



Are Credit Rating Agencies Limiting the Operational Capacity of Multilateral Development Banks?

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Chris Humphrey, University of Zurich

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Multilateral development banks (MDBs) represent one of the most successful types of international organization created in the post-World War II era. Over 20 MDBs currently operate in the world, and two more—the Asian Infrastructure Investment Bank and BRICS New Development Bank—are due to begin operations in 2016.

A key reason for the enduring popularity of MDBs is their financial model. With a relatively small amount of capital contributions from shareholder governments, MDBs can borrow much larger amounts from private capital markets at attractive financial terms, and on-lend those resources for development projects with enough of a margin left over to cover administrative costs. Thus, government shareholders can have a very significant development impact (in financial terms, at least) with a relatively small budgetary outlay (Table 1).¹

Table 1. Shareholder Capital and Cumulative Operations, Selected MDBs (US\$ Billions)

| | Shareholder Capital | Cumulative Development Operations (to 2013) |
|--------------|---------------------|---|
| IBRD (1945) | 13.4 | 586.2 |
| IADB (1960) | 4.9 | 208.6 |
| AsDB (1966) | 5.9 | 146.4 |
| AfDB (1967) | 4.6 | 103.5 |
| CAF (1970) | 3.9 | 115.2 |
| EBRD (1991) | 8.6 | 116.9 |
| IsDB (1975) | 7.4 | 97.8 |
| IFC (1956) | 2.4 | 204.6 |
| Total | 51.1 | 1,579.0 |

Source: MDB annual reports.

Note: Figures are nominal. Includes loans, guarantees and equity investments. Operational launch year in parentheses.

Despite this track record, MDB operations do not come close to filling the gap between developmental needs and public and private sector financing. Just considering traditional physical infrastructure, estimates suggest needs of over \$3 trillion per year between 2015 and 2030 in low and middle-income countries, with a gap of \$1-1.5 trillion compared to existing public and private spending.² The total operational commitments of the eight largest MDBs³ of \$117 billion in 2013 falls well short of filling this gap. As a result, the international agenda has increasingly called for MDBs to scale up their activities, in conjunction with private sector actors. For example, the 2015 Addis Action Plan states that MDBs “should make optimal use of their resources and balance sheets, consistent with

¹ This refers to the non-concessional lending window of MDBs, which is funded mainly by capital market bond issues. The World Bank and the African, Asian and Inter-American Development Banks also have concessional lending windows that are funded directly by shareholder donations and do not use financial leverage. The analysis of this paper is focused on non-concessional lending.

² See Bhattacharya and Holt, forthcoming, and United Nations 2015.

³ The eight are: African Development Bank (AfDB), Andean Development Corporation (CAF), Asian Development Bank (AsDB), Inter-American Development Bank (IDB), European Bank for Reconstruction and Development (EBRD), the Islamic Development Bank (IsDB) and the World Bank’s sovereign (International Bank for Reconstruction and Development—IBRD and International Development Association—IDA) and non-sovereign (International Finance Corporation—IFC) divisions. The European Investment Bank (EIB) is the largest MDB in existence, but it lends almost entirely in industrialized European countries and is hence not discussed in this study.

maintaining their financial integrity...”,⁴ a policy direction also emphasized in the G20.⁵

At the same time, MDBs face restrictions on their ability to expand financing activities. The reasons behind these restrictions are many, including economic and political difficulties to additional shareholder capital contributions at the World Bank and major regional MDBs, as well as shareholder-imposed statutory and policy limits on leverage and portfolio growth. But one particular constraint that increasingly occupies the minds of treasury and risk officials at MDBs is the way in which MDBs are evaluated by the major credit rating agencies (CRAs).

The sensitivity of MDBs to the views of capital markets in general and CRAs in particular is nothing new—it is built into their organizational model. Relying on capital markets to raise resources for development projects is in many ways highly efficient, but it comes at a cost. Bond investors are (understandably and justifiably) interested in a return on their investment, not development outcomes, and hence appraise MDB activities very differently than those in the development field. Thus the development mission of MDBs has in the past and will continue to be at times in tension with the imperatives of their financial model.

However, in the last three years, the rating methodologies of the major CRAs—most notably Standard and Poor’s (S&P)—have become an increasing constraint on MDB operational capacity. CRAs have faced major pressure in the wake of the global financial crisis, and are implementing new rating criteria with a higher degree of transparency and comparability across asset classes. This is particularly difficult in the case of MDBs, as they have several characteristics that are difficult to evaluate in the same way as a commercial bank. As well, MDBs face no regulatory oversight or systematic independent financial analysis by regulatory authorities, meaning CRAs have no external reference on which to base their evaluation criteria.

This paper argues that CRAs are utilizing an evaluation methodology that fundamentally underestimates the financial strength of MDBs. As a result, to retain their AAA bond rating, major MDBs are i) restricting their overall capacity to make use of their balance sheet to address development needs and ii) facing pressure to limit counter-cyclical lending, especially in borrowing countries facing difficulties. CRAs—private, for-profit companies—have become the de facto regulator for the most important set of public institutions addressing global development. The methodologies used by CRAs are weakening several key aspects of the MDB model, and hence restricting their potential to improve the lives of millions if not billions of the world’s poor. This is a perverse outcome that calls for reconsideration and reform.

This paper considers the role played by CRAs in evaluating MDB finances, and the impact of their evaluation methodologies on the ability of MDBs to pursue their development mandate. The paper first reviews the role and evaluation

⁴ UN 2015, p. 17 (para. 70).

⁵ See for example G20 2015, para. 8.

methodology of CRAs in general terms, and then explores in more detail three particular aspects of the methodologies: portfolio concentration, preferred creditor status and callable capital. The concluding section considers how MDBs and shareholder governments might move forward to maximize the developmental potential of MDBs while maintaining their financial integrity and strong access to capital markets.

Why credit rating agencies matter

Private companies have been selling their services to evaluate bond investments since at least the early 1900s, when John Moody set up shop examining the finances of U.S. railroad companies.⁶ The role of CRAs was strengthened in the 1930s, with a legal provision recognizing their role, and solidified in 1975 when another legal provision made the agencies a key aspect of capital adequacy regulation in the U.S.⁷ On the strength of their regulatory status as well as decades of experience operating in first U.S. and global capital markets, the “Big Three” agencies of Standard & Poor’s, Moody’s and Fitch have become an entrenched aspect of investment decisions, particularly for large institutional investors. The Big Three accounted for 96.6% of all bond ratings outstanding as of December 31, 2013, and 99.1% of all government security bond ratings.⁸

Because MDBs have since their inception relied on capital markets for much of their financing, they have spent considerable efforts in obtaining high ratings for their bonds from CRAs. In the early years of the World Bank this proved to be no simple task, as bond markets viewed the newly created development bank as a highly dubious undertaking.⁹ The World Bank did not receive its coveted AAA rating until 1959, after years of lobbying and very strong financial performance.

In subsequent years, the other major regional MDBs—Asian Development Bank (AsDB), Inter-American Development Bank (IDB) and European Bank for Reconstruction and Development (EBRD)—all received AAA ratings, as did the African Development Bank (AfDB) after it accepted industrialized country shareholders in 1982.¹⁰ The main criteria of CRAs appears to have been mainly the backing of industrialized countries, as the former director of the World Bank’s Finance Area put it in a 1995 book, perhaps exaggerating only slightly: “...ratings agencies do not actually base their rating of the MDBs on the spurious sophisticated and often confusing, if not almost irrelevant, financial ratio analysis they purport to impress their readership with. Instead, they now appear to be basing their judgment solely on the strength of usable callable capital.”¹¹ MDBs

⁶ See among others Sylla, 2001, Sinclair 2005 and Langohr and Langohr 2009.

⁷ See Shorter and Seitzinger, 2009.

⁸ SEC 2014, p. 8. S&P accounted for 46.1% of the total, Moody’s 37.0% and Fitch 13.4%. A total of ten firms are formally registered with the SEC as “Nationally Recognized Statistical Rating Organization” for use in capital adequacy purposes, but the other firms have had little success in undermining the market hold of the Big Three. Foreign firms—notably the Japan Credit Rating Agency—are highly relevant for their domestic market, but are not international reference points. Newer firms—such as the recently announced Russian-Chinese Universal Credit Rating Group and other firms in China—may prove important in coming years but are as yet only incipient.

⁹ See Kapur et al. 1997 and Mason and Asher 1973 for details on early World Bank struggles to access New York capital markets and obtain a AAA rating.

¹⁰ See Strand, 2001. The AfDB was awarded AAA in 1990, although it was temporarily downgraded to AA+ between 1995 and 2003 due to poor financial performance.

¹¹ Mistry, 1995, p. 17.

without major backing by industrialized countries, on the other hand, found it impossible to obtain a AAA rating, regardless of their track record.

This strong reliance on callable capital as the key basis for ratings is no longer true today. In the wake of the global financial crisis, the situation facing the ratings agencies has changed considerably, due to the criticism they received in granting high ratings to bonds—notably structured financial securities—that later proved highly risky. S&P was fined \$1.5 billion in 2015 while the U.S. Justice Department has opened a case against Moody's,¹² and all the CRAs have faced greater regulatory and legal pressure from United States Securities and Exchange Commission (SEC), the European Securities and Markets Authority (ESMA), and others.¹³

This sudden increase in external pressure and attention has led the agencies to revamp their methodologies for evaluating different classes of investments, including MDBs. The focus has been to make rating criteria both more easily comparable across different asset classes (corporates, banks, municipalities, sovereigns, etc.), as well as to make the methodologies more transparent. Fitch (2012) and S&P (2012) published updated methodologies for MDBs, while Moody's (2013) published their methodology for the first time.

These methodologies provide considerably more insight than was previously available on how the agencies arrive at a final bond rating for MDBs. Of the three, S&P moved further than the other two in developing a more transparent and formulaic approach to evaluating MDBs. While this increased transparency and comparability is generally viewed as a positive step by MDB officials consulted for this study,¹⁴ it has also led to the most difficulties, due to S&P's methodology. As such, the following sections will focus mainly on S&P's methodology, using Moody's criteria for comparative purposes. These two CRAs jointly account for over 80% of bond ratings.

Overview of MDB evaluation methodology

S&P and Moody's take a broadly similar two-step approach to evaluating MDBs, but differ on the details. In the first step—building a “stand-alone” (S&P) or “intrinsic” (Moody's) evaluation—CRAs consider a wide range of characteristics (see Annex Figures A1-A4 for an overview). These include standard financial metrics such as shareholder equity, risk-weighted assets, non-performing loans, liquidity, and net income, as well as several more subjective attributes related to the relevance of the MDB to shareholders and borrowers, management capacity and internal efficiency and shareholder support, among others.

After finalizing the first step of the evaluation, agencies then in a second step consider whether an MDB should receive additional rating uplift as a result of financial support committed by country shareholders. This is based largely on

¹² See Reuters, 2015 and Wall Street Journal, 2015.

¹³ CFR, 2015.

¹⁴ Thirteen MDB officials in who deal directly with CRAs at AfDB, AsDB, CAF, EBRD, IBRD and IDB were interviewed for this study. See reference section for details.

access to callable capital, a contingent arrangement by which large sums of capital are available should an MDB face an emergency situation where it is unable to pay off bondholders. (See below for a fuller discussion of callable capital).

While many MDB characteristics are analogous to those of commercial financial institutions, and can hence be evaluated in a somewhat similar fashion, MDBs differ fundamentally from private banks in a number of significant ways, including:

- *Mission*: MDBs are not profit-oriented institutions, but rather seek to achieve development outcomes that do not appear on their balance sheets.
- *Ownership*: MDBs are for the most part owned by shareholder governments, and the capital structure and liability side of the balance sheet¹⁵ is very different from private banks.
- *Loan concentration*: The outstanding loan portfolio of most MDBs is structurally very concentrated, with only a small number of borrowers.
- *Preferred credit treatment (PCT)*: Borrowers have generally granted MDBs a privileged position to be first in line for repayment, should a country face financial restrictions.
- *Lack of regulator and LOLR*: MDBs do not fall under banking regulation of any single government, making them essentially self-regulated. As well, apart from the single case of the European Investment Bank (EIB), no MDB has access to lender-of-last-resort facility in case of liquidity problems.

CRAs must find some way to take these unique aspects of MDBs into account in arriving at their bond rating. This is no simple task, as some aspects (such as PCT) are informal and others (such as callable capital) have no easy analog in private financial institutions to use as benchmarks, and their impact on the ability of an MDB to repay bondholders is uncertain. As well, MDBs have no independent regulator to produce analysis that CRAs can build on to design their own evaluation methodologies. In the face of this confusing panorama, and in the wake of severe criticism for their role in the global financial crisis, it may not be surprising that the agencies have adopted a highly conservative approach to rating MDB bonds, as will be described below.

Despite both taking a broadly conservative view on MDB finances, S&P and Moody's differ substantially in both what weighting they give to individual sub-characteristics and the method by which these are summed up to arrive at a rating. S&P takes an approach that results in a more formulaic and restrictive evaluation of MDBs.

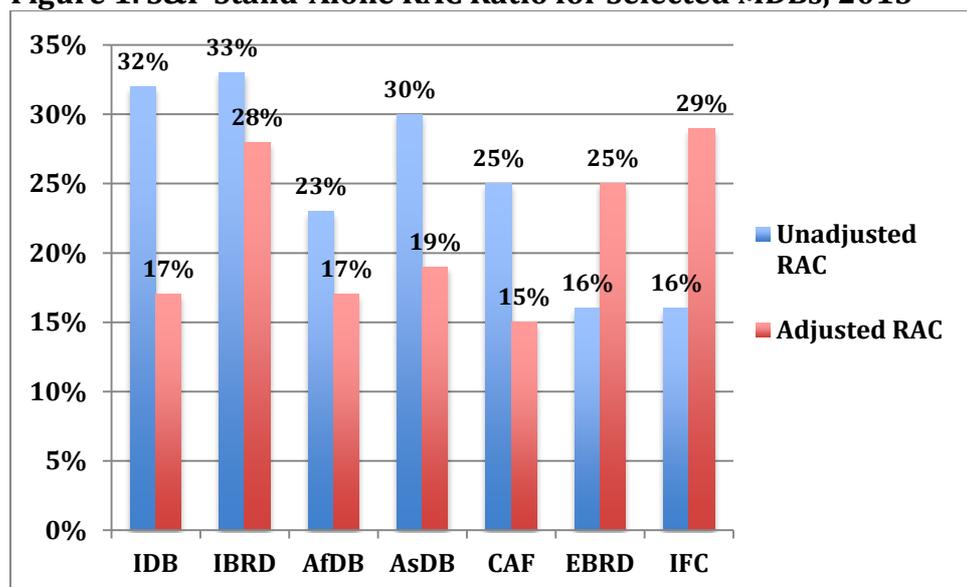
Conceptually, S&P evaluates MDBs as much as possible like private commercial financial institutions, with some adjustments to account for their unique

¹⁵ Notably, MDBs generally do not take deposits, which form a large share of liabilities at most banks. One exception to this is CAF in Latin America, which accepts deposits from public institutions in member countries, particularly central banks.

characteristics. This overall thrust results in a more cautious assessment of MDB financial strength. One key aspect of this is the Risk Adjusted Capital Framework (RACF) used by S&P for all financial institutions since 2009,¹⁶ and which has been adapted to MDBs. The advantage is, as S&P states in their methodology, that it “...introduces comparability with other financial institutions in that we use the RACF for commercial banks as well.”¹⁷ Because of its importance in understanding later sections of this paper, it is worth describing S&P’s RACF in general terms.

Essentially, the RAC is S&P’s approach to assessing capital adequacy, and is expressed as a percentage. The RAC is created by dividing shareholder equity (capital plus reserves) by risk-weighted assets (RWA). RWA, in turn, are calculated by taking the nominal amount of each outstanding loan or other exposure, and adjusting it according to S&P’s assessment of risk. The riskier an asset, the higher its weight in total RWA. The RAC percentage is then adjusted in several ways, discussed in more detail below. The highest RAC category that can be aspired to by an MDB is above 23% (“extremely strong”). The major MDBs show adjusted RAC ratios of between 15 and 29% (Figure 1), while most commercial financial institutions are below 10%.¹⁸

Figure 1. S&P Stand-Alone RAC Ratio for Selected MDBs, 2013



Source: S&P 2014a.

Notes: IFC and EBRD both lend mainly to private sector clients, which leads to considerable differences in evaluation. They are included here and elsewhere in the paper for comparative purposes. The EIB—the largest MDB in existence—is not included as it lends primarily to industrialized European nations.

S&P emphasizes in their methodology (as well as in a recent interview with a top S&P official¹⁹) that the RAC only constitutes 25% of their evaluation of an MDB—

¹⁶ Reuters, 2009.

¹⁷ S&P 2012, p. 3. See S&P 2010 for an overview of rating methodology for commercial banks.

¹⁸ See S&P 2013a. Of the top 100 rated banks in 2013 (highest rating AA-, three steps below AAA), only four had ratios above 10%: Norinchukin Bank (Japan) 11.2%; Caisse Centrale Desjardins (Canada) 10.9%; Shinkin Central Bank (Japan) 10.1% and National Commercial Bank (Saudi Arabia) 11.3%.

¹⁹ S&P lead MDB analyst Élie Heriard Dubriel.

one half of the “financial profile”, which is then combined with the “business profile” to arrive at the stand-alone rating. However, the RAC has assumed a much higher effective importance, for two reasons. First, it provides a single-number shorthand for the capital adequacy of MDBs, which immediately attracts the attention of investors, whatever its formal weight in the rating methodology. Second, it is the variable most subject to large fluctuations year-to-year, depending on factors largely outside an MDB’s control (in particular the riskiness of borrower countries), and thus has an outsized marginal impact on an MDB’s rating changes.

Moody’s takes a more flexible approach than S&P, and applies a set of criteria that have been tailored to the specific realities of MDBs. While this still implies a number of judgments that could be considered overly conservative, it has the virtue of not attempting to evaluate MDBs through a lens designed to examine fundamentally different kinds of financial institutions. The downside of Moody’s approach is that it is considerably more subjective and more difficult to “reverse engineer” for an MDB to understand how its rating was decided upon, compared to the more transparent approach of S&P.

The remainder of this paper will focus on three aspects of S&P and Moody’s methodologies that have major impacts on the both the assessments of the MDBs as well as the ability of MDBs to fulfill their development mission:

- Concentration risk inherent in MDB loan portfolios
- Preferred creditor treatment granted by borrowers to MDBs
- Callable capital committed by shareholders to MDBs

These three issues are not the only aspects of CRA methodology that are problematic. Other factors such as liquidity requirements, views on net income and reserve accumulation, explicit bias in favor of non-borrower led MDBs,²⁰ risk-weighting of assets, overall methodological complexity (and potential for mistakes), and the publication of “stand-alone” ratings are, among others, also relevant, but are not taken up here due to space limitations.

Portfolio concentration risk

The methodology factor that is by all accounts having the most direct impact on MDB operations is how CRAs calculate the risks posed by loan portfolio concentration. MDBs engaging mainly or entirely with public sector (sovereign) borrowers have an inherently narrow loan portfolio.²¹ The non-concessional lending windows of the major regional MDBs have between 15 (AfDB) and 32 (AsDB) country exposures, compared to thousands of individual exposures for most large commercial banks. And even in this small portfolio, the bulk of loans

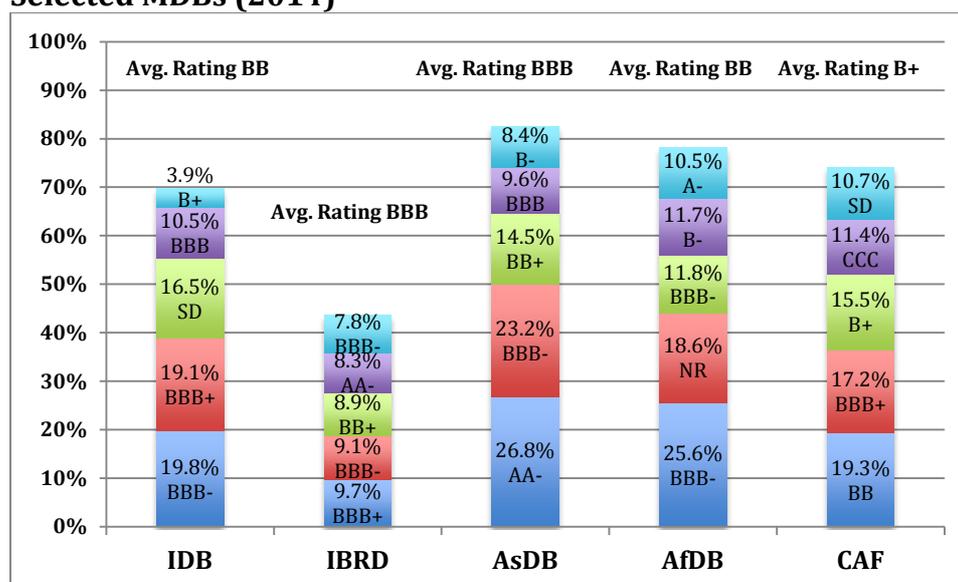
²⁰ While this paper mainly focuses on the World Bank and larger regional MDBs—which are controlled by non-borrowers—more than a dozen other MDBs exist, most of which have a substantial and often majority shareholding by borrowers. This includes CAF, the Central American Bank for Economic Integration, the Islamic Development Bank, PTA Bank, West African Development Bank, among others. These MDBs are strongly and negatively impacted by this bias in favor of non-borrower led MDBs, as may be the new BRICS NDB and AIIB.

²¹ Portfolio concentration is much less problematic for MDBs with mainly private sector borrowers, such as EBRD and IFC, as these have many more individual borrowers.

are to an even smaller number of large middle-income countries, due mainly to their absorptive capacity (Figure 2). All else being equal, a highly concentrated portfolio is inherently riskier than one distributed among many borrowers, and CRAs must take this into account in their assessments. Both Moody's and S&P factor in portfolio concentration as an adjustment to an MDB's overall capital adequacy, but they do so in different ways.

Moody's employs two factors to assess portfolio concentration. First it considers the share of the total portfolio accounted for by the top ten borrowers, and second it calculates the Herfindahl-Hirschman Index related to sector, country and region. While one may question whether these are the two most adequate approaches to assess concentration risk, Moody's does not give a great deal of weight to the adjustment sub-factor—it can only impact the overall capital assessment by a maximum of half a notch, while for example an MDB's history of non-performing loans can have up to a 2.5-notch adjustment impact. As a result, concentration risk as calculated by Moody's does not have a major impact on the overall rating, according to both Moody's methodology²² as well as the feedback of MDB risk and treasury officials.

Figure 2. Top 5 Sovereign Loan Exposures as % of Outstanding Portfolio, Selected MDBs (2014)



Source: MDB financial statements, fiscal year 2014, for portfolio; S&P online database for sovereign ratings as of 31 August 2015.

Notes: Each block of color represents a separate country. SD = selective default; NR = not rated. "Avg. rating" represents a weighted average, with NR taking the same value as a B- rating.²³

The approach used by S&P since 2012 to evaluate portfolio concentration has a much more significant impact on the overall assessment of MDB capital adequacy. After calculating the RAC as described above, S&P makes a series of adjustments to arrive at the final RAC used in the stand-alone rating assessment. Of these, the adjustment for concentration—the "single-name concentration

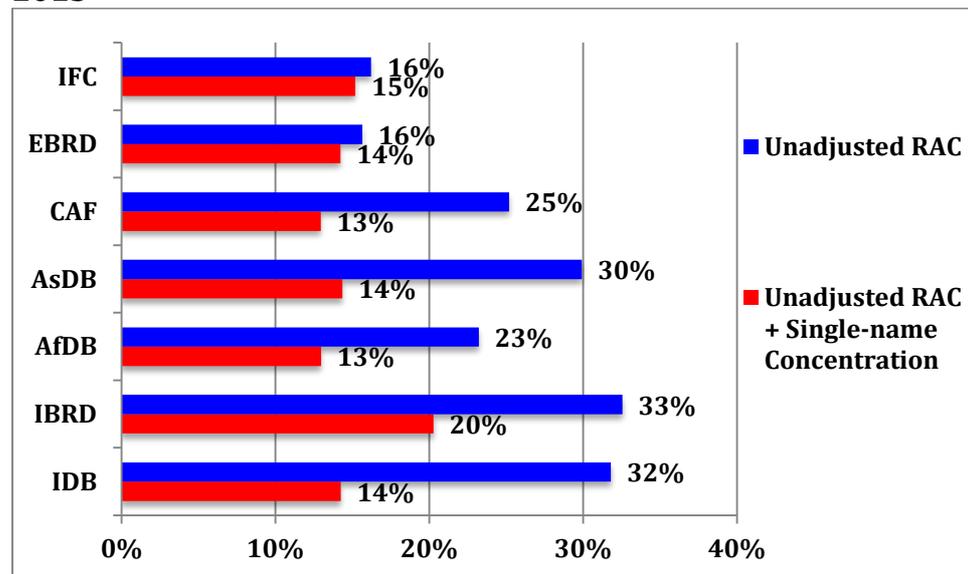
²² See Moody's 2013, Exhibit 7 and p. 12.

²³ S&P does not state what value it assigns to unrated countries in their methodology, but officials at different MDBs agreed that it is likely to be around B-, based on their reverse engineering of their ratings assessments.

penalty”—is by far the largest. Recall that the RAC is calculated by dividing equity by risk-weighted assets. The single-name concentration penalty is added to the value of risk-weighted assets (denominator), meaning that the overall RAC percentage is lowered following this adjustment. As a result, the penalty requires MDBs to hold more equity than would otherwise be the case without the penalty, to achieve the same RAC.

Conceptually, a portfolio that is more concentrated should have more equity to support it, all else being equal. However, the calculation used and especially the weight given to the adjustment are both problematic. For commercial banks and MDBs alike, S&P employs a formula based on a paper by two economists who propose a “granularity adjustment” to refine Basel II capital adequacy evaluation for banks.²⁴ The formula assesses a penalty for risky individual large exposures (unlike Moody’s, which considers concentration of the portfolio as a whole). This approach has a very substantial impact on the resulting RAC ratio (Figure 3).

Figure 3. Impact of Single-Name Concentration Penalty on S&P RAC Ratio, 2013



Source: Own calculations based on S&P, 2014a.

Note: This graphic considers only the impact of the single-name concentration penalty, and does not consider the impact of other adjustments to the RAC.

While the granularity adjustment may be appropriate for commercial banks, it is inadequate to evaluate MDBs with structurally very highly concentrated portfolios. The paper on which S&P’s formula is based clearly states that the methodology is designed for banks with at least 200-500 exposures.²⁵ This is borne out by the application of the methodology to MDBs, which clearly overestimates the concentration penalty compared to what the authors envisioned. The paper states that banks with small portfolios could expect adjustment ranges between 3 and 20% of total capital.²⁶ However, the penalty for MDBs is far higher, increasing the level of risk-weighted assets by over 100%

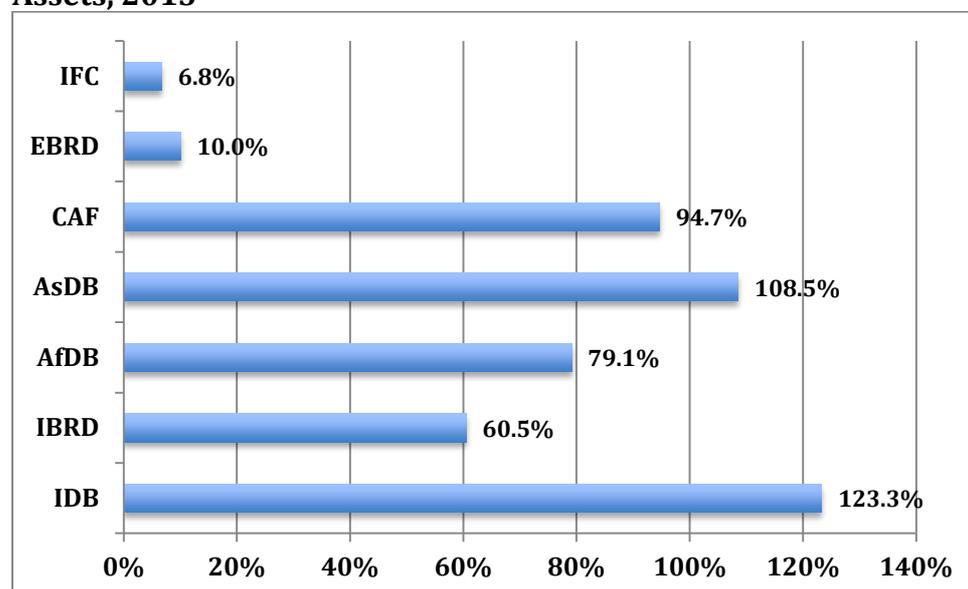
²⁴ Gordy and Lütkebohmert 2007.

²⁵ Ibid., p. 20.

²⁶ From Gordy and Lütkebohmert 2013, an updated version of the 2007 paper.

for both the IDB and AsDB, and with substantial impacts also on CAF, AfDB and IBRD (Figure 4).

Figure 4. S&P Single-Name Concentration Penalty to Total Risk-Weighted Assets, 2013



Source: Own calculations based on S&P, 2014a.

The S&P concentration penalty is having a substantial negative impact on the ability of some MDBs to pursue their development mission by reducing their ability to help member countries during times of stress, or requiring very high equity capital usage to do so. The nature of MDBs indicates that they should undertake lending operations in cycle-neutral or at times counter-cyclical fashion, but should not act pro-cyclically in a way that would accentuate economic swings. However, the concentration penalty encourages pro-cyclicality. When a borrower country with a substantial portfolio of outstanding loans faces a sudden shock, an MDB has an incentive to reduce or cut off lending to that country, for fear of negatively impacting its own credit rating and/or using excessive amounts of equity capital.²⁷

By restricting the ability of some MDBs to help members when they are most in need, the concentration penalty has the potential not only to damage the immediate development impact of MDBs, but also weaken the relationship between MDBs and borrower shareholders over the longer term. Countries are willing to commit their backing to MDBs in part because they have felt that MDBs will be there for them as lenders of last resort, to deal with the effects of a crisis. If countries feel that they can no longer depend on an MDB to help them in the event of a crisis, this could lessen their commitment to the cooperative, with potentially significant adverse operational and governance implications.

²⁷ This is somewhat offset by S&P's "business profile" evaluation, where it gives credit to MDBs who engage in counter-cyclical lending. Evaluating the relative weights of these criteria is not possible according to S&P's published methodology. Regardless, the methodology in the financial profile clearly works against lending counter-cyclically, particularly to individual countries facing difficulties (as opposed to lending to multiple countries facing a regional or global downturn for reasons exogenous to their own creditworthiness).

The concentration penalty is currently a severe problem in particular for the AfDB and IDB. The case of the AfDB is especially troubling: the bank has few non-concessional borrowing countries as it is, and by other (non-RAC) measures considerable available capital.²⁸ But because of the concentration penalty, the AfDB is unable to lend further to two major borrower countries badly in need of support during a time of traumatic political and economic turmoil. IDB and CAF in Latin America face substantial penalties as well, although CAF does not target a AAA rating and hence the penalty does not lead CAF to restrict its operations as a result of the penalty.²⁹ AsDB and IBRD also face significant impacts, but due to the overall higher ratings of their top borrowers (see Figure 2 above) and somewhat greater diversification, this is a less binding constraint.³⁰ The much higher numbers of non-sovereign borrowers at EBRD and IFC mean that the concentration adjustment is less problematic for these MDBs.

Preferred creditor treatment

Due to the unique nature of MDBs—lending for developmental purposes, highly attractive financial terms, support during times of crisis, and representation of borrowers within the MDB, among others—countries have generally granted MDBs “preferred creditor treatment” (PCT). This means that borrowers will continue to repay MDBs even if for some reason they may go into default or delayed repayment to other creditors. As well, MDBs have not participated in sovereign debt restructurings coordinated by the Paris Club of creditors, and have a policy of never writing off loans.³¹ PCT has meant that MDBs have much stronger repayment records than commercial banks (Table 2). However, PCT is informal, with no binding legal or contractual status, and as a result presents difficulties for CRAs to evaluate in a systematic fashion. Both Moody’s and S&P integrate PCT into their evaluations as part of their capital adequacy assessment,³² but they do so in different ways, with the S&P approach again much more conservative.

Table 2. Nonaccruals as Share of Sovereign Portfolio

| | Time Period | Average Nonaccrual (%) |
|-------------|--------------------|-------------------------------|
| IBRD | 1960-2014 | 1.0% |
| IDB | 1960-2014 | 0.4% |
| CAF | 1970-2014 | 0.0% |
| AsDB | 1992-2014 | 0.0% |

Source: MDB financial statements.

Note: Between 1998 and 2005, AsDB had sovereign loans in nonaccrual status of between .01% and .02%, and none in other years. CAF has never had a sovereign loan in nonaccrual.

²⁸ See Humphrey, 2014a for more on AfDB.

²⁹ CAF is rated AA-, and officials stated in interviews that it was currently seeking to reach only AA level.

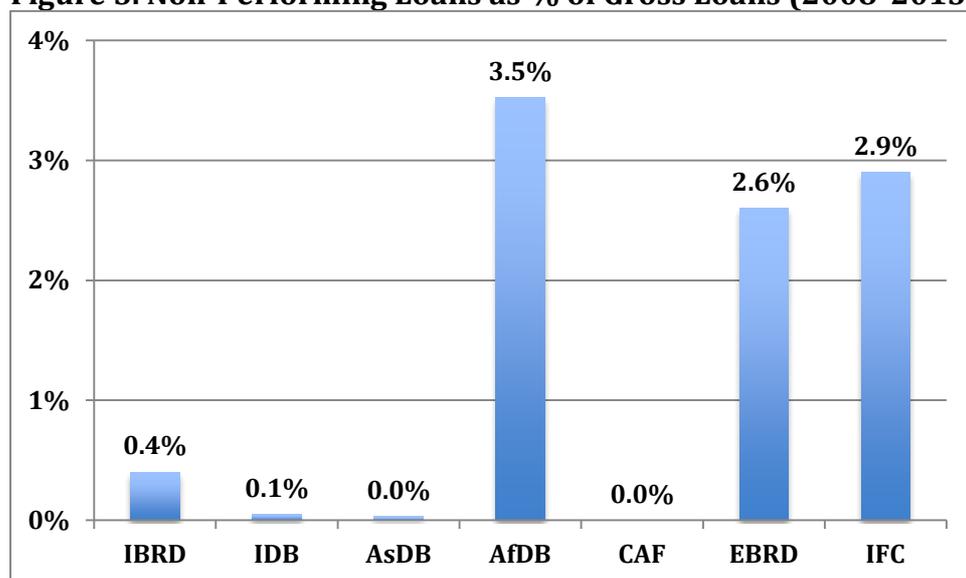
³⁰ The planned combination of assets from AsDB’s concessional and non-concessional portfolios will greatly improve the non-concessional portfolio diversification, and is expected to reduce concentration penalty.

³¹ MDBs have participated in the HIPC and MDRI debt relief initiatives, although this is technically not considered writing off debt.

³² S&P also considers PCT in their assessment of an MDB’s business profile. Its weight as part of the business profile cannot be determined from the S&P methodology description. See S&P 2012, pp. 15-16 and Table 3. According to S&P 2013b, PCT has a higher weight in the RAC assessment than in the business profile (p. 4).

Moody's credits PCT with a fairly substantial weight in the overall capital adequacy score—20% of total.³³ To quantify PCT, Moody's considers an MDB's non-performing loan (NPL) ratio, taking an average over seven years to smooth fluctuations caused by regional or global economic cycles. An MDB with an average ratio of under 1% achieves the highest possible PCT score, meaning the major MDBs focusing on sovereign lending are able to achieve a significant PCT boost relatively easily (Figure 5). The exceptions are AfDB—which has had more loans in arrears for slightly longer periods of time than the other major MDBs³⁴—and private sector-oriented MDBs such as EBRD and IFC, because private firms do not grant PCT to an MDB in the same way as a shareholder government.

Figure 5. Non-Performing Loans as % of Gross Loans (2008-2013 Avg.)



Source: Moody's rating reports.

Note: Because these are taken from Moody's analysis, they may differ from the calculations of the MDBs themselves.

MDB officials generally consider the Moody's method for incorporating PCT into the rating evaluation as reasonable. By considering NPLs, Moody's makes no a priori assumption about how an MDB might be expected to benefit from PCT, but rather bases their assessment mainly on an MDB's track record, while also making some adjustments based on expected future performance. As well, the weight given to the sub-factor is substantial.

S&P calculates PCT for sovereign exposures³⁵ through a unique formula to arrive at a number that can be then included as an adjustment to the RAC ratio, similar to single-exposure risk. In this case, PCT enters as a bonus that increases the RAC (rather than a penalty that decreases it, as with single-exposure risk), in recognition of the fact that PCT allows an MDB to carry more loans for the same

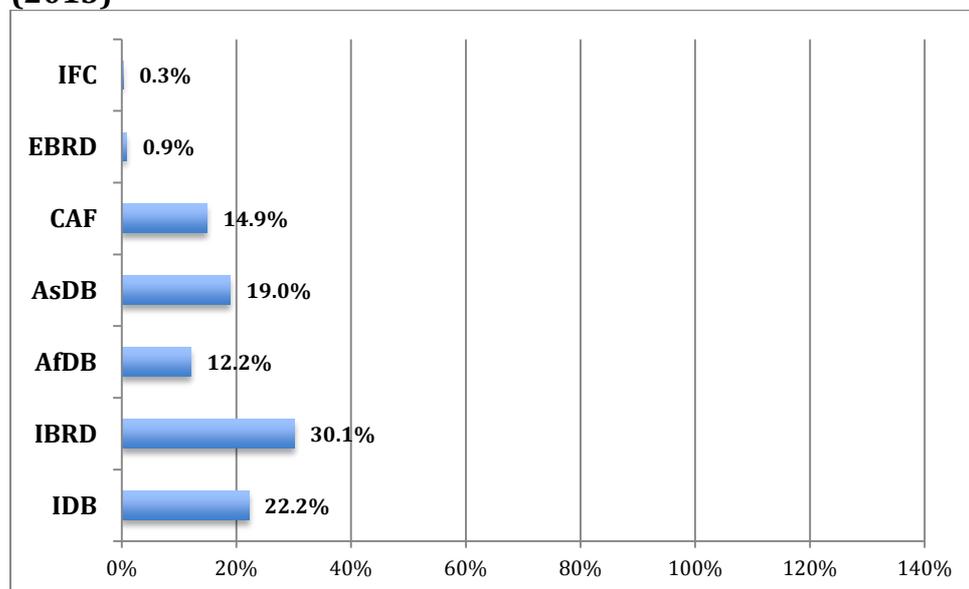
³³ Moody's 2013, Exhibit 7.

³⁴ AfDB officials note that countries in non-accrual to the AfDB have also gone into non-accrual to the World Bank, but these represent a larger share of the portfolio to the AfDB.

³⁵ S&P also calculates "preferential treatment"—a weaker form of PCT—for non-sovereign exposures. This is in recognition of the fact that while private companies do not have the same relationships to MDBs as sovereigns, they are less likely to face governmental restrictions on foreign exchange needed to repay their loans to MDBs.

equity, due to lower repayment risk. While this approach is conceptually sound, the formula used to calculate the PCT bonus is based on a series of assumptions that appear to have little historical basis. As well, the weight given to PCT is quite low relative to the concentration penalty (Figure 6—note that the horizontal axis is scaled the same as Figure 4 above).

Figure 6. S&P Preferred Creditor Treatment Bonus to Risk-Weighted Assets (2013)



Source: Own calculations based on S&P, 2014a.

Note: This figure demonstrates the percentage *decline* in risk-weighted assets (bonus), whereas Figure 4 shows the percentage *increase* in risk-weighted assets (penalty). PCT is here considered as a ratio to total RWA, not just sovereign loans—hence for example the AfDB’s PCT bonus appears lower, since it has a higher share of non-sovereign loans than AsDB, IBRD or IDB.

To calculate how much PCT should be factored into the RAC, S&P employs a “multilateral debt ratio”, which considers how much of a country’s external debt is to multilateral creditors. The higher this ratio, the lower the PCT bonus S&P credits to an MDB’s exposure to that particular sovereign.³⁶ At the high extreme of 100% multilateral debt, this is intuitively logical—if all a country’s debt is to multilaterals, then preferred creditor status has little or no value. However, the rationale for using the ratio is much less clear below 100%, and S&P does not explain in its methodology why it considers this to be the best approach.³⁷

The relationship between the multilateral debt ratio and PCT does not appear to be borne out by the historical record. Under S&P’s methodology, PCT decreases as a country’s multilateral debt ratio increases. Thus, in S&P’s view, the probability of an MDB experiencing a non-accrual event should increase as the multilateral debt ratio increases. Such view was tested by IDB staff, based on a detailed study of sovereign non-accrual histories with IDB and IBRD over the

³⁶ S&P breaks down the ratio into categories (below 25%, 25-50%, 50-75%, and above 75%), which can be problematic. If, for example, a country with a major MDB portfolio has a very small change in the ratio, but enough to cross into another category, this could have a major impact on the PCT bonus to that sovereign exposure. This was recently the case for Brazil in the IDB. The advantage of using a categorical rather than continuous variable (which would avoid that problem) is unclear.

³⁷ See S&P 2012, p. 29.

previous 50 years, while also observing the sovereign's MDR levels prior to, during, and after the non-accrual events. The analysis did not find a statistically significant relationship between the multilateral debt ratio and the likelihood of non-accrual events at a 95% confidence level.

The lack of support for S&P's hypothesis prompted IDB to empirically estimate the probability of non-accruals to IDB given a sovereign default to the market. Over its history, IDB experienced only seven payment delays that were longer than 180 days, which were concurrent with market defaults. During the same period, commercial lenders to IDB's sovereign borrowers experienced 61 defaults. This indicates that the probability of non-accruals to the IDB given a sovereign default to the market is only about 11% – itself an impressive statement of PCT. The analysis resulted in a similar PCT for the IBRD.

The use of the multilateral debt ratio to estimate PCT benefit is not only conceptually unclear and at odds with the historical record of individual MDBs, but it also leads to variance in PCT benefit among MDBs that also do not square with past performance. For example, of all major MDBs, CAF has the best repayment record—never once in its entire history (since 1970) has a sovereign borrower ever gone into nonaccrual, or in fact ever even been late on a single payment. However, it receives a substantially lower PCT benefit than the IBRD, IDB or AsDB, due to the use of the multilateral debt ratio.

Another important distinction between MDBs and commercial banks is that on the rare occasions that MDB sovereign loans go into nonaccrual, the borrowers invariably repay both principal and interest, although sometimes this has taken several years. MDBs all have a policy of never writing off or restructuring loans, and as a result the notion of a sovereign “default” is not applicable in a meaningful way to MDBs. Sovereign borrowers remain shareholders of MDBs even while in nonaccrual, and have always eventually become current again to continue accessing MDB services. Hence, while MDBs do face periods of lost net income during nonaccrual events, the calculation of loss given default is fundamentally different than with a commercial bank.³⁸

In sum, S&P's methodology seriously underestimates the strength of PCT and applies a concept of loss given default that has never historically held true for MDBs, which do not face default in a meaningful sense. Sovereign borrowers view MDBs fundamentally differently than other creditors. These are not simply banks, but rather cooperative international institutions that they are part owners of, and which provide them with financing, knowledge and a voice in the international arena that cannot be replicated elsewhere. Hence, a decision to stop payment on a loan is more than a mere financial decision, and as the historical record has shown, countries that do stop payment invariably repay principal and interest eventually.

S&P maintains that it is forward-looking and models extreme situations, which is a reasonable position—the past does not necessarily predict the future.³⁹ But

³⁸ For more on this point, see Ames, 2015, pp. 24-34.

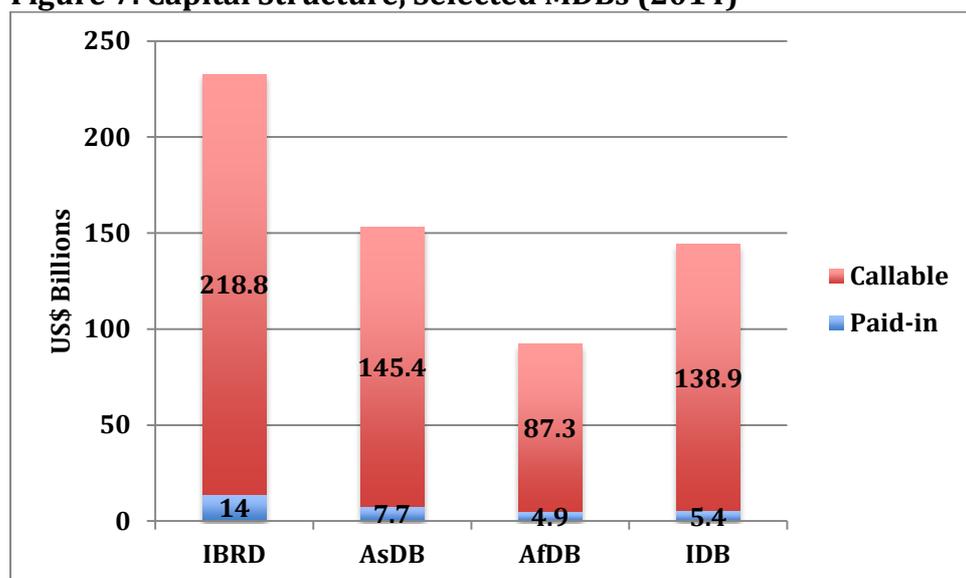
³⁹ As noted in interview with S&P lead MDB analyst Élie Heriard Dubriel.

even in periods of extreme national, regional and global economic turbulence in past decades, PCT has been remarkably strong for most major MDBs. It is difficult to conceive of the scale of economic catastrophe that would lead borrowers to actually default to major MDBs in sufficient numbers to threaten an MDB’s financial stability.

Callable capital

As with PCT, callable capital is a unique aspect of MDBs that cannot easily be compared to commercial financial institutions, and is hence difficult for CRAs to evaluate. Callable capital is a type of “reserve” capital committed by shareholders as part of their capital contribution. It is not actually paid in, but rather is promised by governments should it ever be “called” by the MDB in case it faced such financial difficulties that it needed further resources to pay off bondholders. It was originally put in place to provide greater security to MDBs bonds, although, perversely, protecting callable capital against a call has become a principal justification for conservative financial management in recent decades.⁴⁰ Callable capital now accounts for the vast majority of total shareholder capital at most MDBs (Figure 7).⁴¹

Figure 7. Capital Structure, Selected MDBs (2014)



Source: Fiscal year 2014 financial statements.

Callable capital thus represents a huge amount of resources supporting the stability of the major MDBs, but calculating exactly how it should be valued in financial terms is not a simple task. It is an obligation by shareholder countries as part of their membership to an MDB. At the same time, callable capital is not simply a guarantee that can be called by the MDB under clearly defined circumstances, as is the case with other types of financial guarantees. Instead, those who would pay the guarantee—MDB shareholders—are the same ones

⁴⁰ See Humphrey 2014b and Ames 2015.

⁴¹ The exceptions are IFC, which has never had callable capital, and CAF, which has a relatively small amount but now only seeks paid-in capital.

who would have to declare a call. The process of doing so varies in different MDBs, and has never been tested as no MDB has ever made a capital call. Nor have member governments allocated the necessary funds out of their budgets, meaning some type of legislative approval would be required in most cases.

As a result, CRAs have no clear roadmap or historical record to guide them on how to incorporate callable capital into their evaluation methodologies. Both S&P and Moody's have chosen to do so as a final adjustment to their MDB rating, added on after all other factors have been summed up into a provisional "stand-alone" (S&P) or "intrinsic" (Moody's) rating.⁴² Based on different factors—mainly the ratings of the sovereigns providing the callable capital and CRA assessments of the capital call process and the likelihood that shareholders would respond to a given MDB—both CRAs permit a maximum uplift of three notches for callable capital.⁴³ The main differences between Moody's and S&P relate to i) the type of callable capital credited and ii) how callable capital is conceptually integrated into the assessment of MDB finances.

All MDB shareholders contribute callable capital as part of their financial obligations, but it would not be reasonable to treat all callable capital the same. The callable capital of AAA-rated industrialized shareholders such as Germany or the UK have a much greater likelihood of being paid than that of a small and very poor developing country—a crisis that might occasion a capital call would very likely also restrict the ability of poorer borrowing countries to meet the call.

To address the varying likelihood of payment, Moody's credits MDBs with callable capital from all shareholders rated investment grade or above (Aaa-Baa3), but gives increasing "haircuts" to callable capital from lower-rated shareholders. S&P, by contrast, only credits callable capital "at or above the issuer credit rating," meaning that in practice only AAA-rated callable capital is relevant to the World Bank and major regional MDBs.⁴⁴ As a result, huge sums of callable capital—including that of the United States (rated AA+ currently by S&P) are effectively ignored in the determination of the financial strength assessment of the major MDBs by S&P (Figure 8). To give one example, of the IDB's nearly \$107.6 billion in callable capital from countries rated above investment grade, S&P factors only \$11 billion into their rating. Even the \$42 billion in AA+ callable capital has no impact whatsoever.

This assessment of callable capital is quite extreme. It is reasonable to not give full credit for all callable capital equally, but the probability of industrialized nations like the U.S. (AA+), the Netherlands (AA+), France (AA) or Japan (A+)—not to mention emerging global powers like China (AA-)—of meeting their international obligations in times of crisis is certainly greater than zero. As a result, MDBs are engaging in, as one official put it, "soul searching as regards the quality and value of callable capital." It seems rather shocking that the decision

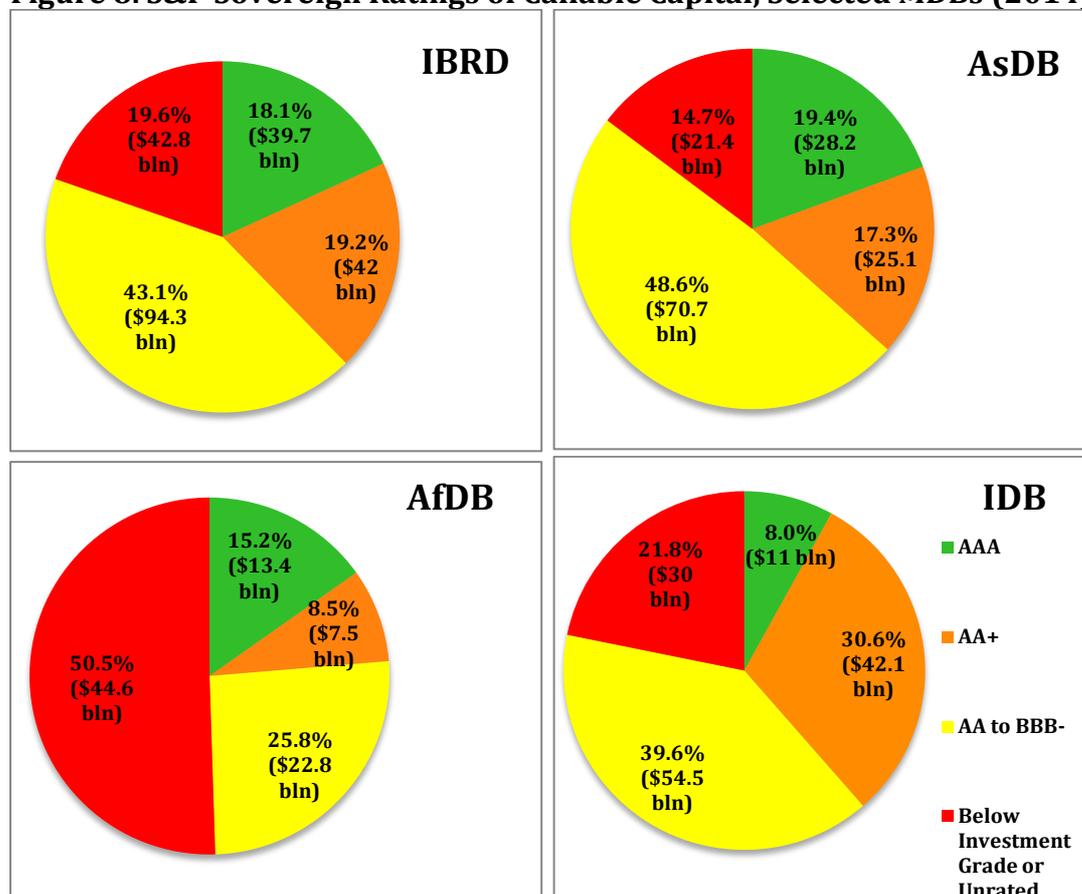
⁴² Unlike Moody's S&P publishes its "stand-alone" rating before accounting for callable capital. This is a point of contention with some MDBs, as they feel it could lead investors to penalize MDBs with sub-AAA stand-alone ratings (like IDB and AfDB currently), even though their final issuer rating is AAA.

⁴³ Moody's states that it can grant more than three notches uplift in "exceptional circumstances". See Moody's 2013, p 16.

⁴⁴ S&P 2012, p. 26. As a minor point, this approach has an oddly circular logic, since the final issuer credit rating itself is only determined after factoring in callable capital.

of a single private firm is effectively failing to give financial value to tens of billions of dollars in international obligations in an instrument designed specifically to promote global development.

Figure 8. S&P Sovereign Ratings of Callable Capital, Selected MDBs (2014)



Source: Fiscal year 2014 financial statements; ratings from S&P online database as of 31 August 2015.

Note: IDB data does not include a small portion of temporary callable capital from Canada in 2014.

While S&P's approach is highly restrictive in what callable capital it credits, it takes callable capital more seriously than Moody's as a financial instrument, at least implicitly. Moody's has a unique set of criteria for evaluating shareholder support to provide uplift based on the quantity and projected availability of callable capital. S&P, on the other hand, actually adds qualifying callable capital into its RAC capital adequacy ratio as part of shareholder equity. For example, the IDB's adjusted RAC at end-2013 was 17% (equity of \$23.4 billion/risk-weighted assets of \$140.1 billion). By including 2013 AAA-rated callable capital of \$9.9 billion, equity increases to \$33.3 billion, and the RAC with shareholder support becomes 24%.

Were S&P to maintain logical consistency in this approach to factoring callable capital into capital adequacy, several MDBs would appear tremendously well capitalized (Table 2). The IBRD, for example, receives no uplift from callable capital, as it is rated AAA on a stand-alone basis and had a stand-alone RAC of 28% in 2013. But if one were to include the IBRD's \$40 billion in AAA callable

capital into shareholder equity, its RAC would increase to 56%—more than double the 23% level needed to achieve the highest RAC category attainable for an MDB. Should AA+ callable capital also be included (much of which is from the U.S., which may well return to AAA status in the near future), the results would be even more impressive (Table 3). Several other major MDBs would show similarly high capitalization levels.

Table 3. S&P RAC Ratios With Callable Capital, Selected MDBs (2013)

| MDB | RAC (2013) | RAC + AAA Callable Capital | RAC + AAA/AA+ Callable Capital |
|-------------|-------------------|---|---|
| IBRD | 28% | 56% | 87% |
| IDB | 17% | 24% | 56% |
| AsDB | 19% | 49% | 76% |
| AfDB | 17% | 41% | 55% |

Source: Own calculations based on S&P 2014 and MDB annual reports.

Note: RAC includes all MDB-specific adjustments, as detailed in S&P 2014. Numbers in last two columns derived by adding all AAA or AAA/AA+ callable capital to adjusted common equity, as calculated by S&P for 2013, and dividing by risk-weighted assets (including all adjustments), as calculated by S&P for 2013.

Including only AAA callable capital would, if S&P’s methods were followed to their logical conclusion, mean that these MDBs would be able to expand their loan portfolio by hundreds of billions of dollars and still maintain RAC ratios above 25%. Such a portfolio expansion would of course come into conflict with the internal financial models and statutory limits of the MDBs themselves, but it highlights the confusion among rating agencies as to the actual worth of callable capital.

Conclusions and Policy Options

The methodologies employed by the major credit rating agencies (CRAs)—in particularly Standard & Poor’s—are having a substantial and negative impact on the ability of MDBs to undertake their development mission. MDBs have always faced statutory and policy limitations on the expansion of their balance sheets, due to investor perceptions and, in many cases, a strong push by some non-borrower shareholders to protect callable capital.⁴⁵ However, the revised CRA methodologies implemented after 2012 have restricted MDBs even further, making it more difficult for them to meet the call of the G20 and others to ramp up development operations without a major increase in shareholder capital, despite their very high financial security.

⁴⁵ A fuller discussion of this last point is beyond the scope of this paper, but is a topic that deserves greater exploration. Callable capital was created to give MDBs greater financial security, but in practice it has perversely led many MDBs to be even more conservative than they might be otherwise, pushed by shareholders to ensure that callable capital can never be threatened. Coupled with the limited credit given by CRAs to callable capital, this calls for a serious rethink of the use of callable capital at MDBs.

The CRA criteria impact both the overall portfolio of MDBs—by requiring more equity capital to back loan books than might otherwise be the case—as well as lending to individual countries facing economic and social difficulties. One senior operations official⁴⁶ at one of the major regional MDBs noted in an interview that S&P’s criteria has in the last three years become a top consideration in deciding country allocations, at times outweighing developmental considerations entirely. The new criteria, the official stated, “is completely overturning our business model,” at times pushing MDBs to lend less to countries in need and more to countries with lower demand and absorptive capacity, due to considerations of financial risk. In short, CRA are becoming de facto regulators for the MDB sector, and their perceptions are creating disincentives for MDBs to optimize their use of capital in line with their development mandate.

In many ways, the highly conservative approach of CRAs is understandable. They have received major criticism in the wake of the global financial crisis, and are under pressure to design transparent and comparable criteria for all rated entities. MDBs pose a number of unique difficulties for CRAs, as they are hybrid institutions akin in some ways to commercial banks, but in other ways very different due to their official character and development missions. As well, CRAs cannot build their methodologies with reference to the assessments of any national or international regulatory bodies, as MDBs are unregulated.

What can be done? CRAs are private companies, and although they face some regulation (particularly in the U.S.), they cannot simply be told to change their rating methodologies. They evaluate bond issuers for private investors based on their own proprietary criteria, and are not responsible for the developmental capacity of MDBs. Official leverage over their approach to MDB evaluation is limited.

MDBs have generally taken the approach that the new methodologies are an exogenous reality that they must cope with, and are acting accordingly. Major MDBs have coordinated with one another to lobby CRAs about specific aspects of the methodologies (with limited success on the issues addressed in this paper)—a strategy that clearly should and will continue. Leadership by the World Bank in coordination with other MDBs is important for the success of this effort, as it is viewed by CRAs as the “lead” MDB and its views carry more weight.

On the whole, however, MDBs have focused on other techniques to strengthen capital adequacy and maintain their bond ratings. Beyond the eternal debates among shareholders regarding capital increases and building equity through reserves,⁴⁷ these have included, among others:

- Restricting lending to sovereign borrowers viewed by CRAs as highly risky, as a way to limit the impact on risk-weighted assets and single-exposure concentration penalty.

⁴⁶ Anonymity requested.

⁴⁷ These are highly contentious issues, involving issues related to changing shareholding voting power, loan pricing, and net income allocations to other causes such as concessional windows or special funds, among others, and are beyond the scope of this paper to address. See Humphrey 2014b and Mohammed 2004 for more on this topic.

- Intensive reverse engineering of CRA evaluations to better understand the impact of individual factors, and modeling potential future MDB operations with these factors in mind.
- Building capital buffers to ensure sufficient distance from downgrade triggers, thus protecting against uncertainty in CRA criteria.
- Designing exposure exchange arrangements among MDBs,⁴⁸ wherein MDBs synthetically exchange individual country exposures while maintaining their overall asset risk profile, thus reducing the impact of single-exposure concentration penalties.
- Ramping up techniques for removing exposures from the balance sheet, notably through loan syndication and co-financing arrangements (particularly for non-sovereign operations).
- Exploring other options for reducing balance sheet risk, such as purchasing market-based insurance on an individual exposure or portfolio basis, and portfolio guarantees with bilateral donors.⁴⁹
- Leveraging concessional lending windows as a way to build more equity capital, as the AsDB is doing by folding its ADF loan portfolio into the equity of its OCR non-concessional window.⁵⁰

The above are rational responses to addressing the pressures occasioned by the new CRA rating methodologies. However, they do implicitly pose questions. Should MDBs—public institutions charged with addressing global development and poverty reduction—be engaging in complex financial (and in some cases legal) engineering as a way to mitigate the impact of overly conservative methodology of one or two private companies? What if the methodology of S&P changes, or if Moody’s or Fitch develop new and more stringent criteria of their own but different from S&P?

These questions lead one to consider alternatives, four of which are discussed below. None of these are “magic bullets” to this complex issue—MDBs will continue to be to a degree dependent on the views of bond investors in general and CRAs in particular, based on their financial model. Nonetheless they may be worth exploring to allow MDBs greater ability to maximize their unique financial strengths to achieve greater development impacts.

First, it may be worth involving international financial regulatory and oversight bodies, such as the Bank for International Settlements (BIS) or International Monetary Fund (IMF). Neither BIS nor IMF have any direct authority over CRAs, and cannot mandate any changes in their methodologies for evaluating MDBs. However, they are recognized international bodies with broad representation among major industrialized and developing economies designed to help manage the stability of world finance, and play a major role in assessing individual and systemic risk posed by financial institutions.

⁴⁸ One such operation has been designed among the AfDB, IDB and IBRD, and at last report was being considered by the respective boards for approval.

⁴⁹ A pilot bilateral portfolio guarantee scheme was at last report well advanced between Sweden and the AsDB.

⁵⁰ AsDB, 2014. This could realistically be undertaken also by the IDB, although its concessional window (FSO) is much smaller. Such an operation is less feasible if not impossible for the World Bank’s IDA and the AfDB’s ADF windows, for legal and developmental reasons, although both of these MDBs are exploring other ways to leverage their concessional windows.

This paper has argued that CRAs are so conservative in their evaluation of MDBs because:

- i) CRAs are under considerable external pressure to design transparent methodologies and avoid overly optimistic ratings assessments;
- ii) MDBs have several characteristics that make them difficult to evaluate in financial terms; and
- iii) No independent financial regulator oversees or even regularly analyzes MDB finances, meaning CRAs have no external set of criteria or track record of systematic evaluations on which to base their own methodologies.

Should an independent and respected authority undertake their own rigorous and fine-grained study of the best methodologies to evaluate MDB finances, this could provide CRAs with the backing they need to modify their own methodologies in a way that permits MDBs greater financial breathing room while still maintaining their high bond ratings.

Such an outcome is of course not guaranteed. It is possible (though very unlikely) that an external authority could take in even more pessimistic view of the issues discussed in this paper than CRAs. As well, CRAs would be under no obligation to follow the guidance of any institution, as they are private firms. However, the MDB sector is long overdue for a thorough evaluation of its financial model by competent independent authorities, and by all accounts CRA analysts themselves recognize some of the problems with their approach, but are constrained from making changes for the reasons mentioned above.

Involving an external agency like BIS or IMF would not imply that the MDBs would be ceding authority over their financial management in any way to another organization. Such authority rests solely with the shareholders of the MDB itself, and should remain with them. The role of an external organization would strictly be to systematically evaluate appropriate methodologies to assess the financial strength of MDBs as a class of financial institutions, and would not involve producing annual evaluations of individual MDBs.

Second, MDB country shareholders could take action themselves, either by MDBs individually or (ideally) working together as a group including at least the World Bank and major regional MDBs. This could involve at least three strategies, and may be more effective as a “package” of actions:

1. Shareholders could make a clear collective statement on their risk appetite for MDB operations. Currently, non-borrower shareholders in particular have given conflicting signals, on the one hand calling for MDBs to expand their balance sheet but on the other encouraging conservative financial management to minimize any chance of a call on callable capital. By agreeing on well-defined parameters for how much risk they are willing to see MDBs take on to pursue their development mission, shareholders would give CRAs considerably more clarity on shareholder support, thus reducing the uncertainty CRAs face when evaluating MDBs. This would be

most effective if done amongst a large group of shareholders and for several MDBs together (especially the World Bank and major regional MDBs).

2. Callable capital could be converted into a more effective instrument that would provide MDBs greater financial security and permit CRAs to grant greater uplift to the benefit of MDB ratings and operational capacity. Callable capital represents a huge amount of resources committed by shareholders to MDBs, but CRAs face difficulties in adequately assessing and giving credit for it when rating MDBs, due to uncertainty surrounding the willingness and ability to cover a hypothetical capital call. A reform of callable capital could involve: i) redefining the rules and procedures for a capital call such that it would be more of an automatic instrument akin to a guarantee; ii) establishing a separate contingent facility wherein a group of shareholders create an intermediate financial backstop, such as a liquidity facility with defined limits and rules, that would be considered more robust by CRAs compared to callable capital; or iii) some shareholders may consider converting a portion of callable capital into paid-in capital (although this would come with most of the same complications as a general capital increase).
3. Shareholders could lobby CRAs directly to ease restrictive methodologies. CRAs may well be susceptible to lobbying by groups of major countries, particularly the G8 or G20. Such an approach could reinforce the efforts of MDB staff in their on-going dialogue with CRAs on methodology issues. Although CRAs are under no obligation to “follow orders” from sovereigns and are responsible primarily to their investor clients, they are likely to pay close attention to the views of major industrialized country governments, who are themselves CRA customers and who also have a degree of regulatory authority over CRA activities.

Third, the major MDBs could consider allowing their bond ratings to fall below AAA under the existing CRA criteria. It should be emphasized that this report does not advocate going sub-AAA. On the contrary, the evidence reviewed here suggests that the major MDBs all have characteristics that should clearly qualify them to be AAA even if they substantially expand their balance sheets. However, if maintaining AAA—which shareholders have explicitly endorsed at IBRD, AsDB, AfDB, IDB and EBRD—has too high an opportunity cost in terms of an MDB’s developmental mission, then it should be reconsidered.

It is not entirely evident that MDBs require a AAA rating to do their job, as demonstrated by the very strong demand for lending from CAF, which is rated AA- by S&P and operates in a region (Latin America) with generally strong access to non-MDB commercial financing. A great many developing countries would still find MDB financial terms attractive even if the cost of funding rose with a downgrade to AA+, particularly if accompanied by knowledge and technical assistance that countries value highly. The new Asian Infrastructure

Investment Bank may consider targeting a sub-AAA rating, specifically to give it more financial flexibility.⁵¹

Attempting to quantify the trade-offs of a one or two-notch downgrade is beyond the scope of this paper, but clearly should be considered in a rational way by all the MDBs.⁵² The balance sheet for several MDBs could be expanded considerably by targeting a RAC ratio consistent with a AA+ rating. Extrapolating from 2013 data and not considering statutory limits of different MDBs, a RAC ratio of 10%—consistent with AA+, assuming other rating criteria remain unchanged and including qualified callable capital—would yield US\$477 billion in additional potential loan portfolio for six major MDBs (Table 4).

On the negative side, MDB cost of funding would likely increase, although how much is a matter of speculation.⁵³ A downgrade could also threaten the “flight to quality” syndrome, wherein investors flock to AAA paper in times of capital market turbulence, which in turn improves MDBs’ ability to lend counter-cyclically. A sub-AAA rating would imply a change in investor base for MDB bonds and also would have implications for posting collateral on derivatives⁵⁴ and holding liquidity. Several of the negative impacts mentioned above would likely be less material if a move to sub-AAA were done in a coordinated fashion by several MDBs at the same time, whereas if one MDB were downgraded it might be punished more severely in terms of funding costs.

Table 4. Additional Loan Portfolio at 10% RAC Ratio (US\$ Billions)

| | IBRD | IFC | AsDB | IDB | AfDB | EBRD | Total |
|-----------------------------|-------------|------------|-------------|------------|-------------|-------------|--------------|
| Additional Portfolio | 263.7 | 51.5 | 47.0 | 48.1 | 12.1 | 54.8 | 477.2 |

Source: Own calculations based on S&P 2014.

Notes: Extrapolation based on fixed ratio between total assets and loan portfolio. This table does not account for MDB statutory lending limits, which in the case of IBRD would have been surpassed for FY2013 using the data above.

An intermediate step along these same lines would be for the major MDBs with stand-alone AAA ratings according to S&P’s criteria to expand their balance sheets to the level where they would fall below AAA on a stand-alone basis, but still retain a final issuer AAA rating, based on shareholder support. In the cases of the World Bank (IBRD) and AsDB, this would imply considerable additional potential to expand the outstanding loan portfolio. Because the final issuer rating would still be AAA, many of the downsides of a downgrade discussed above would not be material, and the pricing impact on bond issues would be minimal or even non-existent.

Fourth, in the longer term, MDBs could work to encourage the growth and sophistication of alternative CRAs, particularly in emerging capital markets.

⁵¹ The AIIB is almost certain to be rated sub-AAA initially by the main CRAs (although it may get a top rating from rating agencies in China), but it could aspire to AAA depending on its financial management and backing from AAA-rated shareholders such as Germany, UK and Switzerland, among others.

⁵² Ames, 2015 explicitly addresses this issue, and suggests that a downgrade would have only a small impact on MDB funding costs, based on the recent experiences of the Council of Europe DB and the EIB.

⁵³ The case of US sovereign bonds, which actually saw yields fall after the downgrade to AA+, suggests that bond buyers do not necessarily rely mechanically on CRA evaluations in making their investment decisions.

⁵⁴ However, it appears that some AAA-rated MDBs are considering posting collateral against derivatives anyhow, and if this becomes more generalized it would reduce this particular benefit of AAA.

While the Big Three agencies clearly dominate global capital markets, and their position is unlikely to be threatened anytime soon, several other CRAs are emerging across the globe, and some of these are already showing that they take a different and more flexible approach to evaluating MDBs.⁵⁵ Should they grow in importance, the overwhelming weight of S&P and Moody's could decline, and their role as de facto regulators for the MDB sector could diminish.

It should be noted that this will not have a meaningful impact in the short or even medium term, due to the tremendous presence of the main CRAs in the eyes of global investors, as well as (and partly because of) their decades of data and experience covering the MDB sector and other financial sectors. But MDBs could actively involve other CRAs by paying for ratings and facilitating access to key data, as they do with the Big Three. As other CRAs build experience in analyzing MDBs and amass a significant amount of data over a reasonable time period, their own methodologies will become more refined and credible in the eyes of investors, and pose a competitive challenge to the methodologies of the Big Three. This could be particularly relevant in maturing capital markets where MDBs may be expected to increase bond issues in future years.

⁵⁵ The Japanese Credit Rating Agency, for example, takes a very different view of several of the key issues raised in this paper in their MDB rating methodology. See Japan Credit Rating Agency, 2013.

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Rating Agencies

Steven Hess, Moody's, Senior Vice President, Sovereign Risk Group, 23 June 2015

Élie Heriard Dubriel, Senior Director, Sovereigns, Standard and Poor's, 1 July 2015

MDBs

AfDB

Tim Turner, Group Chief Risk Officer, 12 June 2015

Riadh Belhaj, Group Credit Risk Group, 24 June 2015

Trevor de Kock, Group Treasury, 26 June 2015

AsDB

Mitsuhiro Yamawaki, Director, Office of Risk Management, 25 June 2015

Michael Kjellin, Head of Policy Group, Office of Risk Management, 25 June 2015

Toby Hoschaka, Head of Policy, Treasury, 25 June 2015

CAF

Gabriel Felpeto, Director of Financial Policy and International Bond Issues, 18 June 2015

Antonio Recine, Senior Specialist, Financial Policy Department, 18 June 2015

EBRD

David Brooks, Deputy Director, Financial Strategy and Business Planning, 13 June 2015

Isabelle Laurent, Deputy Treasurer and Head of Funding, 13 June 2015

IDB

Gustavo de Rosa, Chief Financial Officer, 17 June 2015

Frank Sperling, Unit Chief, Strategic Risk Management, 25 June 2015

World Bank

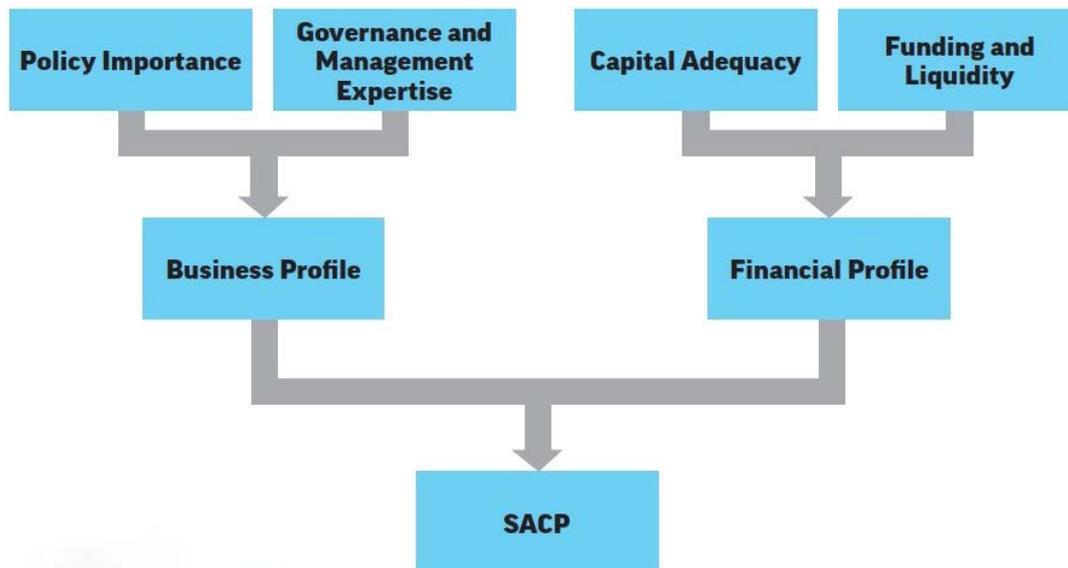
Lakshmi Shyam-Sunder, Vice President and Group Chief Risk Officer, 23 June 2015

Other

Senior operations official, major regional MDB, anonymity requested, 11 September 2015.

Annex

Figure A1. Components to Standard and Poor's MDB Stand-Alone Credit Profile (SACP)



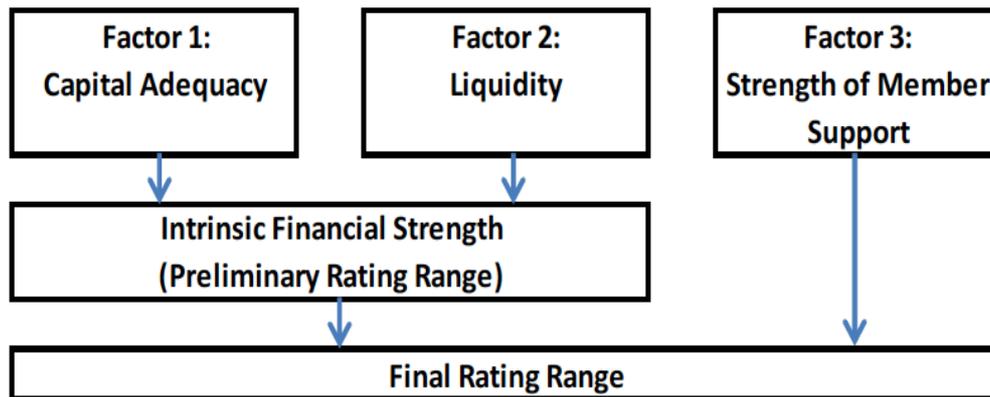
Source: Standard and Poor's, 2012.

Figure A2. Combining Business and Financial Profiles, Standard and Poor's

| --Business Profile-- | --Financial Profile-- | | | | | | |
|----------------------|-----------------------|-------------|----------|----------|----------|-------------------|-------------------|
| | Extremely Strong | Very Strong | Strong | Adequate | Moderate | Weak | Very Weak |
| Extremely Strong | aaa | aaa/aa+ | aa+/aa | aa/aa- | a+/a | a-/bbb+ | bbb/bbb- |
| Very Strong | aaa/aa+ | aa+/aa | aa/aa- | a+/a | a/a- | bbb+/bbb | bb+/bb |
| Strong | aa+/aa | aa/aa- | a+/a | a/a- | bbb+/bbb | bbb/bbb- | bb/bb- |
| Adequate | aa/aa- | a+/a | a/a- | bbb+/bbb | bbb/bbb- | bb+/bb | b+/b |
| Moderate | a+/a | a/a- | bbb+/bbb | bbb/bbb- | bb+/bb | bb-/b+ | b/b- |
| Weak | a-/bbb+ | bbb+/bbb | bbb/bbb- | bb+/bb | bb/bb- | b+/b/b- | ccc+/ccc/ ccc- |
| Very Weak | bbb+/bbb | bbb/bbb- | bb+/bb | bb/bb- | b+/b/b- | ccc+/ccc/ ccc- | cc |

Source: Standard and Poor's, 2012.

Figure A3. Components to Moody's MDB Rating Criteria



Source: Moody's 2013.

Figure A4. Detailed Components of Moody's MDB Rating Criteria

| Broad Rating Factors | Rating Sub-Factor | Sub-Factor Weight (toward Factor) | Sub-Factor Indicator |
|---|-----------------------|-----------------------------------|--|
| Factor 1: Capital Adequacy | Capital Position | 60% | Asset Coverage Ratio |
| | | | Borrower Quality - Weighted Average Borrower Rating |
| | Leverage | 20% | Debt as % Usable Equity |
| | Asset Performance | 20% | Non-Performing Assets - NPLs as % of Total Loans |
| | | | Portfolio Concentration |
| | Adjustment Factors | [-4,3] scores | Operating Environment Profitability History of High NPLs Other |
| Factor 2: Liquidity | Position | 50% | Debt Service Coverage - (ST Debt + CMLTD) as % Discounted Liquid Assets |
| | Funding | 50% | Market: Bond-Implied Ratings Loan: Weighted Average Cost of Loan Debt |
| | Contractual Support | 50% | Callable Capital Coverage of Debt Stock - Debt as % Discounted Callable Capital |
| Factor 3: Strength of Member Support | Extraordinary Support | 50% | Ability - Weighted Median Shareholder Rating Willingness: Propensity of Support Willingness: Priority of Support |
| | | | Linkages Among Members |
| | Adjustment Factors | [-2,1] scores | Correlation of Members and Assets Member Concentration Joint-and-Several Support |

Source: Moody's 2013.

Table A1. Latest Available MDB Bond Ratings

| Type | MDB | Moody's | S&P | Fitch |
|---|---|---------|-----|-------|
| Global | IBRD | Aaa | AAA | AAA |
| | IFC | Aaa | AAA | AAA |
| Regional Non- Borrower Dominated | AfDB | Aaa | AAA | AAA |
| | AsDB | Aaa | AAA | AAA |
| | IADB | Aaa | AAA | AAA |
| | IIC | Aa2 | AA | AAA |
| | IsDB | Aaa | AAA | AAA |
| European | EBRD | Aaa | AAA | AAA |
| | EIB | Aaa | AAA | AAA |
| Sub- Regional and/or Borrower Dominated | Black Sea DB | A2 | A- | NR |
| | CAF | Aa3 | AA- | AA- |
| | Caribbean DB | Aa1 | AA | NR |
| | Central American Bank for Economic Integration | A1 | A | A |
| | East African DB | Ba1 | NR | NR |
| | Nordic DB | Aaa | AAA | NR |
| | North American DB | Aaa | AA+ | AA |
| | PTA Bank | Ba1 | NR | BB |
| | West African DB | Baa1 | NR | BBB |

Source: Ratings agency reports and websites, as of August 2015.

Table A2. Bond Rating Scale for “Big Three” Agencies

| S&P and Fitch | Moody’s | Investor classification |
|--------------------------|----------------|--------------------------------|
| AAA | Aaa | Prime |
| AA+ | Aa1 | High Grade |
| AA | Aa2 | |
| AA- | Aa3 | |
| A+ | A1 | Medium Grade |
| A | A2 | |
| A- | A3 | |
| BBB+ | Baa1 | |
| BBB | Baa2 | |
| BBB- | Baa3 | |
| BB+ | Ba1 | Non-Investment Grade |
| BB | Ba2 | |
| BB- | Ba3 | |
| B+ | B1 | Highly Speculative |
| B | B2 | |
| B- | B3 | |
| CCC+ | Caa1 | Substantial Risks |
| CCC | Caa2 | |
| CCC- | Caa3 | |
| CC | Ca | |
| C | C | Default Imminent |

Source: S&P, Moody’s and Fitch websites, as of August 2015.