets takes precedence over the equity market (Tessema, 2003). Moreover, bond market developments commence with Treasury bond markets. Existence of liquid Treasury bond market has considerable contributions to ameliorate the existing economic conditions. For instance Siriwardena(2007) stated that the rationale for developing treasury bond markets in Sri Lanka<sup>32</sup> is to develop a marketable, medium to long term debt instruments to mobilize funds from non bank domestic sources to finance fiscal deficit and to develop the financial system in the country. The persistently high budget deficit in the 1990s (see annex 1) compelled the government to introduce marketable debt instruments in order to mobilize funds from non-captive type investors in the domestic market (ibid). This measure of the government enabled Sri Lanka to overcome the decades-long budget deficit and

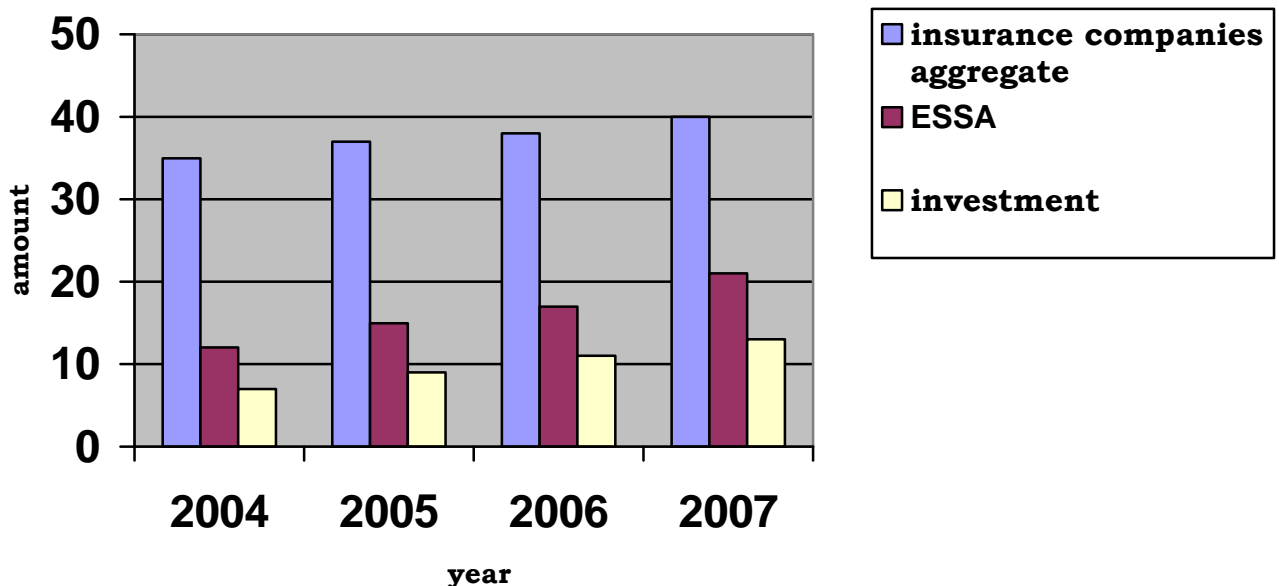
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<sup>32</sup> Sri Lanka is one of the southeast Asian countries with a nascent bond market and credit rating industry

such debt instruments contributed even as far more than 10% percent of the total budget deficit.

Likewise, in Ethiopia where government deficits is mounting from period to period (see annex 1) the introduction of marketable debt instruments is a plausible step to curb the blow of budget deficit, taking the good experience of Southeast Asian countries —particularly Sri Lanka. This is because money can be considerably raised from individual, captivated and non-captivated institutional investors<sup>33</sup>. A curtsey look at the graph below shows the trend of investable fund— (float premium and reserve) for insurance companies and employ retirement savings for the Ethiopian social security Agency(ESSA)— and amount of fund invested is.

**Graph 1: fund available for investment (and invested amount) by potential investors (in mns)**



<sup>33</sup> Non-captivated institutional investor refers to those institutions that don't lie under close oversight of regulators for their investment activities.

The above proposition can be further substantiated by the fact that one of the proposals of the IMF *structural adjustment in Ethiopia* required the country to establish a bond market for private and public sector investment project to facilitate the long term placement of funds held by public institutions, such as the pension funds.<sup>34</sup>

Besides, the escalating private investment in the country, including foreign direct investment (see section 3.3), is also a peerless indicator that there is a reliable base of issuers for initiating corporate bond market in Ethiopia. Hence, there is an important saving and investment base to initiate bond market in Ethiopia.

### **3.1.3 Acts as foreign currency Hedge**

The development of treasury (Government Issue) bond market helps reduce government reliance on local banking system and international capital markets in mobilizing commercial type borrowings to finance the resource gap. In turn, it would help to improve risk management in public debt; lowering risks in relation to interest rate, foreign exchange and refunding exposure, thereby making the economy more resilient to crisis. And it is the development of treasury bond market that acts as a benchmark for the development of corporate bond market.

More importantly, domestic bond market helps to reduce foreign currency denominated commercial borrowings, which could affect the net worth of borrowing through currency mismatch. Whereas raising funds through the local bond market provide a natural hedge that makes neutral effect to the net worth of borrowers.

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<sup>34</sup> See Ethiopia– Enhanced Structural Adjustment Facility; Medium Term Economic and Financial Policy Framework Paper, 1998/99-00/01:

Therefore, stimulated and active domestic bond market development is timely to provide a long-term economic solution to the recently developing rampant foreign currency bottleneck in the long-suffering Ethiopian economy.

### **3.1.4 Enhancing credit penetration by improving and supporting the performance of the banking sector**

Efficient bond market helps to diversify risks away from the banking sector. Ethiopia credit market is materially underdeveloped. The lending/borrowing market in the country predominantly makes use of the banking sector. And the banking sector has witnessed considerable risk and short-comings due to its power and dominance in the credit market. This makes total reliance on the banking sector to be threatening as it may lead to Asian-like crisis if it is not properly regulated and augmented by other financial infrastructure. Powerful banks were created in the long course of bank lending who make collusion and lend money based on established relation than a thorough risk assessment of the borrower. For instance in Commercial bank of Ethiopia the magnitude of NPLs stood at 61.8% of the total outstanding loans as at the end of 2002(Commercial Bank Restructuring Plan; commercial bank of Ethiopia 2003:3). Even after the restructuring, as the NBE banking supervision head, the recent average NPL of commercial banks is 10-20%. This improvement is even the result of an increased emphasis on collaterals as minimum requirements to lend.

Gote Hanson(2004) demonstrates that the current problems in NPLs in Ethiopia have their origin in a number of reasons: poor accounting and auditing procedures, corruption, and bank competence. Here the intention is to accent lack of competence in the banks. To this end, a survey made on the banks and insurance companies (table 2) regarding the academic and

professional competence of the banks' and insurance companies' credit officers and portfolio managers, respectively depict that almost all of them have hardly three years work experience without academic qualification that suits the specific job they are performing.

**Table 2: competence of banks and potential investors in making investment decisions, as a function of staff qualification**

<i>Staff qualification</i>	<i>Banks</i>	<i>%</i>	<i>Potential investors</i>	<i>%</i>
<b>Academic:</b>				
Diploma	-	-	-	-
First degree	8	100	8	100
First degree + international certification related to the work	-	-	-	-
Masters degree + international certification related to the work				
<b>Experience:</b>				
Less than 3 years	7	87.5	5	62.5
Three to six years	1	12.5	3	37.5
Six to ten years	-			-
<b>Greater than ten years</b>	-			-

Source: compiled from primary data collected

Greater reliance on collateral is, therefore, another distinguishing feature of bank lending in Ethiopia. Survey made on the relative importance given to factors considered in credit provision exhibit the fact that much emphasis is laid on collaterals than the financial well being of the applicant, thereby limiting access to credit (table 3 below). In the light of which, on

average roughly 20-25% of credit applications in a particular year are declined due to inability to extend sufficient collateral.

**Table 3: Perceived importance of information sources in deciding to grant loan**

<i>Factors</i>	<i>n</i>	<i>Rank of importance</i>			<i>mean</i>	<i>Rank</i>
		1	2	3		
Client financial standing	8	0.875	0.125	0	1.125	1
Collateral	8	0.75	0.125	0.125	1.375	2
Payment history	8	0.25	0.625	0.125	1.875	3
<b>Business kind</b>	8	0.125	0.25	0.625	2.5	4

*Note: while 1= is very highly important, 2= is highly important, 3= is important. So, the lower the mean the higher the perceived relative importance. The mean is calculated by considering the ranks of importance as weights. Finally the higher the mean the lower the rank.*

Commercial banks are also condemned for their determination to finance only short term projects with lesser risk. As per the banking supervision head of National Bank of Ethiopia (NBE), this banking sector myopia will get awful with the adoption of risk-based capital adequacy requirements for commercial banks<sup>35</sup>.(see annex 3 for Basel Accord)

The cumulative outcome of all the above inefficiencies of the banking sector is less credit penetration in the country. Credit penetration can be measured by comparing number of credit accounts and population size. Table 4 below shows that Ethiopia with a population of well above 75 million has only 120000 credit accounts served by the banking system. This means

<sup>35</sup> Basel I and the currently operational Basel II Accord are the two risk management requirements for commercial banks. Ethiopia has applied Basel I and looking forward to apply Basel II

less than 1% of the Ethiopian population is exposed to bank credit. Bank also contributed 19.1% of GDP in the year 2004. A cursory look at the table enables to conceive that the credit market, in fact considering the banking sector only, is less desirable in Ethiopia than most of the sub-Saharan countries(SSC) cited. This fact gets bitter when we consider that some of these countries have relatively operational capital markets in addition to the banking sector, unlike Ethiopia.

**Table 4: Comparison of number of credit account and Population, 2007**

<i>country</i>	<i>population</i>	<i>Credit account</i>	<i>Bank credit as %ge of GDP</i>
<i>Kenya</i>	35,707,817	>1,000,000	22%
<i>Nigeria</i>	134,859,730	>5000,000	43%
<i>Ethiopia</i>	75,000,000	<500,000	23%
<i>Ghana</i>	24,409,572	>400,000	29%
<i>Tanzania</i>	39,445,392	>1,000,000	19%
<i>Angola</i>	20,000,000	200,000	25%
<i>Mozambique</i>	15,000,000	220,000	33%
<i>Egypt</i>	83, 887,007	>4,000,000	31%
<i>Uganda</i>	31,195,754	>700,000	25%

Source: allAfrican.com and IFC estimate 2007

All these open a window of opportunity to propel for the establishment of a functional bond market that will significantly improve borrowers' access to credit. And it is timely to cry for capital market in the light that bond market provides an easy access to fund at a lesser cost—partially curbing the credit accessibility problem.

A discussion made with NBE Research and development officials revealed that currently there is no crystallized policy framework that is designed to establish capital market and promote corporate borrowing instruments in the country. But researches underwent and works are ongoing as per the financial sector capacity building project of National bank of Ethiopia financed by the World Bank. National Bank of Ethiopia (NBE) is undertaking a three years financial sector capacity building project (ending June, 2009) financed by the World Bank - International Development Association (WB-IDA). And one component of the projects is establishing bond market.

This is a signal that sooner or later Ethiopian will embark on the establishment of a capital market. And my argument for the conception of credit rating firms mostly makes use of the foregoing prospects for the development of bond and other instrumental borrowing in Ethiopia as rating agencies are more functional in cases; but credit rating firms have remarkable role to play even in the banking industry.

### **Section 3.2: Role of, and need for, Domestic credit rating Agency in Ethiopia**

Numerous research works at different capacities have documented propositions for whether Ethiopia needs a capital (or bond) market. Nonetheless, none or few of these studies emphasized what preconditions or structural arrangements should be put in place before and during the establishment of bond market.

A well-functioning bond market involves various stakeholders. The priority of developing the bond market is to make sure that market structure including the legal and regulatory framework and rating agencies are duly established to support the issue of bonds, investment process and trading activities in the bond market (Siriwardena, 2007). A well-developed and robust market infrastructure (importantly CRAs) is a prerequisite for the development of an efficient bond market (ibid).

Moreover, Asian experience witnessed that Global Credit Rating Agencies (GCRA) are not ready to enter domestic markets in the early stages of those markets. Because domestic bond markets may not be large enough to support locally staffed GCRA's office and usually domestic markets are fully protected at their early stage. Therefore, if Ethiopia is to reap the benefits accruing from credit rating agency, it is better to initiate one locally.

This part of the paper presents a reflection on the question 'Does Ethiopia need a credit rating agency?' by shedding light on the role domestically emerging credit rating agency could play in bolstering the country's financial system, and economy in general.

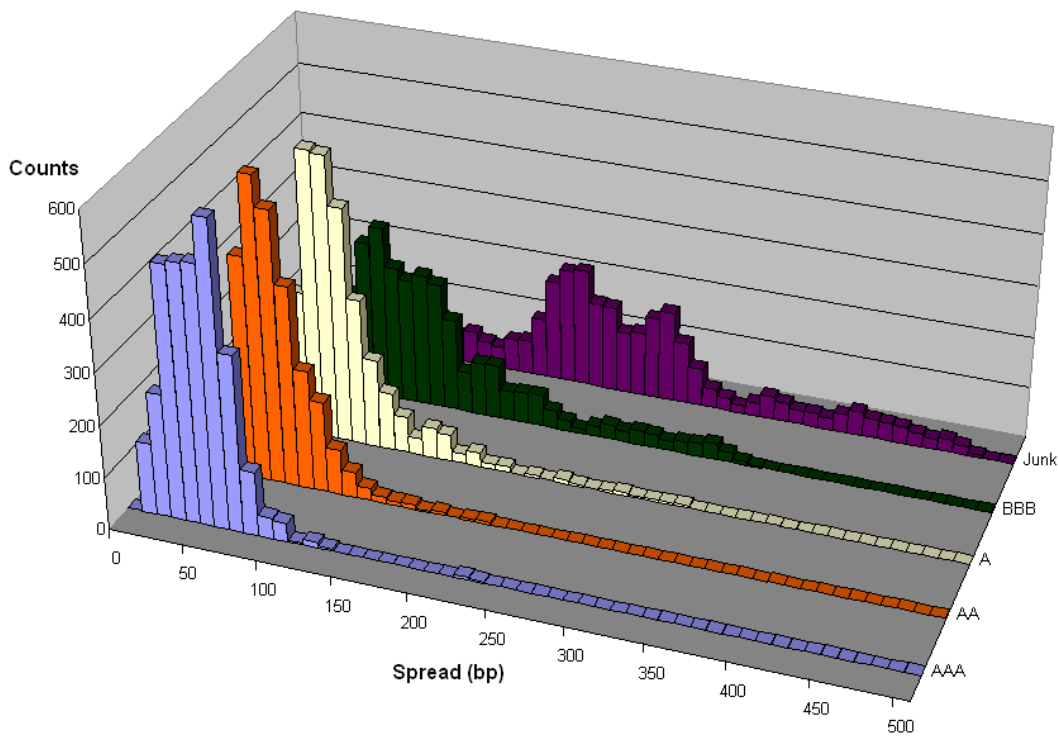
### ***1. potential issuers can borrow at a less cost***

Since monitoring is costly, bank finance is assumed to be more expensive than market finance (Chakroborty S., 2004). Hence, the primary purpose of obtaining a rating is to enhance access to private capital markets and lower debt issuance and interest costs. Theoretical work (Ramakrishnan and Thakor, 1984; Millon and Thakor, 1985) suggests that credit rating agencies, in their role as information gatherers and processors, can reduce a firm's capital costs by certifying its value in a market, thus solving or reducing the informative asymmetries

between purchasers and issuers. This creates the possibility of having more issuers— increases the pool of issuers because of the lesser cost of financing opportunity created by favorable rating. In turn, allowing domestic CRA play a better role.

Jianming and Simone V. (2004) investigated correlation between yield spread and bond rating by studying 4183 bond issues for a data span of 11 years (January 1988 to March 1998). And the findings of this study are used to corroborate the notion that cost of financing and rating are in inverse relationship.<sup>36</sup>

**Graph 2: Distribution of yield spreads for different rating categories**



<sup>36</sup> A sample of bonds with maturity between 2 to 10 years from January 1994 to April 1994 are used by the researchers to illustrate spreads by agency rating categories as depicted by the graph.

The graph build on a simplified data from the study depicts that average spreads<sup>37</sup> increase with declining credit quality. The findings of Jianming and Simone further affirm that spreads of lower rating categories exhibit higher volatility with high standard deviation.

Questionnaire responses from some of the bank officials subject to the study, especially commercial bank of Ethiopia and Awash International bank (table 5 below), surfaced that there is a matured intention to apply differentiated interest rate lending based on borrowers assessed risk with the prerequisite that standardized risk management tool which would help to attach risk to each borrower is installed first. This once again calls for the service of credit rating agent with in the banking system as a centralized risk assessor that could provide a common yardstick to evaluate default risk. Therefore if banks are to apply variable rate lending, credit rating agent— who can assess borrowers more efficiently and effectively than individual banks— could play pivotal role.

**Table 5: Intention to launch variable rate borrowing**

Issues	Banks N=8
Do you have intention in the short-run of launching different interest rate lending based on creditworthiness?	
yes	25%
No	75%

Source: compiled from primary data

Generally, the foregoing theoretical foundation and the written responses to questionnaire imply that desirable rating assists borrowers to raise money at a lesser cost.

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<sup>37</sup> Spread is the yield that accrues to investors

## *II. Development of bond market*

Ethiopia financial system like most underdeveloped systems is characterized by shallow bond market, regimented forex allocation, and short term collateralized commercial lending (Berhanu, 2006).

It is apparent from the presentations in the first part of this chapter that it is timely for Ethiopia to have an operational bond market that would properly augment the bank sector. Where as, the existing bond market in Ethiopia is at the embryonic stage— dominated by public bonds traded in underdeveloped over the counter market. The bond market capitalization level as a ratio of GDP<sup>38</sup> of the Ethiopian bond market (Table 6) is incomparable to the “listmates” given along with. On the other hand, developed countries having long history of bond market (for e.g those in US, Europe, Japan etc.) succeeded in capitalizing more than 100% of GDP through the bond market.

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<sup>38</sup> Bond capitalization is the amount of capital raised through the bond market usually as a percentage of GDP.

**Table 6: Local Currency Bonds Outstanding in US\$ billion: Public and Private sector bonds, 2005/06**

	<i>Market cap (USD bn)</i>	<i>Share of</i>		<i>% of GDP</i>
		public	private	
Malaysia	66.8	40%	60%	93%
Sri Lanka	52	63%	37%	42%
South Korea	186.3	51%	49%	58%
Japan	4487.9	76%	24%	132%
Kenya		85%	15%	19%
Nigeria		na	na	51%
Ethiopia		100%	-	<1%
South Africa		52%	48%	62%
Tanzania		na**	na	18%
Ghana		55%	45%	
<b>India</b>	113.6	72%	28%	45%

Source: compiled for this study and taken from the compilation of APEC

*\*\* na stands for 'not available'*

This is not the place to address this issue in detail, but it must be broached to amplify the fact that domestic CRA is needed to build well-functioning bond market in Ethiopia. Bond markets work efficiently and under considerable liquidity if there are DCRA. This is because DCRA help in building vibrant bond market by increasing the investor pool and enabling issuers do well. Especially, the establishment of mandatory rating requirement for issuers by government would help improve efficiency, transparency, flexibility, and investor confidence in the bond

market.

They also typically take on an additional role in the development of bond markets through education, information dissemination and research activities. The table provided hereunder depict how the bond market of South Korea increased in tandem with the credit rating industry. Credit rating industry was first introduced in Korea in 1985.

A thorough look at the table further reveals the fact that corporate bond issues surpassed the government issues in the recent years which partially is attributable to the increased credibility of credit rating.

**Table 7: level of bond issuance in South Korea in the pre and post Development of credit rating business**

<i>year</i>	<i>Bond issuance per year, unit KWR 1 trillion</i>		
	<b>Government bond</b>	<b>Corporate bond</b>	<b>ABS</b>
1983	0.5	0.2	-
1984	0.7	0.4	-
1985	0.71	0.43	-
1986	1.1	0.9	-
1987	1.3	1.0	-
1989	5.0	3.0	-
1990	10.0	7.0	-
1991	13.0	12	-
2002	34.5	48.5	29.0
2003	66.6	34.1	27.7
<b>2004</b>	77.7	29.5	27.0

Source: Ratings and Information Inc. Presented on 38<sup>th</sup> annual Board Meeting of Asian Development bank

Therefore, given the government's forward-looking plan to promote bond market (as it is

witnessed by financial sector capacity building project of National bank of Ethiopia financed by the World Bank and interview results) the need for DCRA is apparent in Ethiopia.

Moreover, the time to do so shouldn't be deferred to the point when bond markets will fully develop in Ethiopia. Government's decision to strengthen the capital market is just a sufficient condition to think of a credit rating agent. A cursory look at the proceedings of countries helps to give concrete ground to this idea. In most countries the development of credit rating system mirrors the development of bond market<sup>39</sup>.

**Table 8: Temporal presentation of the development of bond market and credit rating**

**Agencies**

country	bond first issued	Credit rating introduced
Korea	1983	1985
Japan	1983	1985
China	1984	1987
Sri Lanka	1997	1999
India	1983	1987
Singapore	1993	1994
South Africa	1993	1998
<b>Nigeria</b>	1997	2003

Source: compiled for this research

<sup>39</sup> Bond market as discussed in this paper begins with the increased issuance of public treasury bonds. The market is assumed to be enhanced when legal frameworks are put in place.

Table above reflects the relationship between first bond issuance and the conception of Credit Rating Company. Hence, bond market development and the issue of championing rating agencies virtually coincide.

Therefore, the initiator of this study believes that it is the right time to espouse the credit rating industry in Ethiopia by all stakeholders, though corporate bond issue is not currently put in place. The fact that most countries with established credit rating industry have their bond markets dominated by public bond issues, for example in Asia 70% of issues are public sector bonds<sup>40</sup>, is instrumental to this argument of the researcher.

Besides, opening local credit rating agent now assists the small and Medium-size Enterprises (SMEs) rampant in Ethiopia to get rating for their issues (borrowings) at a less cost, thereby allowing them access to fund. It is alleged that there is high rate of SME failure in Africa (40% as per African Development Bank annual meeting, 2009) due to banks preference of lending to large companies than new and small-size enterprises. And this exactly is in line with the current policy of the Ethiopian government.

### ***III. Complement the banking sector: assessing risk of borrowers***

Credit rating firms also has a role to play in the banking sector. It cited earlier in this study that the non-performing loans of commercial banks are sizeable. This fact is indirectly backed by the survey outcome (table 9), signifying that default risk is put in the first place by banks among all of the operational risks they are subject to. It is also noted that such default risk grossly emanated from false disclosure by borrowers and unexpected business failure. These

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<sup>40</sup> Asian Bankers Association (Final Report, 2000 p.9). Development of Regional Standards for Asian Credit Rating Agencies: Issues, challenges and Strategic Options.

results, among others, significantly have to do with the credit assessment practices and capacity of banks while granting loan. The competence and readiness to accurately assess borrowers is questionable.

**Table 9: Rank of relative effect of risks in operation and the factors contributing to default risk.**

<i>Items considered</i>	<i>Ranking and % of responses</i>				<i>Mean</i>	<i>Rank</i>
	<i>n</i>	<i>1</i>	<i>2</i>	<i>3</i>		
<b>Panel A: effect of risks on operation</b>						
Default risk	8	8	0	0	1.33	1
Interest rate risk	8	0	0	8	4	4
Liquidity risk	8	6	1	1	1.83	2
Regulatory risk	8	4	2	2	2.33	3
<b>Panel B: Factors affecting default risk</b>						
False disclosure	8	7	1	0	1.5	1
Change in economic condition	8	4	3	1	2.17	3
Change in interest rate	8	3	3	2	2.5	5
Sudden business failure	8	6	1	1	1.83	2
<b>Diversion to other business</b>	8	5	1	2	2.17	3

*Note: this table presents data about perception of the bank respondents on which kind of risks affect their operation more (panel A) and the factors assumed to affect default risk more (panel B). Respondents ranked the severity of the risks as well as factors contributing to default risk on a three-point scale from 1=very high effect through 3=less effect. The mean is calculated by considering the ranks of importance as*

*weights. Therefore, the lower the mean, the higher the perceived effect of the risk and the factors considered.*

Therefore, lending becomes difficult in Ethiopia in the absence of infrastructures taken for granted in most countries in the world. Lack of specific addresses, multiplicity of languages, poor accounting and auditing culture, lack of competent credit analysts, and expensive telecommunications make most lending to rely on local market and community knowledge. Thus significantly restricting the ability of banks to scale up lending to support economic growth.

Thus, there is a need to strengthen these commercial banks in the light of risk management to do away all those overwhelming risks and mounting NPLs and to boost their capacity. Mylenko N. (2008) affirmed that the banks achieving good repayment rates are the ones with strong credit risk management and very proactive approach for collections.

As individual banks lack capacity to thoroughly assess borrowers, the existence of central credit rating agency that is assumed to have better expertise and competence in assessing debt repayment can partially do away the burden of banks. The Chinese experience reveals that credit rating agencies can contribute to the banking sector by engaging on “loan certificate ratings” provision for borrowers intending to borrow greater than a specified amount of loan.

Like most of Asian countries, establishing a DCRA should be done by making a tie-up and technical collaboration with those better-off CRAs world wide. Hence the forthcoming DCRA could better assess borrowers so that banks can easily extend credit to a borrower rated well by the centrally recognized DCRA.

On the other end of the spectrum, banks should exhibit readiness to make use of the DCRA to harvest the above proposed benefits. It is evident from bank responses that, at times, they give loan with out collateral to a customer who is deemed creditworthy. In the view of ensuring this privilege, banks could therefore use the assessment made by DCRA. With this regard, responses to questionnaires (table 10 below) to banks and potential investors of the bond market purports that they are cautiously ready to use the services of DCRA in making decision to invest or lend.

**Table 10: Readiness to use the borrower/issuer rating service of DCRA**

<i>Response status</i>	<i>Potential investors (Percentage)</i>	<i>Banks (Percentage)</i>
Highly ready	12.5	25
Ready	25	25
Ready with caution	62.5	50

.. Source: compiled from primary data

Respondents' probable reasons for their curiosity in using the services of DCRA are related to the competence and integrity of the rater itself, and this is considered in more detail in the section that deals about regulation.

#### ***IV. Promoting Regulation in the financial sector***

Experience of developed countries bespeaks that investment in securities (debt and equity) in a long-term and short-term basis makes a good deal of institutional investors'<sup>41</sup> investment. The

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<sup>41</sup> Institutional investors usually refer to large investors like banks, insurance companies, pension funds, and mutual funds.

same concept equally applies to most European and Asian countries, for example in Asia more than 50% of bond and equity issues are purchased by institutions.

However, in Ethiopia the potential institutional investors' and banks' impression (table 11 below) as to the desirability and sufficiency of the available investment opportunities reflects the illiquidity and insufficiency of existing investment avenues. Hence, one set of factors that probably contributed to this has to do with underdeveloped capital market in both its legal and institutional dimensions. Therefore, such developments are important to diversify and expand the investment span of institutional investors.

**Table 11: banks and potential investors perceived sufficiency of available investment opportunities**

<i>Responses</i>	<i>Banks</i>	<i>Potential investors</i>
	<i>N=8</i>	<i>N=8</i>
yes	12.5%	25%
<b>No</b>	87.5%	75%

Source: compiled from primary data

Nevertheless, the development of such investment platforms is not a complete solution to promote investment by banks and insurance companies in Ethiopia. As mobilizers of a large proportion of public money, such financial institutions are under close oversight of national regulators. Securities and banking regulators in the worldwide rely increasingly on credit ratings (chamsaura, 2004). Credit raters rate securities issued and regulators can dictate the financial endeavors of the financial institutions based on the grade of the rating assigned. Thus

it is wise to plant a thoroughgoing regulatory framework to follow up the viability of security-based investments of such institutions. Below is given the remarkable use of recognized CRA (NRSRO) in enacting regulation in US.<sup>42</sup>

*For example, in US Rule 2a-7 under the Investment Company Act of 1940 limits money market funds to investing in only high quality short-term instruments, and NRSRO ratings are used as benchmarks for establishing minimum quality investment standards. Under Rule 2a-7 a money market fund is limited to investing in securities rated by NRSRO in the two highest ratings categories for short term debt (or unrated securities of similar quality), and there are limitations on the amount of securities the fund can hold that are not rated in the highest rating category (or are not unrated securities of similar quality). In addition, several state insurance codes rely directly or indirectly, on NRSRO ratings in determining appropriate investments for insurance companies. And in 1989, the US congress added the NRSRO concept to the Federal Deposit Insurance Act, prescribing that corporate debt securities are not “investment grade” unless they are rated in one of the four highest categories by at least one NRSRO.*

Moreover, the adoption of risk-based capital adequacy requirements (Basel II Accord) for banks further necessitated the existence of centrally recognized credit rater. Because banks are allowed to use credit raters’ service in ascertaining risk of investments for the adoption of the Basel Accord. The assignment of this risk rating helps to make it at a lesser cost than the banks themselves (Table 12).Hence, credit rating also plays a noticeable role not only with the development of a vibrant capital market but also in the efficient operation of the banking sector

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<sup>42</sup> US is selected due to the existence of firmly established centrally recognized rating agencies(NRSROs) whose service is practically used by SEC in accrediting the investment of financial institutions. The use of credit rating agencies for such purpose is just undergoing development in other areas, particularly in Asia.

as banks will minimize all those time and resource spend in making deep analysis of creditworthiness. Standard and Poor rates an average listed company in a two weeks time with an average cost of \$500— efficient due to competence and experience. Therefore, a specialized DCRA that could assess borrowers efficiently is desirable.

**Table 12: Cost and time used by banks in the decision to extend loan to an average credit applicant.**

<b>Issues</b>	<b>Percentage (N=8)</b>
<b>Panel A: Cost incurred in handling a new client application</b>	
<b>Br1000-2000</b>	12.5
<b>Br2000-3000</b>	25
<b>Br3000-4000</b>	37.5
<b>Br4000-5000</b>	25
<b>Panel B: Average No of days to approve loan for a new client for an average loan amount.</b>	
<b>10-20 days</b>	62.5
<b>20-30 days</b>	25
<b>30-40 days</b>	12.5
<b>&gt; 40 days</b>	—

Source: compiled from primary sources

Therefore Ethiopia as a country accepting and implementing Basel I Accord and with good outlook for Basel II Accord, the development of credit rating agency that could deliver credit risk rating is barely debatable. In a nutshell all the foregoing propositions entail the necessity to foresee the development of credit rating and the rater as a main thrust of regulation.

#### *V. Ancillary services*

In recent years, the large rating agencies have begun developing ancillary businesses to complement their core ratings business. Therefore, locally developed Credit rating agency can also rate various entities— university ratings, health care ratings, corporate governance ratings, bank ratings, insurance ratings etc.— apart from the common security-issue ratings. As these ratings are not issue ratings they take different factors in to account— mainly environmental/social responsibility, financial standing, operational competence etc.

Such kinds of ancillary services of credit rating agencies will have a paramount importance in Ethiopia where service provision and environmental protection of our companies is lingeringly at the “dead nascent stage”. In effect, as a simple instance the researcher believes that such services can have a noticeable contribution to curb the alleged premature artificial saturation in the insurance industry (Ahmed Batole, 2008) and the uncompetitive environment in the banking sector.

Credit rating agent, once established, also plays a pivotal role by providing services like information provision, consultation services, and seminars & trainings.

Nevertheless, as it is pointed out in section 3.4 below, such ancillary services of credit rating agencies are sources of potential conflict of interest in the rating business. This has to do with

concerns expressing the view that ancillary services actually impact the credit rating decision as raters compromise the core rating assigned for not to lose the ancillary service, if both services are provided for one entity.

### Section 3.3: Impetus for Sovereign Rating

Sovereign ratings are gaining importance as more governments with greater default risk borrow in international markets.<sup>43</sup> The number of sovereigns requiring rating from one or more of the internationally reputable rating companies increased from time to time (table 13). Today Moody's and Standard & Poor's each rate more than ninety sovereigns.<sup>44</sup> And the number of African countries getting sovereign rating has reached 24 in a period of roughly two decades (1970-2005).

**Table 13: The Growth of the Sovereign Ratings Business**

<b>Year Rating Was First Assigned by S&amp;P or Moody's</b>	<b>Number of newly Rated sovereigns</b>	<b>Median Rating Assigned (S&amp;P/ Moody's)</b>
<b>Pre-1975</b>	3	AAA/Aaa
<b>1975-1979</b>	9	AAA/Aaa
<b>1980-1984</b>	3	AAA/Aaa
<b>1985-1989</b>	19	A/A2
<b>1990-1994</b>	15	BBB-/Baa3
<b>1995-2000</b>	25	BBB/Baa
<b>2000-2005</b>	35	AAA/Aaa

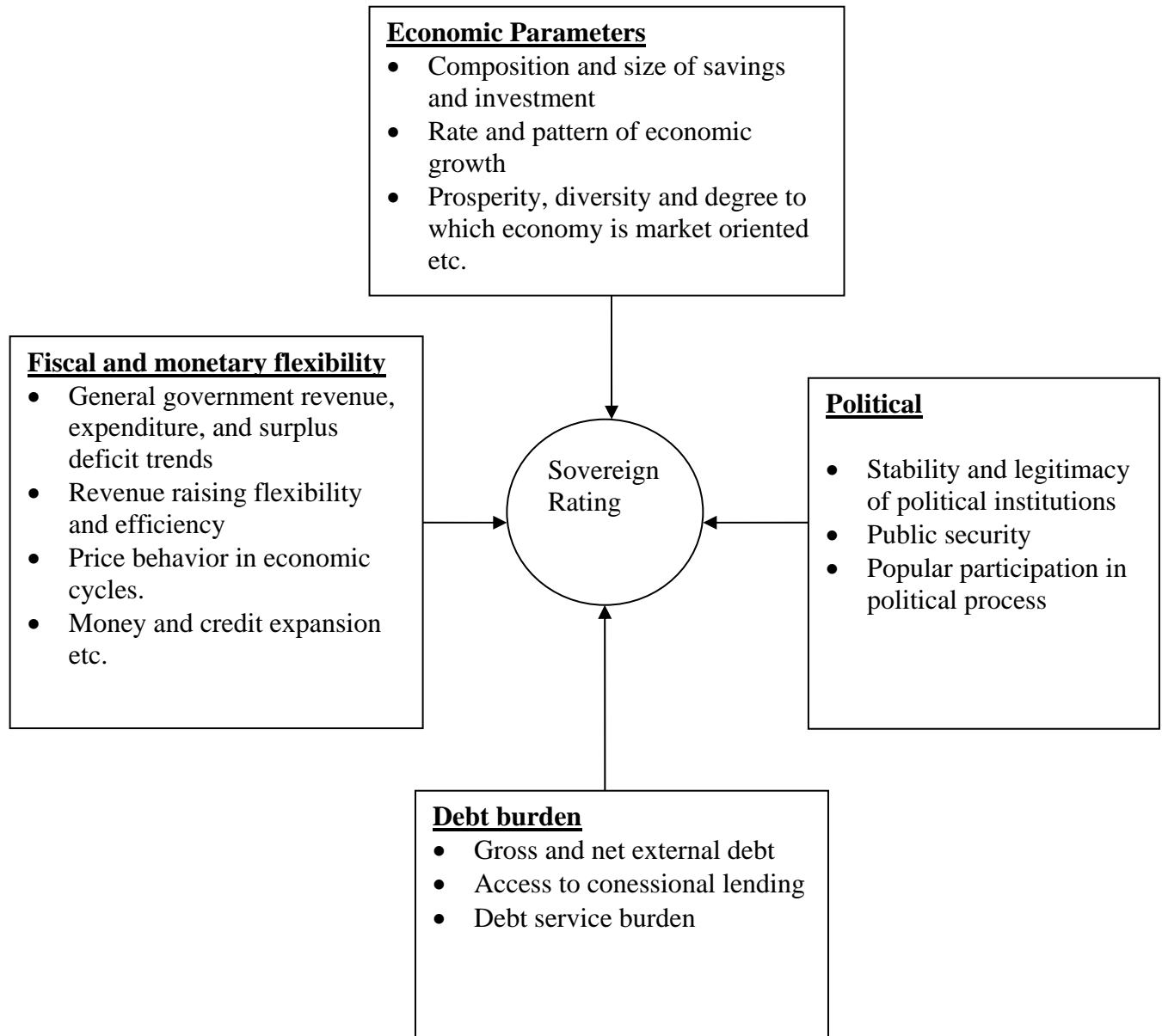
Sources: Standard and Poor's; Moody's Investors Service

<sup>43</sup> Federal Reserve Bank of New York (Report on Current Issues: Volume 1, p.16)

<sup>44</sup> Moody's Website

The simple diagrammatical model given on the next page shows the four parameters taken in to account by the globally recognized credit rating agencies while assessing the sovereign risk of a country. Since sovereign rating is the function of the major macro level factors (economic, political, monetary, and the debt burden) it can be considered as important indicator of country's multifaceted development.

## Exhibit 1: Factors in sovereign rating assignment



Therefore, a sovereign's determination to earn rating by itself fosters improvement in monetary, economic, and political make up of the country. Hence, for countries like Ethiopia,

who are burdened by fragile monetary system and unstable economic & political situation, decisions and readiness to get sovereign rating will be a great value.

By the same token, getting desirable sovereign rating helps mitigate high cost of external financing. Working towards sovereign rating, therefore, would be a lucrative endeavor for Ethiopia who got no rating so far. Ethiopian largely finances its deficit through external borrowings. For example net external borrowings financed 37.5 %<sup>45</sup> of total deficit for the period 1998/99 through 2001/2002 and this is the third highest compared with some sub-Saharan countries.

There are other indirect benefits from ratings for low income countries, namely: foster Foreign Direct Investment (FDI).<sup>46</sup> Reports has witnessed that private investments to sub-Saharan countries is considerably increasing as more and more countries are getting rating. To this end UNDP is largely working with Standard and Poor in assisting sub-Saharan countries in getting sovereign rating.

The level of foreign direct investment in Ethiopia manifested promising trend from \$225 million (2002), to \$465 million (2003), and to \$545 million (2004).<sup>47</sup> Ethiopia is ranked 12<sup>th</sup> in Africa surpassed by 11 nations, all of which having more than BB sovereign rating. And this stimulated foreign inflow of investment would be further enhanced if the country is rated. Besides, such level of FDI by itself is an opportunity to initiate CRA locally. This is because such foreign investors may want the DCRA (who is assumed to be tied-up with GCRA) express their financial standing through its rating while they raise fund internationally.

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<sup>45</sup> See the African Development bank of Ethiopia Report, 2003

<sup>46</sup> UNCTD (Discussion papers no. 186, 2008). Credit Rating Agencies And Their Potential Impact on Developing Countries.

<sup>47</sup> See UNCTAD report on world investment in 2005

It is worth noting that sovereign rating will be easy-going if there is a vibrant local credit rating agency that can feed reliable information about the country to be rated through the DCRA-GCRA collaboration. Therefore, initiating CRA locally can be a step-forward in building good financial structure, thereby winning good sovereign rating.

### **Section 3.4: Regulating Domestic credit rating Agency**

Credit rating agencies are information disseminators to those who input their information for decision making. The credibility of credit rating companies is, therefore, highly demanded by those decision makers. Survey result on the potential investors' and banks' outlook regarding the services of CRA revealed that they consider such services suspiciously (cited earlier in this paper). In table 14 below it is shown that probable lack of high ethical standard on the part of the raters is the first and most reason for such suspicion; lack of qualified personnel being the second.

**Table 14: Reason to take caution for using the services of DCRA**

<i>Reason</i>	<i>Potential Investors</i>		<i>Banks</i>	
	%	rank	%	rank
Lack of high ethical standard	62.5	1	75	1
Don't maintain confidential information	12.5	3	12.5	2
<b>Lack of qualified staff</b>	25	2	12.5	2

Source: compiled from primary data

Moreover CRAs very often are confronted with the suspicion of being exposed to conflicts of interest as mostly the issuers of the debt instrument pay for the credit rating, which fees account for about 90 per cent of the CRA's revenues, and as CRAs offer additional consultation services to their clients. And more importantly the fact that services of CRAs are used as a means of financial regulation, as stated earlier, makes CRA oversight critical.

However, there is a counter argument claiming that CRA regulation inhibits competition by letting only designated raters to be powerful— like the case of NRSRO in US. This paper tries to advocate the need to regulate credit rating agent especially at its development stage. To show this the over simplified model of Pagano & Immordino (2007), where the regulation of auditing firms is analyzed is used as it is modeled by Josef Forster (2007). The regulatory for auditing firms are closely related to those of CRAs. Similar to CRAs, auditing firms serve as information providers for investors and are assigned and remunerated by the audited firm.<sup>48</sup>

Assume an environment with universal risk neutrality and a continuum of investment banks (IB). A representative IB has the possibility to invest in a risky portfolio. To finance investment of the portfolio, it has to raise debt financed from external investors.<sup>49</sup> The goal of the representative IB is to maximize its profits from its investment possibilities. Without debt finance, assume that the IB is not able to invest and the final profit of the IB would then be zero.

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<sup>48</sup> But audit firms and CRAs are different in that audit firms usually provide information to shareholders, who provide equity, whereas CRAs provide information to investors who provide debt finance. Besides, while getting rated is voluntary, most companies are legally forced to be audited.

<sup>49</sup> It is assumed that the IB has no own funds initially and therefore has to finance its operation entirely via debt. To keep the model tractable, it is assumed that external investors require an interest rate of zero.

The risk of the portfolio can be characterized as follows: the final return of the portfolio may turn out to be high or low, so there are two possible states (s) of the portfolio  $s = g$  (good) or  $s = b$  (bad). The type of the portfolio is a priori unknown to the IB. If the portfolio is in the good state, its final value  $\Psi$  is given by a high payoff  $\Psi_g$ , and if the portfolio is in the bad state, the final value  $\Psi$  is given by a low payoff  $\Psi_b$ . Assume that each investment bank in the economy invests only in one portfolio in one period. Therefore, the final value of the portfolio is equal to the gross profit of the IB in one period. The portfolio will be in the good state with unconditional probability  $p$  and in the bad state with probability  $1 - p$ . Since a continuum of IBs is assumed, the unconditional probability  $p$  is also the fraction of IBs in the economy, which has the possibility to invest in a good portfolio. Further assume that  $p$  is exogenous and a priori known by the IBs and the external investors and that neither IBs nor investors have further private information about the quality of the portfolio. If the portfolio is in the good state, the payoff is assumed to be higher than the required debt repayment to the investors  $d$ , but if the project turns out to be in the bad state, the payoff is assumed to be lower than  $d$ :  $\Psi_g > d > \Psi_b$ . Given that the fraction of good IBs  $p$  is publicly known, the expected unconditional gross profit of the representative IB is given by  $\Psi = p\Psi_g + (1 - p)\Psi_b$ . Assume that the expected gross profit of the IB exceeds the required debt repayment ( $\Psi > d$ ). Therefore, risk neutral investors are willing to provide debt finance, given the information about  $p$ . Obviously, all IBs that seek debt finance, will be served irrespective of their portfolio is actually good or bad.

The representative credit rating agency (CRA) has a costly technology that enables the CRA to distinguish, whether an IB has the possibility to invest in a good or a bad portfolio. A single CRA is assumed to rate only one portfolio per period. The CRA is able to detect a signal about the state of the IB's portfolio and accordingly issues a credit rating  $r$  that reflects whether the

bank's portfolio is good or bad. If the CRA comes to the conclusion that the portfolio is good, it issues a good credit rating

$r = g$  and reversely a bad credit rating  $r = b$ .<sup>50</sup> Since the rating technology is costly, the CRA charges a rating fee  $\theta$  from the rated investment bank. The issued credit rating, which is made available to external investors, influences the expected profits of the IB and the decision of the investors to provide debt finance.<sup>51</sup> According to Dye (1993) it is assumed that the CRA can choose the precision of the signal about the state of the rated portfolio. Interpret the precision of the CRA as the quality of a credit rating  $q$ . The quality of a credit rating can be interpreted as the qualification of the staff, the information technology or the internal organization of the CRA. The CRA can choose the quality of the credit rating  $q \in [0; 1]$ . The rating technology is assumed to be perfectly accurate, if the CRA observes a good signal, but that it may be inaccurate after observing a bad signal. The conditional probabilities that the issued credit ratings after observing a good and a bad signal are correct are given by:

$$\Pr(r = g / s = g; q) = 1 \quad (1)$$

$$\Pr(r = b / s = b; q) = q$$

It is obvious that the credit rating is always accurate in the case of a good signal. In the case of a bad signal, the accuracy of the credit rating increases with the quality that is employed in the rating process. The technology of the CRA can be described in such a way that credit ratings are biased upwards, meaning that after observing a good signal, the credit rating is perfectly accurate, but after observing a bad signal only with a certain probability. In the case of a bad

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<sup>50</sup> A good credit rating  $r=g$  can be regarded as reflecting an "investment grade" credit rating and a bad credit rating  $r=b$  as a "speculative grade" credit rating

<sup>51</sup> Since it is assumed that IB invests in only one portfolio for which it seeks external finance, the rating of the portfolio is identical to the rating of the IB itself. Unlike in reality, the model does not discriminate between issuer and issue credit ratings.

signal, the CRA will issue an inaccurately good credit rating with a probability (1 - q), while the probability of issuing a bad credit rating after observing a good signal is zero.<sup>52</sup>

Given the technology of the CRA, the conditional probability of a rated portfolio being in a bad state after getting a bad credit rating can be calculated using Bayes' rule:

$$\Pr(s=b/r=b) = \frac{\Pr(s=b \cap r=b)}{\Pr(r=b)} = 1$$

While the conditional probability of a portfolio with a bad credit rating, being in a good state is given by:

$$\Pr(s=g/r=b) = 0$$

The probability that the rated IB is in a good state, conditional on a good credit rating, is given by the following expression:

$$\Pr(s=g/r=g) = \frac{\Pr(s=g \cap r=g)}{\Pr(r=g)} = \frac{p}{p + (1-p)(1-q)}$$

While the probability that the rated IB in a bad state, conditional on a good credit rating, is given by:

$$\Pr(s=b/r=g) = \frac{(1-p)(1-q)}{p + (1-p)(1-q)}$$

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<sup>52</sup> With that assumption about the technology of the CRA, consideration is given to the real world criticism that CRA may issue too favorable ratings and that ratings may be inaccurately adjusted in the case of a deterioration of an instrument's or firm's conditions

Using the conditional probabilities above the expected final profit of the rated IB after deduction of the debt repayment to external investors  $d$ , conditional on a good credit rating, can be formulated as:

$$E(r=g) = \text{pr}(s=g/r=g) \Psi_g + \text{pr}(s=b/r=g) \Psi_b - d$$

$$\leftrightarrow E(r=g) = \frac{p\Psi_g + (1-p)(1-q)\Psi_b}{P + (1-p)(1-q)} - d \geq \Psi - d \quad (2)$$

And the expected final profit of the rated IB, conditional on bad credit rating can be written as:

$$E(r=b) = \text{pr}(s=g/r=b) \Psi_g + \text{pr}(s=b/r=b) \Psi_b - d$$

$$\leftrightarrow E(r=b) = \Psi_b - d < 0$$

Given the technology of the CRA, the expected profit of the rated IB in the case of a good credit rating is larger than the expected profit without a credit rating (see equation (2)). Conversely, the expected value of the IB with a bad credit rating is smaller compared with the case without a credit rating ( $\Psi_b < \Psi$ ). Since  $\Psi_b < d$ , it is rational for the external investors not to provide  $d$  and the final expected profit in the case of a bad rating is zero ( $E(r=b) = 0$ ). It is obvious that investment will only take place in the cases of a good credit rating or without a credit rating, since the expected profit of the IB is positive in these two cases, meaning that the investors get back their funds. In the case of a bad credit rating investors are not willing to provide debt finance.<sup>53</sup>

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<sup>53</sup> The pivotal criterion for external investors is the expected profit of the IB. The group of external investors is assumed to be homogenous and they are not restricted by regulation to invest only on products with a certain credit rating.

The question on hand is: when is the IB willing to obtain a credit rating from a CRA? The IB can only observe the unconditional probability  $p$  and is only willing to pay a rating fee  $\theta$  for a credit rating, if the expected profit with a credit rating is larger than the expected profit without a credit rating. The expected profit with credit rating net of the rating fee is given by:

$$\Phi^R = \Pr(r = g) E(r = g) + \Pr(r = b) E(r = b) - \theta$$

If no credit rating is assigned, the expected profit is given by:  $\Phi^n = \Psi - d$ . The expected profit of a credit rating for the IB ( $\Pi^{IB}$ ) that can be interpreted as the "informative value" is therefore given by:

$$\Pi^{IB} = \Phi^R - \Phi^n \quad (3)$$

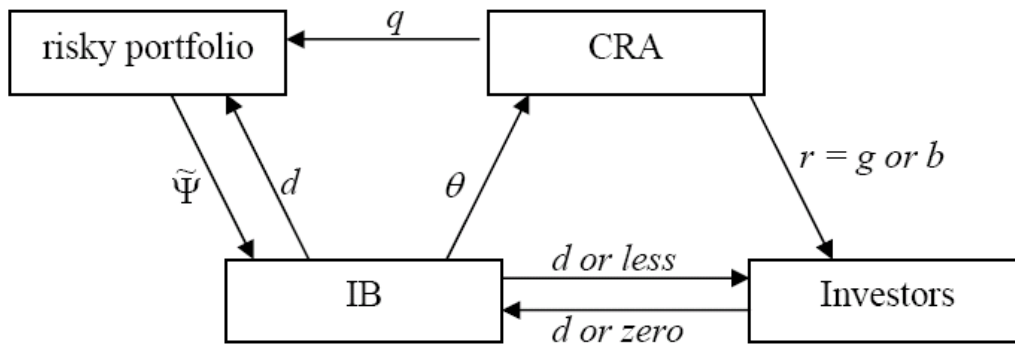
$$\leftrightarrow \Pi = q(1-p)(d - \Psi_b) - \theta \quad (3')$$

If equation (3) is larger or equal zero ( $\Pi^{IB} \geq 0$ ), a credit rating has informative value and it is then optimal for the IB to obtain a credit rating.<sup>54</sup> If instead equation (3) would be negative ( $\Pi^{IB} < 0$ ), the credit rating has no informative value and henceforth the IB would decide not to assign a credit rating. In that case, credit ratings do not play a useful role. From equation (3) can be derived that the value added of a credit rating is increasing in the quality of the credit rating  $q$ , decreasing in the unconditional probability  $p$  and the rating fee  $\theta$ .

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<sup>54</sup> Assumption is made that credit rating is not mandatory. If equation (3) is zero, the IB is indifferent between getting a rating or not. In case of indifference it is assumed that the IB chooses to obtain a credit rating.

**Exhibit 2: interactions between CRA, IB, and investors**



If the fraction of good portfolios becomes larger, the informative value of a credit rating decreases. Furthermore, equation (3) is increasing in the term  $(d - \Psi_b)$ , which can be interpreted as a measure of potential misallocated investment that can be prevented by a credit rating of a CRA about the IB's portfolio. The larger the possible misallocation, the higher is the value of the credit rating. To simplify notation in the following, define  $m = d - \Psi_b$ . Assume that the parameters  $p$ ,  $\theta$ ,  $\Psi_b$  and  $d$  are public observable and given exogenous. Hence, the value of equation (3) depends on the rating quality, which is set by the CRA. Obviously, if the rating quality would be observable for the IB, the IB would be able to observe the exact value of the credit rating via equation (3), while it is not the case if rating quality would be unobservable. Exhibit1 summarizes the interactions between the three agents— IB, CRA and external investors - in the framework of the model.

The model shows that CRAs have an intention to make an upward bias. That is issuing good credit rating if unfortunately a company's status signal poor paying capacity but always issuing good rating with good signals. This problem is magnificent in a concentrated or monopolized credit rating industry as it is true during the initial stages of the industry. The very intent of the

rater in such situations is to maintain as many clients as possible without regard to running competent and merit based business.

In the light of the above discussion, for emerging markets like Ethiopian credit rating business is usually initiated by establishing a single rater. Hence, special oversight is critical to gauge the operation of the new and strange credit rater to prevent excessive powerfulness and curb financial loss that may result from rating crisis due to the aforementioned biases. Regulators should also tailor the regulation framework by considering the fact that the new local CRA could be an arm of a global rating company— through DCRA-GCRA tie up.

### **Section 3.5: Assessed challenges for the development and operation of DCRA in Ethiopia**

This section of the paper is meant for succinct presentation of challenges that are apparent in the move to initiate DCRA in Ethiopia in account of assessments made in the foregoing parts and some new considerations envisaged by the researcher.

#### **A. Lack of Awareness about the brand new concept**

It is well known that credit rating agencies’ success depends on the level of credibility they are able to build in user markets. This poses significant challenge for pioneering agencies in developing markets, where debt markets are in an incipient stage, concepts are new, and the agency’s track record is yet to be established.

In the light of this, question forwarded to elucidate response regarding the market participants' awareness about credit rating industry show that the concept is strange to most of the respondents (table 15 below). For potential investors, 2(28.5%) don't know even what credit rating Agencies are while 4(57%) couldn't properly state the services they cater apart from their name. and the bankers' response is not different from this.

**Table 15: public awareness regarding credit rating and credit raters**

<i>Responses</i>	<i>Potential investors</i>	<i>Banks</i>
No	2	3
Yes	6	5
<b>Total</b>	8	8

Source: compiled from primary sources

Therefore lack of awareness by market participants about the concept of credit rating coupled with less developed bond market is prominent challenge to initiate DCRA in Ethiopia.

However, slight review of the viable pathways pursued by CRISIL (Credit Rating Information Services of India Ltd) purports that 'the credit rating agent came to market and get established at this early stage has a good chance of becoming a successful and reputable credit rating agent in the country'; in fact if effective strategies are designed. Here is CRISIL's experience as it is extracted from the company report:

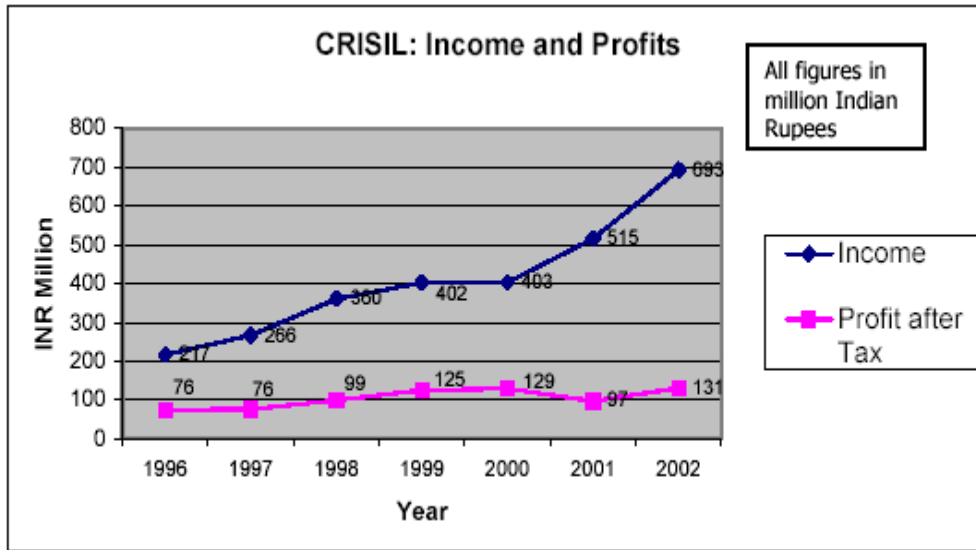
*“The Credit Rating Information Services of India Ltd (CRISIL) began operations in 1987, offering credit rating services in a market where the concept was totally new. Interest rates at that time were government determined, and CRISIL’s business was therefore built entirely on guiding the market for its investment decisions. CRISIL had the challenge of building a new business in an unknown area from a zero base. CRISIL faced several other challenges in its effort. At the time of founding of CRISIL, secondary markets for debt in India were at an embryonic stage, and a source of automatic demand for ratings was therefore denied the agency. Studies undertaken by GCRA had indicated that the market size in India would not support a rating agency”.*

In this difficult market, CRISIL attained profitability in its first quarter of operations, and has remained profitable ever since (see graph below for profits of the past six years). CRISIL issued 400 ratings in its first two years of operations. CRISIL is one of world’s five largest rating companies currently. CRISIL has put in place three strategies stated below which led the company to such glory.

- Creating awareness of the concept amongst all market participants
- Winning credibility, confidence and trust of participants
- Generating ratings business that would increase in size as a system of market driven interest rates came into play

Therefore, the CRISIL experience witness that companies, private or government, can make a successful credit rating business in Ethiopia, even in this early stage, if reliable strategies are worked out.

**Graph 2: CRISIL income and profit**



**B. Inadequacy of accounting and auditing standards**

False disclosure and inadequate accounting and auditing practice are considered as prominent bottlenecks by bank respondents. Poor record keeping and reporting culture and practice of companies is also considered to be the notable potential problem for effective operation of a domestic CRA. Lack of standardized reporting procedure used by most companies, coupled with absence of well designed and articulated audit procedures make credit assessment difficult.

Therefore the intention to initiate domestic credit rating agent should be supported by the campaign to improve the information disclosure and presentation practices of companies. As a matter of fact, an interview held with NBE research and development Director uncovered that there is a current initiation by the Office of Federal Auditors general to standardize financial reporting in Ethiopia.

### **C. Regulatory or policy workouts**

Government doesn't look determined to liberalize the financial market in a short run, especially with standpoint of expanding capital markets. A discussion made with NBE officials confirmed the fact that government doesn't have immediate plans to foster instrumental borrowing and develop active capital market. And this is a challenge for the operation of DCRA, at least in the short run. Furthermore, there is no designated regulatory body that is meant to oversee the operation of the DCRA— like the SEC in US.

Meanwhile, though regulatory framework on credit rating is critically required, it has to be made in an important caution. This is because unnecessary intervention by government in the services of credit rating can make the raters defunct and the space necessary for CRA to survive restrictive, as observed in the Chinese case.<sup>55</sup>

### **D. Lack of qualified analysts**

Working with competent and qualified staff is instrumental for the successful operation of a rating agent. Position of a rating business has largely to do with the credibility of the rating it provides, which in turn is a function of competent and quality service.

Most of the successful credit rating agencies have counted maintaining qualified staff as a competitive advantage. For example CRISIL's management and key financial analysts are those exhibited excellence in their respective fields— 35 staff with a minimum of 15 years work experience and international certification in related fields.<sup>56</sup>

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<sup>55</sup> See "Chinese emerging credit rating industry: the official foundation of private authority" China quarterly, 193 p. 66 and also section 3.4 of this paper.

<sup>56</sup> See CRISIL website,

Whereas such sufficiently qualified staff is unavailable in Ethiopia, it poses greater problem to initiate CRA locally. However, making a close collaboration with the distinguished credit rating agencies, like CRISIL, will essentially curb this problem like most developing market of Asian countries did. For instance CRISIL has enormously contributed technical assistance and training, among others for the *Rating Agency Malaysia (RAM) Berhad* and the *Israel Securities Rating Company Limited (Maalot)*.<sup>57</sup>

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<sup>57</sup> Mohan (2003; p. 5). Setting up and Running a Rating Company in India: The CRISIL Experience,

## **Part Four**

### **Summary of major findings, conclusion, and Recommendation**

#### **Summary of Major findings**

The following major findings divided in three captions are tapped from the body of the analysis.

#### **Impetus for bond market and Credit rating business**

The experiences of well-developed nations show that capital market development, which is the back bone of credit rating industry, is essentially important for the well-being of an economy. St. Hill (1992) finds that there is a remarkable correlation between economic development and stage of capita market— the development of financial market induces economic development. The development of capital market also helps to better mobilize fund from private sources to overcome government budget deficits, as it is the case for Sri Lanka. The insurance companies in the country are identified to have sufficient investable fund which can be invested in long term securities like treasury bonds with a dual benefit of filling government budget deficit and diversifying their investment.

The current perplexing problem of foreign currency can be minimized by developing vibrant bond market in the country. This is due to the fact that government's ability to raise enough money locally helps reduce commitment to external borrowing, thereby doing away problem of currency mismatches.

It is evident from the analysis that the existing bank-dominant credit market in Ethiopia has certain drawbacks. It is not working to the required efficiency. High reliance on collaterals,

incompetent credit analysts, inefficiency, non-objective, relationship-based lending are the legacies of the banking industry in Ethiopia. The collective outcome of all these is mounting non performing loan (as high as 68.5% for CBE, 2003) and poor credit penetration (less than 1% of the population getting access to credit).

Finally it is found out that strengthening the bond market is under project study by the NBE in collaboration with the World Bank. There is good prospect for the development of bond market in Ethiopia.

The above major findings back the argument that domestic credit rating agent is vital to enhance the credit penetration level of the country by its prominent role of disseminating borrower/issuer information to lenders/investors. The Chinese experience provides an explanation that CRA may have a role to play in rating bank borrowers who want to borrow more than specific amount. The same concept can be applied in a broader base in Ethiopia. Hence DCRA is assumed to play noticeable role in augmenting the banking sector which witnessed the aforementioned drawbacks. CRAs are usually staffed with qualified and competent credit analysts. Therefore, the Expected DCRA in Ethiopia is assumed to carry out credit analysis better than the banks themselves.

### **The role of DCRA and the issue of Regulation**

Initiating domestic credit rating agent (DCRA) helps companies raise finance at a desirable cost. Companies rated better are expected to raise capital at a lesser cost.

Survey findings uncover that investing-side financial institutions in the country, mainly

insurance companies and the social security agent, confirmed the insufficiency of the existing investment opportunities. Therefore, sooner or later, it is apparent that such institutions are allowed to invest in differently featured issuances. Hence it is indispensable that DCRA is required to regulate such investments of the financial institutions.

Existence of DCRA is also instrumental for getting sovereign rating which enables the country to get less cost of financing and improve its socio-economical and political make up. This is due to the fact that global sovereign raters make use of the DCRA in their task of assigning sovereign rating.

Apart from its use to regulate financial institutions the DCRA itself should be regulated, especially at its early stage of establishment. This supported by the model of Josef Forster (2007).

### **Challenges and Opportunities for initiating DCRA in Ethiopia**

DCRA in Ethiopia can niche on SMEs who are denied access to bank borrowing as a result of the above cited ill-performance of banks. The DCRA can offer rating to SMEs at a lesser cost so that enhancing their access to bank borrowing. The current proliferation of SMEs in Ethiopia is therefore a noticeable opportunity to initiate DCRA locally.

Moreover the banks' planned intention to lend at differentiated interest rate for differently creditworthy customers and their readiness to use the services of DCRA are also traceable opportunities for initiating credit rating business in Ethiopia.

The ancillary services of credit rating agent are also especially important in Ethiopia. In its supplementary services, DCRA rate companies based on the quality of service and social responsibility of companies. Therefore, the current poor and nascent service provision culture and the timely issue of environmental protection create an opportunity to think of DCRA in the country.

The growth potential of the Ethiopian bond market and the observable movements to promote the market are also opportunities for DCRA. The ever increasing foreign and local private investment is also a recognizable ground in the argument for DCRA. Implementation of the Basel Accord— risk based capital rule for banks— further creates a fertile ground for the ‘upcoming’ DCRA in Ethiopia.

The study found out that there are visible challenges for initiating and developing CRA in Ethiopia: Lack of awareness among the public, poor accounting and auditing practices, lack of properly qualified credit analysts, and the government resistance to the strict liberalization of the financial market are core challenges to initiate DCRA in Ethiopia. However the remarkable experience of some successful CRAs, like CRISIL, show that it is possible to make a viable CRA in such bottlenecks once workable objectives and strategies are put in place. CRISIL of India started business as credit rater in that time when interest rate was controlled and the bond market was nascent in the country. But, by now, CRISIL is the fifth largest credit rating agent in the world.

## **Conclusion**

There is one major question that needs important concluding remarks: *Does Ethiopia need DCRA? When?*

The answer is obviously yes. And the time to do so should not be deferred until the time bond market is fully developed in the country. DCRA has a lot to play in augmenting the banking sector given the inefficiency of banks in Ethiopia. Besides there are important signals that the bond market is expected to do well in the very near future. Therefore the time to think of DCRA is now.

Moreover, GCRA's unwillingness to enter newly emerging markets makes it necessary to initiate CRA first locally and then making a GCRA-DCRA tie-up for technical and operational assistance, like most emerging Asian markets did.

The ancillary services delivered by DCRA also enhance the necessity of DCRA in Ethiopia to ameliorate and further stimulate the poor service provision culture. DCRA is also instrumental for Ethiopia to get sovereign rating. And this stimulated government determination to get sovereign rating sustains improvement in the socio-economic and political endeavors of the country.

The issue of *'how is the new DCRA going to operate?'* also is the other question demanding concluding remark regarding the facilitation of regulatory frameworks for the operation of the DCRA. The sensitive services provided by CRAs compels regulation such services. The simplified model given in the foregoing part signifies that credit rating services of CRAs

should be properly regulated as they have an intention to make an upward bias in assigning ratings. And this problem is significant at the initial stage of the credit rating business where there is only one monopoly CRA. Therefore, regulating the “upcoming DCRA” will be especially important in Ethiopia.

## **Recommendation**

The following recommendations and policy implications should be taken in to account while in the move to establish DCRA in Ethiopia.

- ✚ First the government’s stand of keeping the financial system highly regulated should be revisited. Credit rating business works better under objective and moderate regulation not in subjectively driven extreme regulation. This is a failure as is witnessed in the Chinese credit rating industry. Government should be keen to promote capital market that projects in the pipe line for the establishment of capital market should be given due attention.
- ✚ Different platforms should be arranged to create awareness among the public and stakeholders regarding the concept of credit rating. The media, workshops, and research undertakings on the subject matter help this purpose.
- ✚ The existing poor accounting and auditing practices among the business enterprises should be ameliorated. Standardizing financial reporting, like the one started by the Office Federal Auditors General, will practically help with this regard.
- ✚ CRA competence is primarily the function of the human asset it holds. Therefore establishing DCRA requires qualified credit analysts and competent management, which is barely accessible in Ethiopia. Hence, DCRA, as it is usually the case, should be first initiated in a GCRA-DCRA tie-up. Such collaboration has technical, technological, and

other capacity-building merits.

- ✚ Before embarking on development of DCRA, proper regulatory body (like that of SEC in US) that will be in charge of regulating the credit rating industry and the capital market as a whole should be put in place. The central bank of the country can facilitate this infrastructure. Regulatory frameworks for the registration and operation of CRA should be designed. Such proper oversight of the CRA increases users' (banks, insurances, and issuers) reliance on the DCRA.
- ✚ In most countries, DCRA's are established by the mutual cooperation of the prominent financial institutions in the country. For instance CRISIL is founded by core financial institutions in India like ICICI and HDFC. Therefore, it is the recommendation of this study that the NBE should take the leadership in coordinating the well-established financial institutions of the country to form DCRA in the manner stated above.
- ✚ The government (particularly the NBE) should take the initiative to create consensus among the bankers that capital market is not a substitute to their banking market. Rather, it is supplementary to it.
- ✚ DCRA should better initially established as an extension of a government organ to win the trust of users— banks, potential investors, issuers. In the US for example the NRSRO recognition serves this purpose.

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**ANNEX 1**  
**Key Economic performance indicators in Sri Lank and Ethiopia**

Table 1: Key Economic performance indicators in Sri Lanka

Item	unit	2000	2005	2006	2007
GDP growth	%	6	6.2	7.7	6.7
National savings	%GDP	21.5	23.7	23.48	23.7
Investment	%GDP	28	26.5	28.7	29.5
Unemployment	%	7.6	7.7	6.5	6.3
GDP deflator	%	6.7	10	10.3	12.9
Overall budget Deficit	%GDP	9.9	8.4	8.1	7.2
Public debt/GDP	%	99.9	91.1	89.2	85.5
Overall/BOP	US\$ Mn	-522	501	204	450
Current account deficit of BOP	%GDP	6.4	2.7	4.8	4.3
Broad money growth(M <sub>2b</sub> )	%	12.9	19.1	17.8	19

Source: Central Bank of Sri Lanka

Table 2: Partial presentation of key Economic performance indicators in Ethiopia

Item	unit	2000	2005	2006	2007
GDP	%	7.7	6.4	6.1	8.9
Investment	%GDP	17.7	23.3	23.1	22.9
Overall budget deficit	On cash basis	-4.8	-6.2	-4.6	-3.6
External debt	%GDP	86.3	94.3	92.5	89.5
Current account,exc official transfer	% change	-4	-7.9	-7.4	-
Inflation(CPI,average)		-5.2	3	3	-

Source: IMF (2005), (2006)

**ANNEX 2**  
**Rating symbols for long-term and short-term debt by the known raters**

Interpretation	Moody's	Standard & Poor's			Fitch	
	Long-term	Short-term	Long-term	Short-term	Long-term	Short-term
<b>Investment-grade ratings</b>						
High credit quality	Aaa		AAA		AAA	
High credit quality	Aa1 Aa2 Aa3	Prime-1	AA <sup>+</sup> AA AA <sup>-</sup>	A1 <sup>+</sup>	AA <sup>+</sup> AA AA <sup>-</sup>	F1
Strong payment capacity	A1 A2 A3	Prime-2	A <sup>+</sup> A A <sup>-</sup>	A1	A <sup>+</sup> A A <sup>-</sup>	
Adequate payment capacity	Baa1 Baa2 Baa3	Prime-3	BBB <sup>+</sup> BBB BBB <sup>-</sup>	A2 A3	BBB <sup>+</sup> BBB BBB <sup>-</sup>	F2 F3
<b>Speculative-grade ratings</b>						
Speculative Credit risk developing Due to economic changes	Ba1 Ba2 Ba3		BB <sup>+</sup> BB BB <sup>-</sup>	B	BB <sup>+</sup> BB BB <sup>-</sup>	B
High speculative Credit risk present With limited margin safety	B1 B2 B3	Not prime	B <sup>+</sup> B B <sup>-</sup>		B <sup>+</sup> B B <sup>-</sup>	
High default risk Capacity depending on sustained, Favorable conditions	Caa1 Caa2 Caa3		CCC <sup>+</sup> CCC CCC <sup>-</sup> CC	C	CC <sup>+</sup> CCC CCC <sup>-</sup> CC	C
<b>Default,</b> Although prospect of partial recovery	Ca, C		C,D	D	C,D	D

Source: based on standard & Poor's, Mood's and Fitch

### **ANNEX 3**

#### **Basel II Accord**

The major objectives of Basel II Accord is to revise the rules of the 1988 Basel Capital Accord in such a way as to align banks' regulatory capital more closely with their risks, taking account of progress in the measurement and management of these risks and the opportunities which these provide for the strengthened supervision. Under pillar 1 of Basel II, regulatory capital requirements for credit risk are calculated according to two alternative approaches: (i) the Standardized Approach; and (ii) the Internal Ratings-Based Approach. Under the Standardized Approach (SA) the measurement of credit risk is based on external credit assessment provided by External Credit Assessment Institutions (ECAIs) such as credit rating agencies or export credit agencies. Under the Internal Ratings-Based Approach (IRBA), subject to supervisory approval as to the satisfaction of certain conditions, banks use their own rating systems to measure some or all of the determinants of credit risk. Under the Foundation Version (FV), banks calculate the probability of default (PD) on the basis of their own ratings but rely on their own supervisors for measure of the other determinants of credit risk. Under the Advanced Version (AV), banks also estimate their own measure of all the determinants of credit risk, including Loss Given Default (LGD) and Exposure at Default (EAD).

Under the regulator capital requirements for operational risk, there are three options of progressively greater sophistication: (i) under the Basic Indicator Approach (BIA), the capital charge is a percentage of banks' gross income; (ii) under the Standardized Approach (SA), the capital charge is the sum of specified percentages of banks' gross income from eight business lines (or alternatively for two these business lines, retail and commercial banking, of different percentages of loans and advances) and (iii) under the Advanced Measurement Approach (AMA), subject to the satisfaction of more stringent supervisory criteria, banks estimate the required capital with their own internal systems for measuring operational risk.

Pillar 2 and 3 of Basel II are concerned with supervisory review of capital adequacy and the achievement of market discipline through disclosure

## ANNEX 3

### Questionnaires and interview Questions

Addis Ababa University

Msc. In Accounting and Finance

#### Questionnaire<sub>1</sub>

Questions below are set to be responded by selected banks (Commercial bank of Ethiopia, Dashen bank, Wegagen bank, and Awash bank) which are assumed to be possible **lending-players** in the capital market for debt. The questions are designed in such a way that responses procured could give good insight as to the drawbacks of the existing bank-based fund flow in Ethiopia that may call the need for **Credit rating Agencies(CRAs)**. To get reliable data the questions are deemed to be replied by an individual having relevant attachment with the issue. This questionnaire has three parts, of which Part three **may require** fresh background information about CRAs so respondents may consider that before filling this section. I want to reflect my many thanks for the curiosity and genuineness in filling this questionnaire. Choose by making a tick mark in the parenthesis.

#### *Part one: personal information and awareness*

1. What is your academic status and your position in the organization?

\_\_\_\_\_

2. Do you know what Credit Rating Agencies (CRAs) are? Make a tick mark.

Yes [ ] No [ ]

3. If yes, what do you think they do?\_\_\_\_\_

\_\_\_\_\_

4. What is the academic & professional qualification of your credit analysts?

Diploma holders

First degree holders

First degree holders with some international professional certification

Masters degree holders

Masters degree holders with some international professional certification

Any other, specify \_\_\_\_\_

5. What is the average work experience of your credit analysts

Less than three years

six to ten years

Three to six years

Greater than ten years

***Part two: The functioning of the current-bank based financing***

6. What is your **most important** source of information to decide on a client's loan application?

Client financial statements

Client's collaterals

Clients historical payment record

Any other specify, \_\_\_\_\_

7. Rank the following risks as they most affect you (assign 1 for strongly affecting and 4 least affecting, and others accordingly).

Default risk

Liquidity risk

Interest rate risk

regulatory risk

8. Rank the following factors as they most affect your default risk, (assign 1 for strongly affecting and 4 least affecting, and others accordingly).

Lack of qualified analysts

unexpected business failure

False disclosure

Any other,

change in economic condition

specify\_\_\_\_\_

Interest rate change

9. Is there any way you may grant loan without demanding collateral? If yes specify\_\_\_\_\_

10. From the total credit applicants in a particular year what is the [rough] percentage of applicants rejected due to lack of insufficient collateral?

\_\_\_\_\_

11. What is the average number of days you need to process loan application, for new applicant?

\_\_\_\_\_days

12. Roughly, how much (in birr) do you incur in processing loan application – assuming labor, resource, and opportunity cost?

\_\_\_\_\_

***Part three: the need and Role of credit rating agencies***

13. Are you ready to grant loan to an applicant who is confirmed as highly credit worthy by nationally recognized credit rating Agency?

Yes [ ] No [ ]

14. How much is your readiness to use information delivered by a credit rating Agency that discloses the creditworthiness of bond issuers (borrowers) through rating?

[ ] Highly ready

[ ] Ready with some caution (suspect)

[ ] Unwilling

[ ] Any other information specify\_\_\_\_\_

15. If you suspect the credit rating Agencies, cite some of your reasons for so(possible to choose more than one item)

[ ] They may deliver confidential information to a competitor

[ ] They may not undertake their assessment duly so may not give accurate rating

[ ] Because they ask a fee for the rating service which is a cost to us

[ ] Any other information specify\_\_\_\_\_

16. Which factor do you think is critical in determining the creditworthiness of bond issuer(borrower) (rank them by assigning 1 to 5 from most critical to least critical; by giving 1 to the most critical)

[ ] Cash flow status

[ ] Operating efficiency

[ ] Financial flexibility

[ ] Competitive climate

[ ] Capital structure

[ ] Management quality

17. Do you have different interest rate for differently creditworthy companies?

Yes [ ] No [ ]

18. If you select No for the above question, specify your reason?

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19. Do you have any intention of collaborating with other private or public banks to form a credit rating agent(CRA)

Yes [ ] No [ ]

20. Are the currently existing investment avenues available for you enough?

Yes [ ] No [ ]

21. Are you ready to invest on corporate bonds, and other borrowing securities issued [in fact with government permission] by private companies?

[ ] yes [ ] No

22. If your answer is No, what is your hesitation or fear?( if you choose more than one, rank them)

[ ] lack of Creditworthiness (ability to pay) of issuers

[ ] Because bonds can not be sold on demand due to lack of secondary market

[ ] Lack of appropriate credit analysts in our company who can make decision which and what kind of bond to buy

[ ] Any other specify\_\_\_\_\_

23. Do you think the development of credit rating Agencies (companies) will, at least partly, resolve your fear?

[ ] yes [ ] No

## Questionnaire<sub>2</sub>

Questions below are set to be responded by selected insurance companies which are assumed to be possible **investors** in the capital market for debt. The questions are designed in such a way that responses procured could give good insight into how important **credit rating Agencies (CRAs)** are for the operation of Insurance companies. To get reliable data the questions are deemed to be replied by an individual having relevant attachment with the issue. This questionnaire has three parts, of which Part three **may require** fresh background information about CRAs so respondents may consider that before filling this section. I want to reflect my many thanks for the curiosity and genuineness in filling this questionnaire. Choose by making a tick mark in the parenthesis.

### *Part one: personal information and awareness*

1. What is your academic status and your position in the organization?

---

2. Do you know what Credit Rating Agencies (CRAs) are? Make a tick mark.

Yes [ ] No [ ]

3. If yes, what do you think they do?

---

4. What is the academic & professional qualification of your investment analysts?

[ ] Diploma holders

[ ] First degree holders

[ ] First degree holders with some international professional certification

[ ] Masters degree holders

[ ] Masters degree holders with some international professional certification

Any other, specify\_\_\_\_\_

5.What is the average work experience of your investment analysts

Less than three years

Three to six years

six to ten years

Greater than ten years

***Part two: current investment opportunities***

6.Where do you currently invest your investable fund? ( *choosing more than one item is possible*)

bank time deposit

corporate certificate of deposit

real estate

any other

corporate bonds

\_\_\_\_\_

7.How do you rank the following investment difficulties by considering your current situation( give 1 for the critical problem, 2 for less critical, and so on)

Liquidity problem (easily converting to cash as required)

Safety of principal recovery

Lesser return

Any other specify\_\_\_\_\_

8.Do you think the investment opportunities available and allowed to you currently are enough?

yes  No

9. Do you have any government restriction on your investment activities?

yes  No

10. If yes specify:

---

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11. If No, what possible investment opportunities you prefer?

---

---

12. Why? \_\_\_\_\_

***Part three: the need and role of credit rating agencies***

13. Are you ready to invest on corporate bonds, and other borrowing securities issued [in fact with government permission] by private companies?

yes  No

14. If your answer is No, what is your hesitation or fear?( if you choose more than one rank them)

lack of Creditworthiness (ability to pay) of issuers

Because bonds can not be sold on demand due to lack of secondary market

Lack of appropriate credit analysts in our company who can make decision which and what kind of bond to buy

Any other specify \_\_\_\_\_

15. Do you think the development of credit rating Agencies (companies) will, at least partly, resolve your fear?

yes  No

16. How much is your readiness to use information delivered by a credit rating Agency that discloses the creditworthiness of bond issuers through rating?

Highly ready

Ready with some caution (suspect)

Unwilling

Any other information specify\_\_\_\_\_

17. If you suspect the credit rating Agencies, cite some of your reasons for so(possible to choose more than one item)

They may deliver confidential information to a competitor

They may not undertake their assessment duly so may not give accurate rating

Because they ask a fee for the rating service which is a cost to us

Any other information specify\_\_\_\_\_

18. Which factor do you think is critical in determining the creditworthiness of bond issuer(borrower) (rank them by assigning 1 to 5 from most critical to least critical; by giving 1 to the most critical)

Cash flow status

Operating efficiency

Financial flexibility

Competitive climate

Capital structure

Management quality

### **Interview Questions (NBE)**

Questions below are designed for structured interview to be conducted with Banking Supervision and Research and Development officers of National Bank of Ethiopia. The questions are designed in such a way that focus group discussion is desired with respect to the issues raised in the question. Thank you in advance

1. How is the credit penetration level of the country considered? Do you think the currently existing bank-based system could satisfy the required flow of funds in the country type and amount?
2. Is there any intention to develop the securities market, especially the bond market? If yes when and how?
3. Is there any intention to develop Credit Rating Agencies (CRAs)? If so when and how? Do you think CRAs help the development of securities market?
4. Do you think the securities market could efficiently operate without the CRA?
5. Is the National Bank of Ethiopia (NBE) working towards promoting corporate instrumental borrowing like corporate bonds, commercial paper, and certificate of deposit?  
  
If yes, when and how?  
  
If no, why?
6. Have Ethiopia ever got sovereign rating?
7. How do you consider the benefit of getting rated for a country?
8. Do you think that the Ethiopian Social Security Agency, Insurance companies and individual investors have enough investment opportunities, assuming the ill-development of securities market?

9. Do our banks finance Direct Foreign Investment (DFI)?
10. Is there any rule worked out as to the operation of CRAS? What pre-conditions should be satisfied before letting the operation of CRAs?
11. What challenges/opportunities could be foreseen in the act of developing CRAs in Ethiopia?
12. What possible benefits could be reaped from CRAs, assuming the Ethiopian context?
13. Is there any intention of securitizing collaterals?
14. How many companies in the country are capable of issuing bond or any other privately-placed borrowing instruments, satisfying the commonly acceptable requirements?