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CREDIT RATING AGENCIES AND THEIR POTENTIAL IMPACT ON DEVELOPING COUNTRIES

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CREDIT RATING AGENCIES AND THEIR POTENTIAL IMPACT ON DEVELOPING COUNTRIES

Marwan Elkhoury

Abstract

Credit rating agencies (CRAs) play a key role in financial markets by helping to reduce the informative asymmetry between lenders and investors, on one side, and issuers on the other side, about the creditworthiness of companies or countries. CRAs' role has expanded with financial globalization and has received an additional boost from Basel II which incorporates the ratings of CRAs into the rules for setting weights for credit risk. Ratings tend to be sticky, lagging markets, and overreact when they do change. This overreaction may have aggravated financial crises in the recent past, contributing to financial instability and cross-country contagion.

The recent bankruptcies of Enron, WorldCom, and Parmalat have prompted legislative scrutiny of the agencies. Criticism has been especially directed towards the high degree of concentration of the industry. Promotion of competition may require policy action at national and international level to encourage the establishment of new agencies and to channel business generated by new regulatory requirements in their direction.

I. INTRODUCTION

Credit rating agencies (subsequently denoted CRAs) specialize in analysing and evaluating the creditworthiness of corporate and sovereign issuers of debt securities. In the new financial architecture, CRAs are expected to become more important in the management of both corporate and sovereign credit risk. Their role has recently received a boost from the revision by the Basel Committee on Banking Supervision (BCBS) of capital standards for banks culminating in Basel II.

The logic underlying the existence of CRAs is to solve the problem of the informative asymmetry between lenders and borrowers regarding the creditworthiness of the latter. Issuers with lower credit ratings pay higher interest rates embodying larger risk premiums than higher rated issuers. Moreover, ratings determine the eligibility of debt and other financial instruments for the portfolios of certain institutional investors due to national regulations that restrict investment in speculative-grade bonds.

The rating agencies fall into two categories: (i) recognized; and (ii) non-recognized. The former are recognized by supervisors in each country for regulatory purposes. In the United States, only five CRAs of which the best known are Moody's and Standard and Poor's (S&P) are recognized by the Security and Exchange Commission (SEC). The majority of CRAs such as the Economist Intelligence Unit (EIU), Institutional Investor (II), and Euromoney are "non-recognized". There is a wide disparity among CRAs. They may differ in size and scope (geographical and sectoral) of coverage. There are also wide differences in their methodologies and definitions of the default risk, which renders comparison between them difficult.

Regarding their role vis-à-vis developing countries, the rating of country and sovereign is particularly important. As defined by Nagy (1984), "Country risk is the exposure to a loss in cross-border lending, caused by events in a particular country which are – at least to some extent – under the control of the government but definitely not under the control of a private enterprise or individual". Under this definition, all forms of cross-border lending in a country – whether to the government, a bank, a private enterprise or an individual – are included. Country risk is therefore a broader concept than sovereign risk. The latter is restricted to the risk of lending to the government of a sovereign nation. However, sovereign and country risks are highly correlated as the government is the major actor affecting both. Rare exceptions to the principle of the sovereign ceiling – that the debt rating of a company or bank based in a country cannot exceed the country's sovereign rating – do occur.

The failure of big CRAs to predict the 1997–1998 Asian crisis and the recent bankruptcies of Enron, WorldCom and Parmalat has raised questions concerning the rating process and the accountability of CRAs and has prompted legislators to scrutinize rating agencies. This report gives an overview of the sovereign credit rating industry: (i) analyses its impact on developing countries; and (ii) assesses some of the CRAs' shortcomings in the context of concerns that have recently been raised.

II. CREDIT RATING AGENCIES IN THE INTERNATIONAL FINANCIAL SYSTEM

A. Asymmetry of information and CRAs as "opinion" makers

A credit rating compresses a large variety of information that needs to be known about the creditworthiness of the issuer of bonds and certain other financial instruments. The CRAs thus contribute to solving principal agent problems by helping lenders "pierce the fog of asymmetric information that surrounds lending relationships and help borrowers emerge from that same fog"[1].

CRAs stress that their ratings constitute opinions. They are not a recommendation to buy, sell or hold a security and do not address the suitability of an investment for an investor. Ratings have an impact on issuers via various regulatory schemes by determining the conditions and the costs under which they access debt markets. Regulators have outsourced to CRAs much of the responsibility for assessing debt risk. For investors, ratings are a screening tool that influences the composition of their portfolios as well as their investment decisions.

B. Credit ratings and Basel II

Regulatory changes in banks' capital requirements under Basel II have resulted in a new role to credit ratings. Ratings can be used to assign the risk weights determining minimum capital charges for different categories of borrower. Under the Standardized Approach to credit risk, Basel II establishes credit risk weights for each supervisory category which rely on "external credit assessments" (see box 1). Moreover, credit ratings are also used for assessing risks in some of the other rules of Basel II.

[1] White (2001: 4).

Box 1: Basel II

The major objective of Basel II 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 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 Standardised Approach (SA) the measurement of credit risk is based on external credit assessments 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 supervisors for measures of the other determinants of credit risk. Under the Advanced Version (AV), banks also estimate their own measures of all the determinants of credit risk, including Loss Given Default (LGD) and Exposure at Default (EAD).

Under the regulatory 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 of 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.

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

Source: Various writers such as Reisen (2002), have expressed the view that the Basel II Accord may destabilize private capital flows to developing countries. This would be true if the closer links under Basel II between the levels of banks' regulatory capital and their assessment of credit risks accentuated pro-cyclical fluctuations in their lending. Moreover, the same link may also result in higher interest rates than under the 1988 Accord for less creditworthy developing country borrowers. The ratings of CRAs may contribute to unfavourable effects under both headings. As discussed below, changes in these ratings sometimes follow closely cyclical changes in economic conditions. Moreover, owing to their low credit ratings, certain developing countries may be assigned higher weights for credit risk than under 1988 Capital Accord and thus be charged higher rates of interest on their borrowing.

The importance of ratings-based regulations is particularly visible in the United States, where it can be traced back to the 1930s. These regulations not only affect banks but also insurers, pension funds, mutual funds and brokers by restricting or prohibiting the purchase of bonds with "low" ratings. Examples are: (i) non-investment grade or speculative-grade ratings easing the issuance conditions or disclosure requirements for securities carrying a "satisfactory" rating; and (ii) an investment-grade rating.[2] While ratings-based regulations are less common in Europe, they are part of the new Capital Requirements Directive through the EU that will implement Basel II.

[2] The major CRAs have their own rating schemes which differ for different categories of debt: long- and short-term; bank- and non-bank and in the case of Fitch's ratings for banks include the likelihood of external support, should this become necessary to enable them to continue meeting their financial obligations on a timely basis. The best known ratings are those of Moody's and Standard and Poor's for long-term debt, which vary between AAA and BBB for investment grade for Standard and Poor's (Aaa-Baa3 for Moody's) and between BB+ and CC for speculative grade for Standard and Poor's (Ba1-C for Moody's). For more details see table 1 of annex 2.

III. CREDIT RATING AGENCIES' PROCEDURES AND METHODS

A. Quantitative and qualitative methods

The processes and methods used to establish credit ratings vary widely among CRAs. Traditionally, CRAs have relied on a process based on a quantitative and qualitative assessment reviewed and finalized by a rating committee. More recently, there has been increased reliance on quantitative statistical models based on publicly available data with the result that the assessment process is more mechanical and involves less reliance on confidential information. No single model outperforms all the others. Performance is heavily influenced by circumstances.

A sovereign rating is aimed at "measuring the risk that a government may default on its own obligations in either local or foreign currency. It takes into account both the ability and willingness of a government to repay its debt in a timely manner.[3]" The key measure in credit risk models is the measure of the Probability of Default (PD) but exposure is also determined by the expected timing of default and by the Recovery Rate (RE) after default has occurred:

- Standard and Poor's ratings seek to capture only the forward-looking probability of the occurrence of default. They provide no assessment of the expected time of default or mode of default resolution and recovery values;
- By contrast, Moody's ratings focus on the Expected Loss (EL) which is a function of both Probability of Default (PD) and the expected Recovery Rate (RE). Thus EL = PD (1- RE); and
- Fitch's ratings also focus on both PD and RE (Bhatia, 2002). They have a more explicitly hybrid character in that analysts are also reminded to be forward-looking and to be alert to possible discontinuities between past track records and future trends.

The credit ratings of Moody's and Standard and Poor's are assigned by rating committees and not by individual analysts. There is a large dose of judgement in the committees' final ratings. CRAs provide little guidance as to how they assign relative weights to each factor, though they do provide information on what variables they consider in determining sovereign ratings. Identifying the relationship between the CRAs' criteria and actual ratings is difficult, in part because some of the criteria used are neither quantitative nor quantifiable but qualitative. The analytical variables are interrelated and the weights are not fixed either across sovereigns or over time. Even for quantifiable factors, determining relative weights is difficult because the agencies rely on a large number of criteria and there is no formula for combining the scores to determine ratings.

In assessing sovereign risk, CRAs highlight several risk parameters of varying importance: (i) economic; (ii) political; (iii) fiscal and monetary flexibility; and (iv) the debt burden (see box 2). Economic risk addresses the ability to repay its obligations on time and is a function of both quantitative and qualitative 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 only limited legal redress, a government can (and sometimes does) default selectively on its obligations, even when it possesses the financial capacity for debt service. 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 2).

[3] Moody's special comment (August 2006:1). "A Guide to Moody's Sovereign Ratings".

Box 2: Standard and Poor's sovereign ratings methodology profile

Political risk

- Stability and legitimacy of political institutions;
- Popular participation in political processes;
- Orderliness of leadership successions;
- Transparency in economic policy decisions and objectives;
- Public security; and
- Geopolitical risk.

Income and economic structure

- Prosperity, diversity and degree to which economy is market-oriented;
- Income disparities;
- Effectiveness of financial sector in intermediating funs availability of credit;
- Competitiveness and profitability of non-financial private sector;
- Efficiency of public sector;
- Protectionism and other non-market influences; and
- Labour flexibility.

Economic growth prospects

- Size and composition of savings and investment; and
- Rate and pattern of economic growth.

Fiscal flexibility

- General government revenue, expenditure, and surplus/deficit trends;
- Revenue-raising flexibility and efficiency;
- Expenditure effectiveness and pressures;
- Timeliness, coverage and transparency in reporting; and
- Pension obligations.

General government burden

- General government gross and net (of assets) debt as a per cent of GDP;
- Share of revenue devoted to interest;
- Currency composition and maturity profile; and
- Depth and breadth of local capital markets.

Offshore and contingent liabilities

- Size and health of NFPEs; and
- Robustness of financial sector.

Monetary flexibility

- Price behaviour in economic cycles;
- Money and credit expansion;
- Compatibility of exchange rate regime and monetary goals;
- Institutional factors such as central bank independence; and
- Range and efficiency of monetary goals.

External liquidity

- Impact of fiscal and monetary policies on external accounts;
- Structure of the current account;
- Composition of capital flows; and
- Reserve adequacy.

External debt burden

- Gross and net external debt, including deposits and structured debt;
- Maturity profile, currency composition, and sensitivity to interest rate changes;
- Access to concessional lending; and
- Debt service burden.

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Source: Standard and Poor's (October 2006). "Sovereign Credit Ratings: A Primer.
Notes: NFPEs: Non-Financial Public Sector Enterprises.

Broadly speaking, the economic variables aim at measuring three types of performance: (i) measures of domestic economic performance; (ii) measures of a country's external position and its ability to service its external obligations; and (iii) the influence of external developments. 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.

In practice, a small number of variables such as: (i) GDP per capita; (ii) real GDP growth per capita; (iii) the Consumer Price Index (CPI); (iv) the ratio of government fiscal balance to GDP; and (v) government debt to GDP have a large impact on credit ratings. The relationship between these indicators and Standard and Poor's ratings are illustrated in figures 1-5 of Annex 1. By and large: (i) higher GDP per capita leads to higher ratings; higher CPI inflation to lower ratings, the lower the rating, the lower the government balance as a ratio to GDP; and (ii) higher fiscal deficits and government debt in relation to GDP to lower ratings.

B. Empirical assessments of credit rating determinants

A number of economists have estimated econometrically the determinants of credit ratings for both mature and emerging markets (Cantor and Packer, 1995, 1996; Haque et al., 1996, 1997; Reisen and von Maltzan 1999; Juttner and McCarthy, 2000; and Bhatia, 2002). In these studies, a small number of variables explain 90 per cent of the variation in the ratings:

- GDP per capita;
- GDP Growth;
- Inflation;
- The ratio of non-gold foreign exchange reserves to imports;
- The ratio of the current account balance to GDP; and
- Default history and the level of economic development.

Indeed, a single variable GDP per capita, explains about 80 per cent of the variation in ratings (Borenszstein and Panizza, 2006). It is worth noting that the fiscal position, measured by the average annual central government budget deficit/surplus ratio to GDP, in the three years before the rating year and the external position measured by the average annual current account deficit/surplus in relation to GDP, in the three years before the rating year, were found to be statistically insignificant.

While including political events can improve the explanatory power of the regressions, the exclusion of political variables does not bias the parameter estimates (Haque et al., 1996; Cantor and Packer, 1996). In addition, for developing country ratings, two other variables adversely affected ratings independently of domestic economic fundamentals (Haque et al., 1996, 1997):

- Increases in international interest rates; and
- The structure of its exports and its concentration.

Jüttner and McCarthy (2000), found a structural break in ratings assessment in 1997 in the wake of the South-East Asian crisis. "Econometric estimates may convey wrong or meaningless signals to investors during a rating crisis, there is no set model or framework for judgement which are capable of explaining the variations in assignment of sovereign ratings over time[4]". The authors add in a footnote that this means that in a global financial

[4] Jüttner and McCarthy (2000: 2- 22).

crisis ratings, models might become completely obsolete since a stable relationship between rating and their determinants might be impossible to identify.

In their analysis of the determinant of ratings during the the Asian crisis, Jüttner and McCarthy found that the following variables were significant:

- The CPI;
- The ratio of external debt to exports;
- A dummy default history;
- The interest rate differential; and
- The real exchange rate.

Neither the interest rate differential nor the real exchange rate were found to be significant determinants prior to the Asian crisis thus indicating that these variables may have been overlooked by the agencies before the crisis. Variables denoting financial strength were not found to be significant determinants of sovereign ratings even one year after the Asian crisis. However, these variables were subsequently included in ratings assessments by the major CRAs following their unsatisfactory performance during Asian crisis.

C. Rating differences, notching, solicited and unsolicited ratings

Although CRAs have different concepts and measurements of the probability of default, various studies which have compared Moody's and Standard and Poor's ratings, have found a great similarity for investment grade ratings (Cantor and Packer, 1996; Ammer and Packer, 2000). In the case of speculative-grade issues, Moody's and Standard and Poor's assign divergent ratings much more frequently to sovereign bonds than to corporate bonds. The literature also finds clear evidence of differences in rating scales once we move beyond the two largest agencies. For example, ratings for the same issuer tend to be lower for the two largest agencies than for other agencies such as Fitch, Duff and Phelps.[5]

Some of these differences can be explained by sample selection bias. The analysis of (Cantor and Packer, 1997) points to only limited evidence of significant selection bias and significant evidence for differences in rating scales between larger and small CRAs. Regardless of rating differences, the market appears to reward issuers with a lower interest costs when a third rating is assigned, especially when the rating is higher (BCBS, 2000).

Fitch and the Egan-Jones Rating Companies have accused the big two CRAs of practising the "notching", a practice whereby Moody's and Standard and Poor's would initiate an automatic downward of structured securities, if the two agencies were not hired to rate them (Egan-Jones Ratings Company, 2002). Moody's response to Fitch's accusations is that unsolicited ratings usually result in a lower rating for debt securities because of either lack of information or the use of different methodologies to determine the probability of default.

Unsolicited ratings raise potential conflict of interests. Both Moody's and Standard and Poor's state that they reserve the right to rate and make public ratings for United States SEC-registered corporate bonds, whether or not requested by an issuer. If the issuer does not request the rating, the rating will simply be based on publicly available information. If the issuer requests the rating, then it provides information to the rating agency and pays the fees. Many new entrants in the credit rating industry issue unsolicited ratings to gain credibility in the market. Some issuers have accused CRAs of using unsolicited ratings and the threat of

[5] The credit rating business of Duff and Phelps was merged to Fitch's in 1994.

lower ratings to induce issuers to cooperate in the rating process and pay the fees of solicited ratings[6].

Since 2001, Moody's claims that it has not done any unsolicited rating in Europe. Standard and Poor's also claims not to do any unsolicited rating outside the United States. As unsolicited ratings are based on public information and thus lack issuer input, the issue of unsolicited ratings could be addressed by requiring CRAs to disclose whether it has been solicited or not. Both Moody's and Standard and Poor's already specify in their ratings whether the ratings have been solicited and give issuers the opportunity to participate at any stage of the process, if they wish.

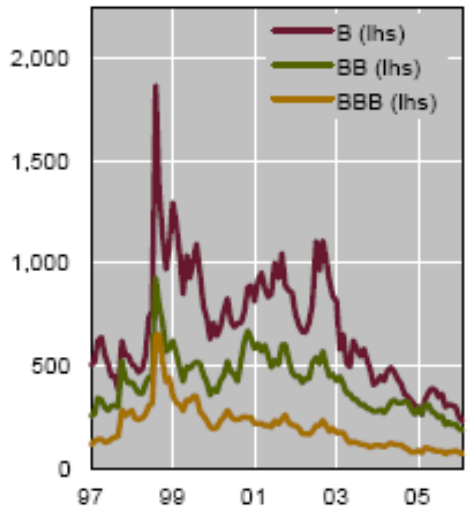
IV. IMPACT OF RATINGS

A. Costs and benefits of obtaining a rating

As mentioned earlier, 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. For sovereign borrowers, there is evidence of a clear correlation between bond spreads and ratings grade as shown in figure 1, (BCBS, 2006), the lower the rating, the higher the spread.

Figure 1

Bond spreads by ratings



Source: BIS Quarterly Review, JPMorgan Chase and EMBI Global Diversified (EMBIGD) (March 2006).

[6]SEC (Concept Release nos. 33-8236; 34-47972 and IC-26066). Rating agencies and the use of Credit Ratings under the Federal Securities Laws.

There are other indirect benefits from ratings for low income countries, namely: (i) to foster FDI; and (ii) to promote more vibrant local capital markets greater public sector financial transparency"[7]. As a result, even some sovereigns that do not intend to issue cross-border debt in the immediate future are seeking credit ratings from CRAs.

For emerging markets, there is an important externality of obtaining a rating, that of the "sovereign ceiling" effect. Borenzstein et al., (2006), find that, although it has been relaxed since 1997, the effect of the sovereign ceiling remains statistically highly significant, especially for bank corporations, being more important for banks that reside in countries with a high level of sovereign debt and smaller for banks with strong foreign parents.

B. Booms and busts: financial crises in emerging markets and the pro-cyclicality of ratings

The 1997–1998, Asian crisis highlighted CRAs' potential for reinforcing booms-and-busts of capital flows. As ratings lagged, instead of leading market events and over reacted during both the pre-and post-crisis periods, they may have helped to amplify these cycles. Other evidence points in the same direction.

Several empirical studies show that sovereign ratings are sticky, lagging market sentiment and overreacting with a lag to economic conditions and business cycles. (Larrain et al., 1997; Reisen and von Maltzan, 1997) have found that ratings are correlated with sovereign bond yield spreads. In the aftermath of the 1994–1995 Mexican crisis, the authors find a two–way causality between sovereign ratings and market spreads. Not only do international capital markets react to changes in the ratings, but the ratings systematically respond, with a lag to market conditions as reflected in the sovereign bond yield spreads. This study also indicates a highly significant announcement effect when emerging markets sovereign bonds are put on review with negative outlook. Moreover, the study finds a significant negative effect of rating announcements following a rating downgrade, investors need to readjust their portfolios. Positive rating announcements, by contrast, do not seem to have a significant effect on bond spreads.

Moody's more recent 2003 report on pro-cyclicality claims that the relative stability of credit ratings compared to market-based indicators suggests that ratings were more likely to dampen rather than to amplify the credit cycle, and that most rating changes reflected long lasting changes in fundamental credit risk rather than temporary cyclical developments. The relationship between credit ratings and the cyclicality –and thus the impact of changes in the CRAs' practices in response to shortcomings revealed by the crises of the 1990s – thus remains an open empirical question.

C. Accuracy and performance of ratings

CRAs' failure to predict the Mexican and Asian financial crises was due, among other things, to the fact that contingent liability and international liquidity considerations had not been taken into account by CRAs. Concerning the Asian crisis, Moody's acknowledged that it had been confronted with a new set of circumstances requiring a paradigm shift in the following areas:

- Greater analytic emphasis on the risks of short-term debt for otherwise creditworthy countries;

[7] Standard and Poor's and David B (2004). "Credit FAQ: The Future of Sovereign Credit Ratings", London.

- Greater emphasis on the identity and creditworthiness of a country's short-term borrowers;
- Greater appreciation of the risks posed by a weak banking system;
- Greater attention to the identity and likely behaviour of foreign short-term creditors; and
- Increased sensitivity to the risk that a financial crisis in one country can lead to contagion effects for other countries.

A balance has to be found in the trade-off between accuracy and stability. Rating agencies are averse to reversing ratings within a short period of time. Both Moody's and Standard and Poor's intend their ratings to be stable measures of relative credit risk. Moody's claims that this corresponds to issuers' as well as institutional investors' wishes and that its "*desire for stable ratings reflects the view that more stable ratings are 'better' ratings".*

An economist argues that measured "failures" are based on ratings stability (Bhatia, 2002). With exceptions for some of the lowest ratings, he defines a "failed rating" as one that is lowered or raised by "three or more notches within 12 months". The choice of three notches is related to the small probability of a three notch rating change among CRAs. Applying the Bhatia definition of rating failure to the long-term foreign currency sovereign ratings of Moody's and Standard and Poor's in 1997–2002, shows that Moody's and Standard and Poor's both experienced failures during the Asian crisis; Standard and Poor's failed also during the Russian and Argentinean crisis; and Moody's failed during the Russian but not the Argentinean crisis (see table below). Bhatia's failure definition suggests that rating failures was less prevalent in 1999–2002 than in 1997–1998.

Sovereign ratings failure statistics, 1997–2002[1/]

Faiure	Failed rating (and date)[2]	Corrected rating (and date)[2]	Notches adjusted[3]	Key factor
S&P				
1997: Thailand	A (3 Sep. 1997)	BBB- (8 Jan. 1998)	4↓ (0.97)	Evaporation of reserves
1997: Indonesia	BBB (10 Oct. 1997)	B- (11 Mar. 1998)	7↓ (1.40)	Collapse of asset quality
1997: Rep. of Korea	AA- (24 Oct. 1997)	B+ (22 Dec. 1997)	10↓ (5.26)	Evaporation of reserves
1997: Malaysia	A+ (23 Dec. 1997)	BBB- (15 Sep. 1998)	5↓ (0.57)	Collapse of asset quality
1998:Rep. of Korea	B+ (18 Feb. 1998)	BBB- (25 Jan. 1999)	4↑ (0.36	Reserves replenishment
1998: Romania	BB- (20 May 1998)	B- (19 Oct. 1998)	3↓ (0.61)	Evaporation of reserves
1998: Russian Federation	BB- (9 June 1998)	B- (13 Aug. 1998)	3↓ (1.43)	Evaporation of reserves
2000: Argentina	BB (14 Nov. 2000)	B- (12 July 2001)	4↓ (0.50)	Fiscal slippage
2002. Uruguay	BBB- (14 Feb. 2002)	B (26 July 2002)	5↓ (0.94)	Evaporation of reserves
Moody's				
1997: Thailand	A2 (8 Apr. 1997)	Bal (21 Dec. 1997)	5↓ (0.68)	Evaporation of reserves
1997:Rep. of Korea	A1 (27 Nov. 1997)	Bal (21 Dec. 1997)	6↓ (7.83)	Evaporation of reserves
1997: Indonesia	Baa3 (21 Dec. 1997)	B3 (20 Mar. 1998)	6↓ (2.05)	Collapse of asset quality
1997: Malaysia	A1 (21 Dec. 1997	Baa2 (14 Sep. 1998)	4↓ (0.46)	Collapse of asset quality
1998:Russian Federation	Ba2 (11 Mar. 1998)	B3 (21 Aug. 1998)	4↓ (0.75)	Evaporation of reserves
1998:Moldovia	Ba2 (14 July 1998)	B2 (14 July 1998)	3↓ (90.00)	Evaporation of reserves
1998:Romania	Ba3 (14 Sep. 1998)	B3 (6 Nov. 1998)	3↓ (1.76)	Evaporation of reserves
2002: Uruguay	Baa3 (3 May 2002)	B3 (31 July 2002)	6↓ (2.07)	Evaporation of reserves

Source: Bhatia (2002: box 5).

Notes: 1/ Ratings failure defined by successive downgrades or upgrades of a long-term foreign currency sovereign rating by three or more notches in aggregate during any rolling 12-month period, excluding downgrades or upgrades into, out of , within, or between the ratings categories from "CCC" or "Caa" downward. Based on ratings activity up to-end July 2002, coverage of failures from August 2001 on is therefore partial.

2/ Refers to a long-term foreign currency sovereign rating.

3/ Notches of ratings downgrades (↓) or upgrades (↑). Figures in parentheses capture the speed of adjustment, in notches per month (notches of adjustment divided by the number of months from start to end of the corrective sequence).

In response to criticism concerning such failures, Moody's has introduced watchlist and Standard and Poor's outlook reports to alleviate the tension between accuracy and stability by providing timely warnings of likely rating changes.

Ratings performance can also be compared with market indicators. (IMF,1999) conducted an analysis of yield spreads in relation to the Asian crisis and found that one year ahead of the crisis in Thailand, Indonesia and the Republic of Korea, sovereign spreads were quite low – of the order of 100–150 basis points. In the Russian Federation and Brazil, they were higher – about 300 basis points. Thus, in relative terms, the markets were in broad agreement with the CRAs with respect to these countries, indicating a higher risk of default for the Russian Federation and Brazil than for the Asian countries. Moreover, spreads did not widen much initially in response to the onset of the Asian crisis, a pattern conforming to that of the ratings. Thus the performance of financial markets broadly paralleled that of the major CRAs.

D. Impact of ratings on policies pursued by borrowing countries

For borrowing countries, a rating downgrade has negative effects on their access to credit and the cost of their borrowing (Cantor and Packer, 1996). Although precise information is not available on the way in which macroeconomic policies are taken into consideration by CRAs in establishing sovereign ratings, it is reasonable to assume that orthodox policies focusing on the reduction of inflation and government budget deficits are favoured. There is a risk, therefore, that in order to avoid rating downgrades, borrowing countries adopt policies that address the short-term concerns of portfolio investors, even when they are in conflict with long-term development needs. However, this is an issue which has not been the subject of systematic research.

V. PUBLIC POLICY CONCERNS

A. Recent regulatory initiatives

In view of the critical role played by CRAs in the modern financial architecture, policy-makers have recently focused on some shortcomings arising from the following concerns:

- Barriers to entry and lack of competition;
- Conflicts of interest;
- Transparency; and
- Accountability.

These concerns have been raised by the International Organization of Securities Commission, (IOSCO), the United States Securities and Exchange Commission, (SEC), the European Commission Committee of European Securities Regulations, (CESR), and by the United States Congress and Senate.

On the basis of Section 702 of the Sarbanes-Oxley Act of 2002, the United States Congress mandated the SEC to issue a "Report on the Role and Function of Credit Rating Agencies" in the operation of the Securities Markets. This was to address several issues pertaining to the current role and functioning of CRAs including the information flow in the credit-rating process, barriers to entry artificially created by the Nationally Recognized Statistically Rating Organizations (NRSRO) designation in the United States and conflicts of interest or abusive practices.

A review of the concept of NRSRO was already underway at the SEC. In June 2003, the SEC issued a Concept Release seeking comments with respect to whether CRAs' ratings should continue to be used for regulatory purposes, and if so, whether the NRSRO certification procedure was appropriate as well as more generally what should be the adequate level of regulatory oversight for CRAs. In April 2005, the SEC released a "Proposed Rule" aiming at insuring a higher level of transparency with respect to the NRSRO concept.

The technical committee of the IOSCO issued three reports in September 2003: (i) Report on the Activities of Credit Rating Agencies; (ii) Statement of Principles Regarding the Activities of Credit Rating Agencies; and (iii) Report on Analyst of Conflict of Interest. These reports highlighted the important role CRAs play in financial markets, and aimed at ensuring greater reliability for their ratings. In December 2004, the IOSCO published its Code of Conduct Fundamentals for Credit Rating Agencies (the IOSCO Code) which aimed at developing "governance rules" for CRAs to ensure: (i) quality and integrity of the rating process; (ii) independence of the process and avoidance of conflict of interests; and (iii) greater transparency in the methodology of ratings and adequate treatment of confidential information. However, the IOSCO Code did not address the issue of enforcement of the Code, recommending that CRAs adopt these rules voluntarily.

In response to IOSCO's Code of Professional Conduct, Moody's and Standard and Poor's published their own Code of Professional conduct in the second half of 2005, thus aligning their policies and procedures with IOSCO's Code. In the spring of 2006, Moody's and Standard and Poor's published their first report on the implementation of the Code of conduct. Here, it was stated that, even before the SEC and IOSCO had recommended new rules of conduct in 2003, the two agencies had already established internal codes of conduct and procedures to prevent and manage potential conflict of interests and to safeguard the independence and objectivity of their rating processes.

Consideration of the issues related to CRAs by the United States Congress eventually culminated in the Credit Rating Agency Reform Act which was signed into law in early September 2006. This amended the Securities Exchange Act of 1934 to redefine an NRSRO as any CRA that has been in business for at least three consecutive years and is registered under the Act. It also prescribed procedural requirements for mandatory NRSRO registration and certification. It granted the SEC exclusive enforcement authority over any NRSRO and authorized the SEC: (i) to take action against an NRSRO that issued credit ratings in contravention of procedures, criteria and methodologies included in its registration application; and (ii) to censure, limit, suspend or revoke the registration of an NRSRO for violations of the Act.

In the European Union, the Enron and Parmalat breakdowns prompted discussions on CRA reliability. In response to a call by Commission for Advice, the CESR released in March 2005 "CESRs" Technical Advice to the European Commission on possible Measures Concerning Credit Rating Agencies.

B. Issues of concern

1. Barriers to entry and lack of competition

In the United States, there are only 5 CRAs designated by the SEC as NRSROs: (i) A.M. Best.; (ii) Dominion Bond Rating Service (DBRS); (iii) Fitch; (iv) Moody's Investors Service; and (v) the Standard and Poor's Division of McGraw Hill. A.M. Best is a global agency which rates the debt only of insurance companies. DBRS is Canadian-based with a regional scope and the only non-US NRSRO designated agency. Thus, the number of global NRSROs providing a comprehensive service in the United States are three, of which two agencies,

Moody's and Standard and Poor's control over 80 per cent of the market. The mean number of CRAs recognized among the BCBS' member countries is around six and there are between 130–150 credit rating agencies in the world. However, only a small number of CRAs are recognized internationally and the number has not changed much since the 1970s (BCBS, 2000).

According to the United States Department of Justice, the NRSRO designation has acted as a barrier to entry in a catch-22 manner.[8] A new rating agency cannot obtain national recognition without NRSRO status and it cannot obtain NRSRO status without national recognition. In the words of the Rapid Ratings testimony before the Committee on Financial Services[9], "the effect of this catch-22 has been to preserve a duopoly that has thwarted competition and innovation".

In an effort to increase competition and improve the quality of credit ratings, Representative Fitzpatrick introduced H.R. 2990, The Credit Rating Agency Duopoly Relief Act of 2005. He believed that the SEC-NRSRO designation constituted an "insurmountable and artificial barrier to entry". Lack of competition in the industry has led to inflated prices, stifled innovation, lower quality of ratings, and unchecked conflict of interests and anti-competitive practices[10]. This bill was the basis of the Credit Rating Agency Reform Act of 2006 (see above).

In its 2005 report to the European Commission mentioned above, the CESR also stated that new CRAs face a number of barriers to entry and existing CRAs face a number of natural barriers to expansion. Issuers usually only desire ratings from those CRAs that are respected by investors and which tend to be only those with a long performance record[11]. The CESR report concluded that "the impact of regulatory requirements on competition is not clear and therefore it cannot conclude that any regulatory requirements would either increase or decrease the entry barriers to the rating industry. Thus CESR does not recommend the use of regulatory requirements as a measure to reduce or remove entry barriers to the market for credit ratings."[12] The CESR recommended a "wait and see" attitude and implementation of IOSCO's Code.

In a response to such initiatives, Moody's stated that it "has supported eliminating regulatory barriers to entry". But, with regard to competition issues, Moody's argues that the "costly nature of executive time" would not allow issuers to have many different ratings. Because of network externalities, only a small number of CRAs would be favoured by investors, who would desire "consistency and comparability in credit opinions". Newly established CRAs would need time to gain credibility in the market.

Standard and Poor's also recommended its support to "a more open and transparent process to designate NRSROs reduce barriers to entry and ensure that the markets remain the ultimate judge of the rating process"[13]. However, Standard and Poor's did not believe that the whole NRSRO process should be withdrawn.[14]

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[8] http://www.sec.gov/rules/concepts/s71203/rapid110603.htm#P69_8177#P69_8177.

[9] H.R. (2990:8). The Credit Rating Agency Duopoly Relief Act of 29 November 2005, http://www.rapidratings.com/press_releases/2005nov_Credit_rating_testimony_press_release_rapid_ratings_corporate_credit_rating_agency.pdf.

[10] H.R. (2990:4-5). The Credit Rating Agency Duopoly Relief Act of 29 November 2005, Serial No. 109-66.

[11] CESR (2005: paras. 247-248).

[12] Ibid (para. 252).

[13] Standard and Poor's (July 2003: Press Release). S&P Supports a New More Transparent NRSRO Designation Process.

[14] Ibid, Standard and Poor's (July 2003: Press Release).

2. Potential conflict of interests

In its September 2003 "Report of Analyst Conflict of Interests", IOSCO highlighted potential conflict of interests facing the industry that can interfere with the independence and objectivity of its analysis. Conflict of interests may arise when a rating agency offers consulting or other advisory services to issuers it rates since issuers could be unduly pressured to purchase advisory services in return for an improved rating. The report also drew attention to the issue of "notching" by CRAs, i.e. lowering ratings for issues which they had not rated, and that of "'solicited" versus "unsolicited" ratings, where aggressive tactics might be used to induce payments for a rating an issuer did not request.

The IOSCO Code addresses the first of these issues with the following recommendation: (i) the credit rating, a CRA assigns to an issuer or security should not be affected by the existence of a potential business relationship between the CRA (or its affiliates); and (ii) the issuer (or its affiliates) or any other party, or the non-existence of such a relationship."[15] This principle has been integrated into Moody's and Standard and Poor's own Codes of Professional Conduct.

3. Transparency

Many market participants have expressed concern over the lack of transparency over CRAs' ratings methodologies, procedures, practices and processes. In this context, the IOSCO Code stresses the following in order to promote transparency and improve the ability of market participants and regulators to judge whether a CRA has satisfactorily implemented the Code Fundamentals: (i) CRAs should disclose how each provision of the Code Fundamentals is addressed in the CRA's own Code of Conduct; and (ii) CRAs should explain if and how their own Code of Conduct deviate from the Code Fundamentals and how such deviations nonetheless achieve the objectives laid out in the Code Fundamentals and the IOSCO-CRA principles. This will permit market participants and regulators to draw their own conclusions about whether the CRA has implemented the Code Fundamentals to their satisfaction, and to react accordingly.[16]

IOSCO requires the CRAs' methodologies to become public to enhance transparency in an industry which is very opaque in nature. "CESR goes further and proposes, as an alternative to self-regulation, the need to introduce some specific rules on fair representation which would establish a minimum level of disclosure on those elements and assumptions which make clear for market operators and investors to understand how a specific rating was determined by a credit rating agency"[17].

The nature and extent of information made available to the public still varies from agency to agency. Since the publication of the IOSCO Code and its integration into the CRAs' own Code of Conduct, the CRAs have increased the number of lengthy research reports and publications on their web sites and published some of the criteria used to assess credit risk in their bid to improve transparency. However, the view is still widespread that CRAs' methodologies, the variables and weights which they employ, and the criteria used in the deliberations of rating committees remain opaque to both investors and borrowers. The CESR summed up the continuing problem when it stated that: "Credit rating agencies should aim for transparency as the best way forward to enable investors and issuers to understand the quality and objectivity of the credit rating. Credit rating agencies should therefore implement measure 2.7 of the IOSCO Code".

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[15] IOSCO Code (Section 2: para. 2.2).
[16] IOSCO Code (2004, Introduction: 2).
[17] CESR (2005: para. 117).

4. Accountability

There is no mechanism to protect investors and/or borrowers from mistakes made by CRAs or any abuse of power on their part. This is true even if reputable interests and competition provide incentives for generating quality financial information. In order to promote transparency and improve the ability of market participants and regulators, to judge whether a CRA has satisfactorily implemented what it pledges it is doing, the IOSCO Code recommends only that CRAs give full effect to the Code by publishing their own, adhering to it and justifying publicly any deviation between this code and their activities.

There remains the need for more formal regulation to address market failures in the form of imperfect competition and principal-agent problems in the credit rating industry. The CESR technical report clearly puts its finger on the issue involved here: "The reason for having a regulatory mechanism should rather be that there exists some market failure that has to be dealt with. In essence, all the issues discussed in the previous chapter arise, because of the existence of conflict of interests between the CRAs and the issuers and/or the users of ratings (the investors). This type of conflict of interests between professional players on the financial markets are natural and exist in numerous areas of the markets. They become especially apparent in the rating market because of the lack of balance of power between the different players. Issuers are relatively weak compared to the CRAs because of their dependence on the ratings they get. Investors have not historically invested large resources in improving rating agencies' behaviour because of CRAs insufficient transparency on its operations. This meant that CRAs historically have a very strong position. What the IOSCO Code is trying to do is to rebalance the interests between the different players."[18]

Rousseau (2005), sums up concern over the resulting "accountability gap" as follows: (i) this accountability gap is worrisome for CRAs as well as market participants; (ii) for the former, the accountability gap may affect their credibility in the marketplace; and (iii) for the latter, it is of particular concern given the role that CRAs play in capital markets. There is a need for a mechanism to take over if reputation fails.[19]

For the first time in the history of ratings in the United States, the Credit Rating Agency Reform Act of 2006 has clearly designated the SEC to monitor CRAs' compliance with new securities laws and regulations. The SEC will be able to act as deemed necessary, study and report to congressional committees any problems faced in the future in all matters related to the credit rating industry.

[18] CESR's technical advice to the European Commission on possible measures concerning credit rating agencies (March 2005: 51, para 260).
[19] Rousseau S (2005: 37).

VI. Conclusions

CRAs play a key role in financial markets by helping to reduce the informative asymmetry between lenders and investors, on one side, and issuers on the other side, about the creditworthiness of companies (corporate risk) or countries (sovereign risk). CRAs' role has expanded with financial globalization and has received an additional boost from Basel II which incorporates the ratings of CRAs into the rules for setting weights for credit risk.

In making their ratings, CRAs analyse public and non-public financial and accounting data as well as information about economic and political factors that may affect the ability and willingness of a government or firms to meet their obligations in a timely manner. However, CRAs lack transparency and do not provide clear information about their methodologies.

Ratings tend to be sticky, lagging markets, and then to overreact when they do change. This overreaction may have aggravated financial crises in the recent past, contributing to financial instability and cross-country contagion. Moreover, the action of countries which strive to maintain their rating grades through tight macroeconomic policies may be counterproductive for long-term investment and growth.

The recent bankruptcies of Enron, WorldCom, and Parmalat have prompted legislative scrutiny of the agencies. Criticism has been especially directed towards the high degree of concentration of the industry, which in the United States has reflected a registration and certification process in the form of NRSRO designation biased against new entrants. The effect of such concentration has been the absence of the discipline enforced by competition and a low level of innovation.

In the United States, policy action has included the 2006 Credit Rating Agency Reform Act which has overhauled the regulatory framework by prescribing procedural requirements for NRSRO registration and certification and by strengthening the powers of the SEC.

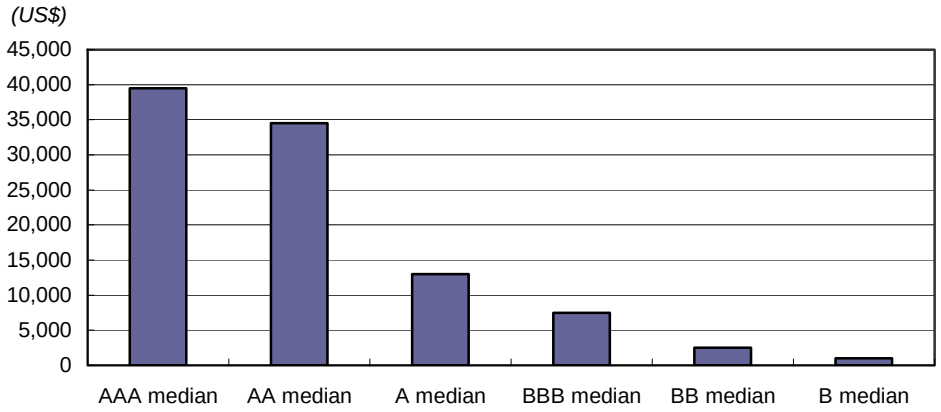
At international level, the main initiative has been the publication by IOSCO of its Code of Conduct. This Code aims at developing governance rules for CRAs to ensure the quality and integrity of the rating process, the independence of the process and the avoidance of conflict of interest and greater transparency. In its 2005 Technical Advice to the European Commission on possible Measures Concerning Credit Rating Agencies, the CESR recommended the implementation of the IOSCO Code and adoption of a "wait and see" attitude.

Definitive assessment of these initiatives would still be premature. The industry will receive a fillip from implementation of Basel II. The major CRAs will undoubtedly seek a substantial share of the new business which will result. Promotion of competition may require policy action at national level to encourage the establishment of new agencies and to channel business generated by new regulatory requirements in their direction. Regulatory action at the national level may also be necessary to ensure that the agencies operate in accord with levels of accountability and transparency matching the recommendations of the IOSCO Code.

ANNEX 1

Sovereign ratings methodology profile

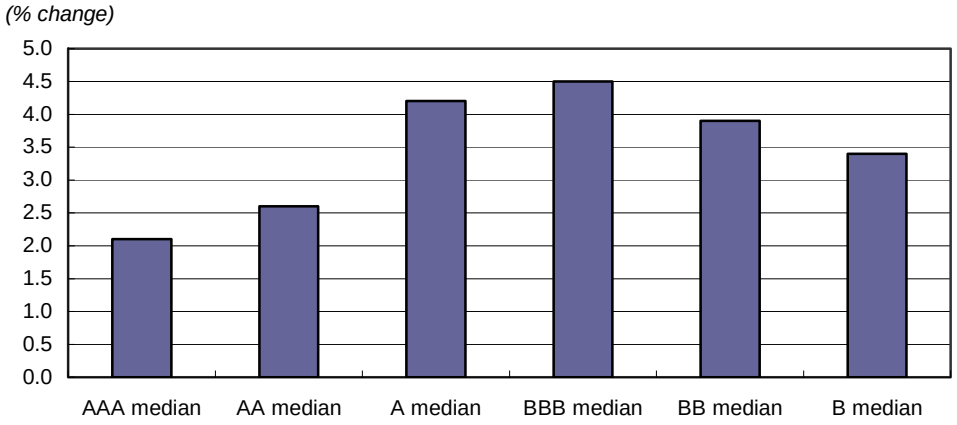
Figure 1
GDP per capita



f-Forecast.

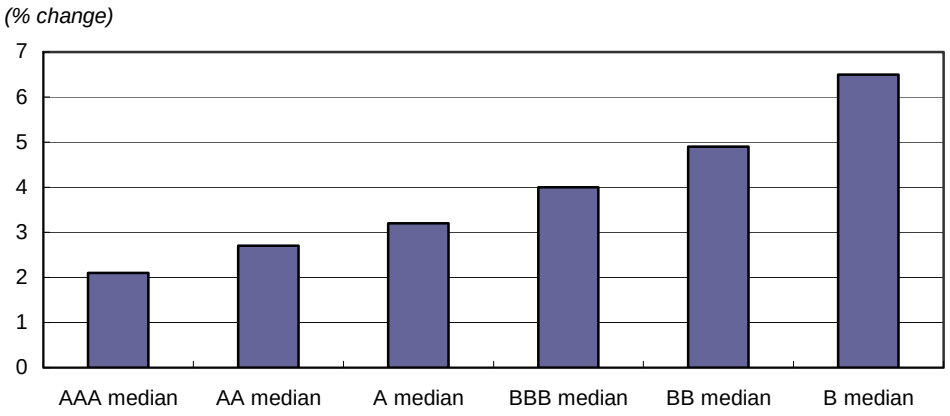
Source: Standard and Poor's (Oct. 2006). "Sovereign Credit Ratings: A Primer".

Figure 2
Real GDP growth per capita



Source: Standard and Poor's (Oct. 2006). "Sovereign Credit Ratings: A Primer".

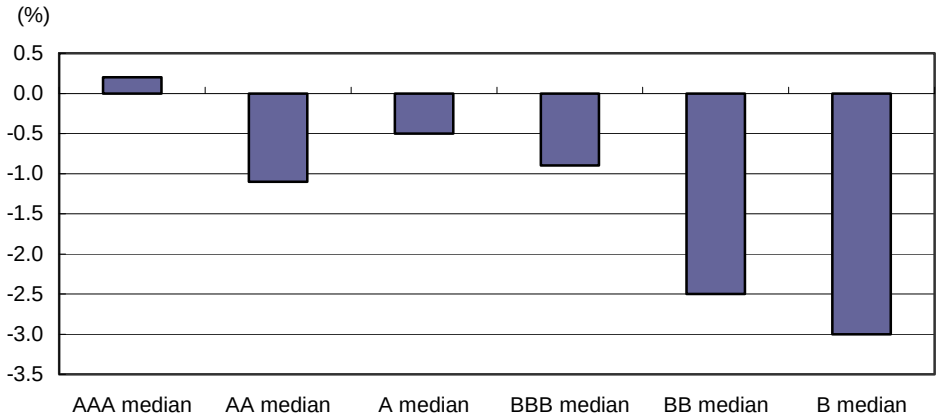
Figure 3
Consumer price index



f-Forecast.

Source: Standard and Poor's (Oct. 2006). "Sovereign Credit Ratings: A Primer".

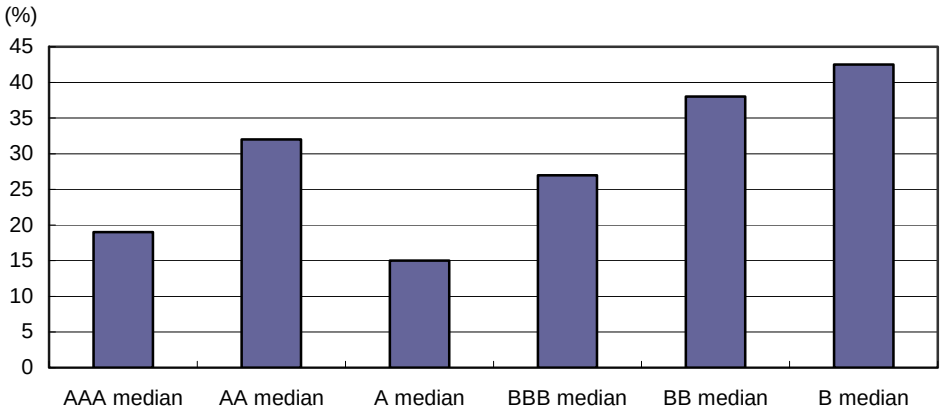
Figure 4
General government balance/GDP



f-Forecast.

Source: Standard and Poor's (Oct. 2006). "Sovereign Credit Ratings: A Primer".

Figure 5
Net general government debt/GDP



f-Forecast.

Source: Standard and Poor's (Oct. 2006). "Sovereign Credit Ratings: A Primer".

ANNEX 2

Rating symbols

Table 1: Rating symbols for long-term and short-term debt

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

Source: Based on Moody's, Standard and Poor's and Fitch.

Table 2: Rating agencies recognized in various countries

	Canadian Bond Rating Service (BRS)	Dominion Bond Rating Service (DBRS)	Duff and Phelps Credit Rating Agency	Fitch IBCA	Ital Rating DCR SPA	Japan Credit Rating Agency (JCR)	Japan Rating and Investment Information	Mikuni and Co.	Moody's Investor Service	Standard and Poor's Rating Services	Thompson Bank Watch	***Total number o f rating agencies recognized***
Members of the Basel Committee on Banking Supervision												
Belgium			T	T					T	T	T	**5**
Canada	T	T		T		T			T	T		**6**
France	T	T	T	T		T	T		T	T	T	**9**
Italy			T	T	T	T[1]			T	T	T	**7**
Japan			T	T		T	T		T	T	T	**7**
Luxembourg				T					T	T		**3**
Netherlands	T	T	T	T		T	T		T	T	T	**9**
Sweden				T					T	T		**3**
Switzerland		T		T				T	T	T	T	**6**
United Kingdom	T[1]	T[1]	T[1]	T		T[1]	T[1]	T[1]	T	T	T[1]	**10**
United States			T	T					T	T	T	**5**
Total BCBS	**4**	**5**	**7**	**11**	**1**	**6**	**4**	**2**	**11**	**11**	**8**	**70**
Interesting non-members of the BCBS												
Argentina			T	T						T	T	**4**
Australia	T[1]	T[1]	T[1]	T		T[1]	T[1]	T[1]	T	T	T[1]	**10**
Chile		T		T					T	T	T	**5**
Hong Kong (China)				T			T		T	T	T	**5**
Total non-BCBS	**1**	**2**	**2**	**4**	**0**	**1**	**2**	**1**	**3**	**4**	**4**	**27**
Total	**5**	**7**	**9**	**16**	**1**	**6**	**6**	**3**	**15**	**16**	**12**	

Source: BCBS (2000, Table 2: 46).

Notes: 1. Table 2 shows the rating agencies recognized by the banking supervisors in BCBS countries and selected non-members. The total number of agencies recognized in each country is shown in the right hand column. It is evident there is considerable disparity in the number of recognitions granted by supervisors. The big three CRAs: (i) Moody's; (ii) Standard and Poor's; and (iii) Fitch are recognized by all BCBS members and and almost all non-BCBS countries shown.

2. This table was done before the merger of Duff and Phelps with Fitch.

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