He Who Pays the Piper Calls the Tune: Credit Rating Agencies and Multilateral Development Banks¹

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Abstract

Multilateral development banks (MDBs) have proved to be one of the most popular and enduring forms of international organization ever created, in large part because of their unique financial model. MDBs raise most of the resources needed for operations from international capital markets rather than government budgets, which greatly increases their financial capacity and attractiveness to member governments. However, this model has a trade-off: MDBs must pay close attention to the perceptions of bond investors, who have little interest in development goals. This paper explores the influence of credit rating agencies (CRAs) on MDB operations, based on a close analysis of the methodologies used by CRAs to evaluate MDBs as well as interviews with MDB financial staff and CRA analysts. The study finds that the methodology used by Standard and Poor's seriously undervalues the financial strength of MDBs, thus limiting their ability to pursue their development mandate. The findings highlight the fact that, because MDBs depend on capital markets, major shareholder governments may not be the all-powerful "principals" guiding MDB activities that much existing academic literature assumes.

Key words: Multilateral, development, World Bank, capital markets, credit rating agency, Standard and Poor's

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1. Introduction

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 New Development Bank—began operations in 2016.

A key reason for the enduring popularity of MDBs is their unique and powerful financial model. Member governments contribute a relatively small amount of shareholder capital to establish the financial foundations of an MDB, but the majority of resources for development projects are raised not from governments, but rather by borrowing on international capital markets. For example, the World Bank's main lending window² borrowed US\$63 billion in FY2016, mainly in the form of bonds.³

Because MDBs are generally viewed as stable institutions by the markets, they are able to borrow very inexpensively compared to many other bond issuers, meaning they are able to on-lend to borrowing countries with a margin above their own funding costs to cover administrative expenses, and still lend at attractive terms for development projects.

Thus, government shareholders can have a very significant development impact (in financial terms, at least) with a relatively small budgetary outlay (Table 1). This does not pertain to the "concessional" lending window for the poorest countries—like the World Bank's International Development Association (IDA)—and numerous MDB-administered trust funds, which are instead funded mostly by direct donations from wealthy governments.⁴

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

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MDB	Total Paid-In Capital (to	Cumulative Development				
	2015)	Operations (to 2015)				
IBRD (1945)	15.2	628.3				
IDB (1960)	5.7	231.4				
AsDB (1966)	7.4	170.2				
AfDB (1967)	4.9	114.4				
Total	33.2	1,144.3				

Source: MDB annual reports.

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

While MDBs have proved to be tremendously successful in channeling private capital toward development projects, this financial model does come with tradeoffs. Organizations funded directly by a government or group of governments through regular budgetary allocations—such as the United Nations or the Global

² Known as the International Bank for Reconstruction and Development (IBRD).

 $^{^3}$ See World Bank, 2016, pp. 17 and 28 for a description of the World Bank's funding program.

 $^{^4}$ IDA and other concessional windows also receive resources from net income allocated from the non-concessional windows—a practice that has numerous financial and governance implications. For more on this, see Humphrey 2014.

Fund—are susceptible to pressure from governments. But the fact that MDBs raise much of their operating resources on capital markets could weaken the control of shareholder government "principals" in the classic principal-agent framework frequently used to analyze international organizations (IOs) in general and MDBs in particular.

What sort of pressure do capital markets exert over MDBs, if any? Bond markets certainly have a strong influence on governments, with the recent Euro zone crisis as just the most recent of many examples. Rising sovereign bond yields driven by the perceptions of capital market players can easily force a government to change fiscal, exchange rate or monetary policies, despite substantial political resistance, and even came close to destroying the Euro.⁵ Not for nothing did U.S. political consultant James Carville once comment that if reincarnation existed, "I want to come back as the bond market. You can intimidate everybody" (Wall Street Journal, February 25, 1993).

This paper explores the relationship between capital markets and MDBs, and seeks to answer the following linked questions: does their dependence on the perceptions of bond investors influence the ability of MDBs to undertake the development mandate for which they were created, and if so, in which ways? It does so by examining the methodology of credit rating agencies (CRAs) as key gatekeepers for MDB access to capital markets.

The findings indicate that CRAs—and in particular, Standard & Poor's (S&P) are utilizing evaluation methodologies that significantly underestimate the financial strength of MDBs. Briefly put, CRAs attempt to evaluate MDBs using a similar approach to how they evaluate commercial banks, although MDBs—as cooperative banks with developmental non-profit a mandate—are fundamentally different. 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 economic difficulties. CRAs private, for-profit companies—have become the de facto regulator for the most important set of international organizations mandated to promote global development.

This highlights the "Achilles heel" of MDBs: they must pay close attention to the perceptions of bond buyers and, especially, CRAs, which have no particular interest in or allegiance to the MDB mission of promoting development and reducing poverty. This, in turn, impinges on the ability of shareholder governments to dictate MDB activities. As the old saying goes, "He who pays the piper calls the tune". The study findings have important implications for a fuller understanding of how and why MDBs make decisions on lending and other operational policies.

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⁵ For one particularly egregious episode of the impact of CRAs, consider the mistaken S&P press release announcing a downgrade of France's sovereign rating in 2011, and the ensuing impact on French government borrowing costs (Ryan, 2012, p. 5).

The paper is structured as follows. The theoretical underpinnings of the research are described in Section 2, followed by a justification of the case selection and an outline of the methodological approach in the third section. Section 4 closely examines the internal logic and consistency of three key aspects of CRA methodology for MDBs, while Section 5 provides evidence for how this methodology has impacted MDB operations. The sixth section concludes.

2. Theoretical Considerations⁶

The main intention of the paper is to contribute to the academic literature explaining the factors behind MDB actions by focusing on how their financial model influences their behavior. Scholarship on the financial pressures faced by MDBs is relatively limited. Kapur et al. (1997) present rich historical information on the interplay between financial and developmental considerations at the World Bank and Humphrey (2016) compares the historical and financial trajectory of three MDBs. Mohammed (2004), Woods (2006) and Humphrey (2014) consider political implications of MDB financial policies in more recent contexts. Gould (2006) paints a fascinating picture of the interplay between financial markets and IMF activity, although in a way that differs fundamentally from the current paper, which focuses on the way MDBs raise their own operating resources.

However, little research has focused on the fact that MDBs obtain most of their resources from capital markets, and what that might mean. As noted by Barnett and Coleman (2005)—following on an earlier study of organizational sociology focusing on resource dependence by Pfeffer and Salancik (1978)—international organizations (IOs) must adapt to ensure the resources needed to survive, even if they end up acting in ways that does not always perfectly match the goals of the organization: "The more dependent they are on others, the more likely IOs will alter their activities in a way that conforms to these external demands and standards." (Barnett and Coleman 2005: 599). This suggests that MDBs will be highly responsive to capital market requirements, to ensure a continued flow of resources.

Dovetailing with this view of the IO as a strategic actor seeking to ensure access to resources is the extensive literature viewing IOs as "agents" constituted by a group of "principals" (nation states) to undertake certain specific tasks (see among others Hawkins et al, 2006, Lyne et al. 2009, or Lake, 2007). The principal-agent (PA) framework has proved extremely useful in helping illuminate how and why IO agents might pursue agendas that do not always match up with what government principals desire, and the mechanisms used by those principals to attempt to control the agents. One of the key mechanisms for principals to enforce their authority over agents is control over resources. As noted by Lake (2007): "A grant of authority from the principal to the agent must be conditional and revocable, and the principal retains all residual rights of

⁶ The author is indebted to the editors of this special edition of RIO for highlighting theoretical weaknesses in a previous draft.

control including the right to veto actions by the agent either directly or indirectly by cutting funding or other means" (p. 207, italics added).

In the case of MDBs, the ability of shareholder principals to utilize the purse strings to enforce their preferences is diluted. Most MDB operating resources do not come from government budget allocations, but rather from borrowings on capital markets. This gets at a critical point often overlooked in the application of PA models to IOs—resource control. In the original application of PA approaches in economics (see Coase, 1937 and Fama, 1980)—wherein private corporate shareholders are principals and corporate management the agent—resource control is limited. Shareholders can establish policy, hire and fire, and set employee compensation levels. But other essential resources for a corporation to thrive are not under shareholder control. This notably includes the demand from customers for goods or services as well as suppliers of working capital, like banks or bond buyers.

For most IOs, operating resources are controlled entirely by the principal. Client demand is not relevant in terms of resource generation for most IOs, and the agency's budget is entirely supplied by the principal. Hence, for example, the United States can apply direct and immediate pressure on the United Nations by threatening to withhold its budgetary contribution. For many IOs, then, principals have a very powerful mechanism of control not available to principals in a private corporation.

But the financial model of MDBs is fundamentally different from other IOs. Certainly, shareholders do still have some control over MDB resources—notably during capital increases (where shareholders increase their shareholding to expand MDB capacity) and replenishing concessional lending windows (for the poorest countries). Numerous MDB researchers, including Nielson and Tierney (2003), Woods (2006), Babb (2009), Tussie (1995) and Gutner (2002), among others, have highlighted how major MDB policy changes were pushed through during capital increase or replenishment round negotiations. However, the working capital used for day-to-day operations of MDBs comes not from shareholders, but rather capital markets. This, in turn, makes it more difficult for principals to control MDBs.

Countries have thus made a trade-off in designing the MDB financial model: on the one hand it eases the budgetary burden on governments, but on the other hand it requires management to be responsive to the exigencies of capital markets to obtain the resources necessary to achieve the MDB's development mission. MDB shareholders have no (or at least, very limited) control over capital markets, and as a result must accept that management needs to

⁷ Similarly, MDBs must be responsive to demands of borrower countries. Borrower country demand is an under-studied area of MDB activity, and is sometimes erroneously assumed to be constant and limitless in academic research. For example, the many studies seeking to establish US influence on World Bank lending linked to UN voting patterns implicitly assume that if a country did not receive loans, then the cause is a supply-side issue (US influence), rather than a demand-side issue (a country did not want to borrow from the World Bank, and also disagreed with US foreign policy).

undertake actions and policies to ensure continued access to those markets, even if it limits the MDB's ability to achieve shareholder goals. The greater degree of autonomy from shareholders, as well as the need to answer to external actors (bond buyers and CRAs) with their own interests, may partly explain why MDBs are particularly susceptible to PA dynamics, relative to IO funded directly by government allocations.

This points to the weakness of applying PA frameworks in the same way to MDBs as other IOs and public agencies. The compelling evidence presented in existing PA research (of both the realist and neo-liberal institutionalist varieties) on MDBs clearly shows that a focus on government shareholders can go a long way to explaining how MDB behavior. But in the case of MDBs, it is clearly not the whole story. The fact that MDBs are structurally designed to access resources from bond issue means that governments cannot use financial control in the same way as at other IOs. This article seeks to explore what this dependence might mean for the ability of the MDB agent to pursue the tasks assigned to it by its government principals.

Before moving on to that empirical work, it is worth considering on a conceptual level the roles played by bond buyers and CRAs in this PA dynamic between MDBs and government shareholders. One might be tempted to think of the bond markets as type of second principal to MDBs, since the MDBs respond to their dictates. That, however, would be pushing the PA model too far. Bond buyers do not delegate authority to MDBs in any meaningful sense; they just lend MDBs money and want to get paid back. Instead, it is more appropriate to think of bond markets as an external, independent factor, part of the environment in which the PA dynamic between MDB principals and agents plays out.

At the same time, CRAs themselves can certainly be thought of as agents, a point not investigated in this paper but interesting nonetheless. In fact, CRAs would seem to have a rather unique agent role, functioning on the one hand as a private, for-profit information providers to bond market investors, and on the other hand as sanctioned regulator-like agents of governments in which capital markets operate. This rather odd split role—with sometimes conflicting incentives as a result—helps explain the odd position in which CRAs often find themselves, criticized for not performing their public agent role sufficiently well, due to their conflicting private incentives.

As numerous studies have highlighted (Shorter and Seitzinger, 2009; Bolton et al. 2012; Kruck 2016; and Bruner and Abdelal 2005), CRAs have a key formal role as capital market gatekeepers for several reasons. Their status is enshrined in financial regulation in Europe and the U.S. as a component of how capital adequacy is measured under the Basel guidelines. As well, CRAs a very powerful role in shaping the perceptions of many bond investors who do not have the time

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⁸ Internal MDB factors such as internal staff incentives investigated by more constructivistoriented researchers such as organizational culture or the role of development ideas, are also relevant (see for example Weaver, 2008 and Chwieroth, 2008, among others). As noted by Nielson et al. (2006), this research is particularly useful in supplementing PA models by helping explain why MDB agents might have agendas that diverge from principals.

and information to easily evaluate debt securities themselves—particularly MDBs, about which most bond investors know little. Lastly, certain institutional investors like pension funds and central banks are required by their mandates only to invest in securities with a minimum bond rating from the CRAs.

Understanding the motivations of CRAs themselves is not the focus of this paper. It is nonetheless worthwhile briefly considering the question of why CRAs might use restrictive methodologies to evaluate MDBs. Combining the insights of existing research on CRA behavior with the peculiarities of the MDB case, one can propose a plausible explanatory narrative as to why CRAs might use a restrictive rating methodology for MDBs.

The 2008 crisis and ensuing criticism of CRAs led directly to an increase in external pressure from regulators to tighten methodologies (as described in Kruck 2016), as well as likely a need to recover reputation to ensure prolonged future business in the way Mathis et al. 2009 suggest. Because the 20-odd MDBs represent a very small share of CRA revenue, they have little leverage over CRAs as customers, reducing the financial incentives CRAs might have to over-rate MDB securities described by Bolton et al. 2012. This makes it easier for CRAs to use them as a convenient example to demonstrate their rating stringency and gain credibility in the markets as described by Mathis et al. 2009. Further, as will be explored in more detail below, the particular logic of the quantitative model employed by S&P has led to perverse outcomes weighing on MDB ratings, similar to those outlined by Choi and Hwang (2012) for other asset classes.

The above is simply a speculative interpretation that would require further research to substantiate and deepen—the empirical evidence presented later in this paper does not bear directly on this question.

3. Case Selection and Methodology

This paper focuses on the impact of CRA methodologies on four MDBs: 9 the World Bank, Inter-American Development Bank (IDB), Asian Development Bank (AsDB) and African Development Bank (AfDB). These are the paradigmatic multilateral development banks built following the end of World War II, with a roughly similar approach to addressing global development. The World Bank is of course by far the best-known MDB, while the other three are the standard-bearer regional MDBs in the Bretton Woods system, modeled direct on the World Bank and with many of the same shareholders, although each with its own particular regional characteristics and trajectory. They are also among the select group of MDBs with the highest possible AAA bond rating from all the major CRAs, which confers substantial advantages for capital market funding not available to lower-rated bond issuers. 10, 11

⁹ That is, the non-concessional lending windows of all these MDBs. As noted previously the concessional lending windows are mainly funded via donor contributions, not bond issues.

¹⁰ Several other MDBs are also rated AAA: the International Finance Corporation, the Islamic Development Bank, the European Investment Bank (the largest MDB in existence), and the European Bank for Reconstruction and Development. See Annex Table A1 for complete list of MDB ratings, and S&P 2014a, pp. 12-14 for a full historical list of S&P ratings for the MDB sector.

With a AAA rating, the major MDBs can fund themselves at very low interest rates in capital markets compared to other issuers, which in turn allows them to offer loans at very low rates to borrowers, even after adding a margin to cover MDB administrative expenses. AAA status, and the prestige this carries among bond investors around the world, allows the major MDBs to opportunistically raise funding around the globe when conditions are advantageous, further bringing down funding costs (and hence loan charges to borrowers). These strengths are accentuated even further during times of global crisis, when investors flee for quality assets like AAA bonds 12—which benefits the ability of MDBs to ramp up counter-cyclical lending to help mitigate crisis impacts on developing borrower countries. As the 2015 G20 statement on MDBs noted, "AAA credit ratings have been at the core of the business model of many MDBs," and any action to change to MDB operations is only viable if "AAA ratings would not be put at risk" (G20, 2015). 13

This study only analyzes the rating methodology used by Standard and Poor's (S&P) since 2012 in detail. Although numerous bond rating agencies exist, by far the most important players are the "Big Three" of S&P, Moody's and Fitch, which jointly accounted for 96.6% of all bond ratings outstanding as of December 31, 2013, and 99.1% of all government security bond ratings (SEC, 2014, p. 8). These three firms established themselves as the main providers of bond ratings over the decades since Moody's first set up shop evaluating railroad bonds in the early 1900s (Sinclair 2005, Shorter and Seitzinger 2009, and Langohr and Langohr 2009). Other firms exist around the world, ¹⁴ and some are important in their domestic markets, but none have come close to threatening the dominance of the Big Three. According to MDB staff directly responsible for interacting with bond markets and CRAs, ¹⁵ they hold regular meetings and interact only with the Big Three CRAs.

Of the Big Three, S&P's rating methodology is by far the most binding on MDB operations, as confirmed in every interview done for this paper. By employing a highly quantitative, formulaic methodology, S&P generates comparable ratings across asset classes (commercial banks, investment banks, MDBs, etc.), as demanded by regulators. This approach, however, forces S&P to evaluate MDBs much more closely to private financial institutions despite the many unique

¹¹ The ability of sub-AAA MDBs to access capital markets and how this impacts their ability to pursue their particular mandates are not addressed in this paper, but would be a worthwhile topic for further research. Humphrey 2016 explores the efforts of the Andean Development Corporation using a more historical approach than the current paper.

¹² A World Bank Treasury staffer said in an interview in 2009, referring to the global financial crisis: "For the AAA MDBs like the World Bank and IADB, we had tons of ways to get funding because of the flight to quality. In any kind of market crisis investors don't want to take risks, they go straight for a safe havens like the AAA supranationals, and in particular the World Bank."

¹³ Other advantages of AAA include the facilitation of private bond placements by MDBs with major institutional investors, especially central banks; reduced liquidity needs due to the lack of need to back up derivative exposures; and more effective use of guarantee instruments.

¹⁴ The Japan Credit Rating Agency was the only CRA outside of the Big Three with a published methodology for evaluating MDBs. See Japan Credit Rating Agency 2013.

¹⁵ See reference section for interview list.

characteristics of MDBs as cooperative development banks. The less proscriptive and more subjective approaches used by Moody's and Fitch are not as problematic for MDBs, according to all interviewees. As such, S&P serves as an "extreme case" to highlight the issues of MDB dependence on capital markets. ¹⁶

The paper's research methodology is designed to address two principal questions: i) do CRA methodologies impact the ability of MDBs to pursue their development mandate, and ii) if so, in which ways. The empirical sections of the paper are dedicated to a close examination of S&P's methodology, using data from the MDBs themselves as well as rating agency reports to highlight the specific ways in which the methodology impacts MDBs. This is supplemented with in-depth interviews with 13 officials (mainly from risk and treasury departments) from five different MDBs.¹⁷ Three interviews were also conducted with CRA analysts. Supplementary information was drawn from third-party reports on MDB activities as well as MDB annual reports and financial statements.

4. MDB evaluation methodology

This section considers the conceptual underpinnings and internal logic of S&P's methodology, with a particular attention on the need for S&P analysts to generate quantitative inputs to their ratings model. S&P must assign a numeric value to characteristics of MDBs that are not easily quantifiable in nature, and does so in a way that is highly conservative and detrimental to MDB lending capacity.

Background to CRA assessment of MDBs and Current Context

The problems confronting MDBs from CRA methodologies is a relatively new phenomenon, or at least one not experienced in several decades. The World Bank had to work intensively to win over the New York capital markets after it was created in 1944, and did not receive its coveted AAA rating until 1959, after years of lobbying and very strong financial performance (see Kapur et al. 1997 and Mason and Asher 1973 for details). Once CRAs grew comfortable with the World Bank, however, the path proved much smoother for newer MDBs to receive AAA, which was granted almost immediately to the AsDB and IDB after their founding.

The main criterion of CRAs from the 1960s to the early 2000s was the backing of industrialized countries in the form of callable capital. Callable capital is a type of guarantee committed by MDB shareholders that can be called on in case of financial emergency. The callable capital of industrialized countries came to be

¹⁶ Considering why S&P moved the farthest in this direction is beyond the scope of this paper, but is likely due to a combination of business strategy, internal corporate culture and possibly greater pressure and attention due to S&P's leading position in the rating industry (46% of outstanding bond ratings as of Dec. 31, 2013).

¹⁷ See reference section for interview list.

viewed as an all-important security that allowed CRAs to grant AAA ratings. ¹⁸ The AfDB, for example, was created in 1964 with only the participation of African borrower countries, and was unable to access capital markets at useful financial terms until it accepted industrialized country shareholders and their callable capital (Strand, 2001). ¹⁹

This comfortable situation continued until just a few years ago, according to interviews with MDB staff. In the wake of the global financial crisis of 2008, however, circumstances changed drastically for the CRAs. As is well known, CRAs played a key role in the crisis by granting 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 opened a case against Moody's (Reuters, 2015 and Wall Street Journal, 2015), 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 (CFR, 2015).

This sudden increase in external pressure and attention has led CRAs to revamp their methodologies for evaluating different classes of investments, including MDBs (see Kruck, 2016). 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 and much more thorough methodologies for MDBs, while Moody's (2013) published their methodology for the first time.

Of the three, S&P moved much further toward developing a formulaic and replicable approach to evaluating MDBs compared to Moody's or Fitch, which according to MDB staff interviews as well as a direct comparison of the methodologies still employ considerably more qualitative judgments in arriving at their final rating. A former lead MDB analyst with S&P, who was involved with designing the new methodology, stated that "the previous way wasn't really a methodology, if an MDB tried to apply it to themselves they would only have a vague idea where they would come out...The new approach is much more elaborate and highly mathematical."

Essentially, S&P built a complex new methodology for private financial institutions in 2009, under tremendous pressure from the SEC, and subsequently adapted it to MDBs. However, MDBs differ fundamentally from private banks in a number of significant ways, including:

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¹⁸ As the former director of the World Bank's Finance Area put it in a 1995 book: "...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." Mistry, 1995, p. 17.

 $^{^{19}}$ This is an important issue facing the two newest MDBs—the Asian Infrastructure Investment Bank and the New Development Bank—due to their capital and membership structure.

- Mission: MDBs are not profit-oriented institutions, but rather seek to achieve development outcomes that do not appear on their balance sheets.
- Ownership and balance sheet: MDBs are for the most part owned by shareholder governments, and the capital structure and liability side of the balance sheet²⁰ are very different from private banks.
- Callable capital: A large majority (over 90% in most cases) of MDB total subscribed capital is in the form of callable capital, a type of guarantee that does not form part of MDB equity and is not used in private banks.
- Loan concentration: The loan portfolio of most MDBs is structurally concentrated, with a very small number of borrowers compared to commercial banks.
- Preferred credit treatment (PCT): Borrowers have generally (though informally) 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 regulations 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 (like 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. In the face of this confusing panorama, and in the wake of severe criticism for their role in the global financial crisis, S&P adopted a highly conservative approach to quantifying several of these unique MDB characteristics and forcing them into a rating methodology originally designed for private banks.

One key aspect of this highly quantitative approach is the Risk Adjusted Capital Framework (RACF) used by S&P for all financial institutions since 2009 (Reuters, 2009), and which has been adapted to MDBs. Because of its importance in understanding later sections of this paper, it is worth describing S&P's RACF in general terms. The RAC ratio is a measure of capital adequacy, expressed as a percentage, and is created by dividing shareholder equity (paid-in capital plus reserves) by risk-weighted assets (mainly outstanding loans, weighted by how risky S&P considers each borrower). This RAC is then adjusted in several ways, as described later in the paper. The advantage of the RAC 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."21

The highest RAC category that can be aspired to by an MDB is above 23% ("extremely strong")—the explicit target for every MDB official interviewed for this study, as it facilitates achieving a AAA rating. The major MDBs show adjusted

²⁰ Notably, MDBs generally do not take deposits, which form a large share of liabilities at most

²¹ S&P 2012, p. 3. See S&P 2010 for an overview of rating methodology for commercial banks.

RAC ratios of between 15 and 28% (Figure 1), while most commercial financial institutions are below 10% (S&P 2013a).²² This in itself is indicative of how conservative MDBs operate: if they maintained RAC ratios on a par with even the most cautious private banks, they could be lending billions more in development projects.

Although the RAC ratio forms only part of an MDB evaluation—generating the "financial profile", which is then combined with the "business profile" to arrive at the stand-alone rating—it has assumed a much higher effective importance, for two reasons, according to interviews with MDB financial officials. First, it provides a 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-toyear, depending on factors largely outside an MDB's control (in particular the riskiness of borrower countries, as judged by S&P), and thus has an outsized marginal impact on an MDB's rating changes.

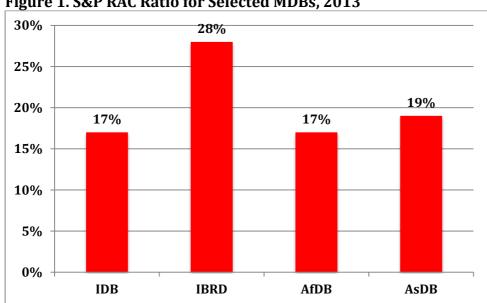


Figure 1. S&P RAC Ratio for Selected MDBs, 2013

Source: S&P 2014a.

The remainder of this section focuses on three aspects of S&P's methodology that weigh particularly heavily on its assessment of MDBs:

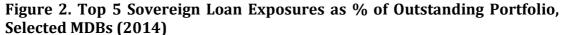
- *Concentration risk* inherent in MDB loan portfolios
- <u>Preferred creditor treatment</u> granted by borrowers to MDBs
- **Callable capital** committed by shareholders to MDBs

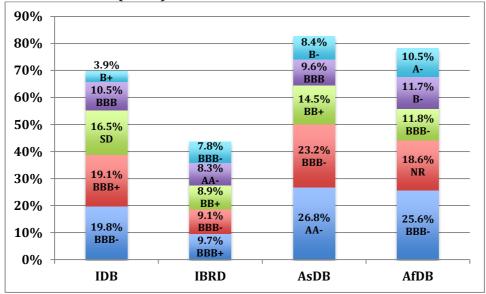
²² Of the top 100 rated banks in 2013 (highest rating AA-, three steps below AAA), only four had ratios above 10%: Norinchukin Bank (Japan) 11.2%; Caisse Centrale Desjardins (Canada) 10.9%; Shinkin Central Bank (Japan) 10.1% and National Commercial Bank (Saudi Arabia) 11.3%.

Other factors such as liquidity requirements, net income and reserve accumulation and an explicit bias in favor of non-borrower led MDBs,²³ among others, are also relevant but are not taken up here due to space limitations as well as the overwhelming attention paid to these three factors by MDB staff in interviews.

Portfolio concentration risk

MDBs lending mainly or entirely with government borrowers have an inherently narrow loan portfolio, particularly the regional and sub-regional MDBs focused on a specific geographic area. ²⁴ 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 are to a small number of large middle-income countries, due mainly to their absorptive capacity—the top five countries represent 44% if the World Bank (IBRD) loan portfolio, and over 80% for AsDB (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.





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

²³ More than a dozen other MDBs exist, most of which have a substantial and often majority shareholding by borrowers. This includes the Development Bank of Latin America (CAF), Central American Bank for Economic Integration, PTA Bank, West African Development Bank, and Black Sea 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 Development Bank and Asian Infrastructure Investment Bank. For more on sub-regional MDBs, see among others Zappile (2016).

 $^{^{24}\,}Portfolio$ concentration is much less problematic for MDBs with mainly private sector borrowers, such as EBRD and IFC, as these have many more individual borrowers.

Notes: Each block of color represents a separate country. The percentage represents the share of each country's outstanding loans in the MDB's total loan portfolio, while the letters are S&P's sovereign rating for that country. SD = selective default.

The approach used by S&P since 2012 to evaluate portfolio concentration has a major impact on MDB capital adequacy. After calculating the RAC as described above, S&P makes a series of adjustments to it. Of these, the adjustment for concentration—the "single-name concentration penalty"—is by far the largest. This penalty is assessed to an MDB's RAC as a result of having a high share of their loan portfolio to a single borrower ("single name"), and is particularly severe when that borrower has a low S&P sovereign rating. The penalty is added to the value of risk-weighted assets (RAC denominator), meaning that the overall RAC percentage is lowered following this adjustment. After taking portfolio concentration into account with S&P's technique, the regional MDBs in particular suddenly look seriously undercapitalized (Figure 3).

30% **AsDB** 14% ■ Unadjusted RAC 23% **AfDB** RAC with 33% Concentration **IBRD** 20% **Penalty** 32% IDB 14% 0% 10% 20% 30% 40%

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.

The calculation used by S&P is highly problematic, and criticized by finance officials at all MDBs. S&P's formula is based on a paper by two economists to refine Basel II capital adequacy evaluation for commercial banks, which penalizes large, risky individual exposures (Gordy and Lütkebohmert 2007). While the adjustment may be appropriate for commercial banks, 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, and that banks could expect adjustment ranges between 3 and 20% of total capital (Gordy and Lütkebohmert 2013). However, as applied by S&P to MDBs, the penalty more than doubles the level of risk-weighted assets for both the IDB and AsDB (Figure 4). That is, the adjustment makes it seem that these MDBs have loan portfolios twice as large as is actually the case—a huge penalty.

Assets, 2013 **AsDB** 108.5% **AfDB** 79.1% **IBRD** 60.5% 123.3% **IDB** 40% 80% 0% 20% 60% 100% 120% 140%

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

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

The extreme nature of S&P's approach is highlighted by the fact that in some cases the penalty implied that MDBs should be setting aside more of their own equity capital to back up a loan than the face value of the loan itself.²⁵ In response to loud complaints by affected MDBs when the methodology first came out in 2012, S&P instituted a "high risk exposure cap"—a technical-sounding name for simply reducing the impact of the concentration formula to 100%, because more than that obviously makes no sense (S&P, 2014a).

Despite the impact of the concentration penalty on MDB RAC ratios, the caveats in the paper on which it was based, and vociferous complaints by MDB management, S&P has persisted with its use. Several MDB officials suggest that the reason for this is that there is simply no other available tool with sufficient credibility that they can use to generate inputs into their RAC ratio. Moody's, which does not attempt to generate any ratio analogous to the RAC, uses standard measures of concentration like the share of the total portfolio accounted for by the top ten borrowers. The result, according to the Moody's methodology itself (Moody's 2013, Exhibit 7 and p. 12) as well as the feedback of MDB officials, has a relatively minor impact on MDB rating and operations.

Preferred creditor treatment

Due to the official status and developmental nature of MDBs, 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. PCT has meant that MDBs have generally had much lower non-performing loan (NPL) records than commercial banks (Figure 5). Even the AfDB, which has a substantially higher NPL than the other major MDBs, is still below the average for US commercial banks. However,

²⁵ Like all financial institutions, MDBs set aside only a portion of their shareholder equity to back up outstanding loans—the is the core of capital adequacy measures. In the case of sovereign guarantee loans, MDBs set aside 20-30% of their shareholder equity.

PCT is informal, with no binding legal or contractual status, and as a result is difficult for CRAs to account for in their ratings.

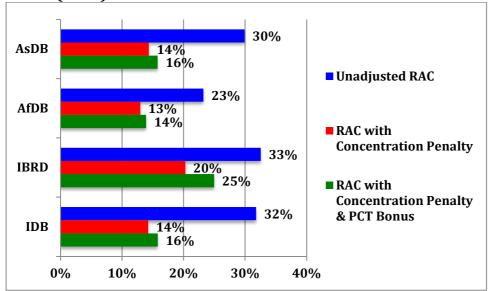
4%
3%
2%
1%
0.3%
0.1%
0.0%
IBRD IDB ASDB AfDB US banks

Figure 5. Non-Performing Loans as % of Gross Loans (2010-2014 Avg.)

Source: Moody's 2015 credit rating reports for each MDB; St. Louis Federal Reserve for US banks.

S&P calculates PCT with a 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 equity, due to lower repayment risk. However, the weight given to PCT is quite low relative to the concentration penalty, resulting in only a small bonus for MDB capital adequacy. The bonus does not offset the concentration penalty, whereas the methodologies used by Moody's and Fitch do, in recognition that they are two offsetting characteristics built into the MDB business model (Figure 6).

Figure 6. Impact of Concentration Penalty and PCT Bonus on MDB RAC Ratios (2013)



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

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

Not only does S&P give little credit for PCT, but the way they arrive at a numeric value for PCT to plug into the RAC ratio is questionable. 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. At the high extreme of 100% multilateral debt, this is intuitively logical—if all of 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 (S&P 2012, p. 29).

The relationship between S&P's multilateral debt ratio and PCT is not borne out by the historical record. IDB staff undertook a detailed study of all default events by borrower governments to commercial lenders in the previous 50 years. ²⁶ Of the 63 such cases, only seven had payment delays of longer than 180 days to the IDB—itself an impressive statement of PCT. But further, the IDB calculated the multilateral debt ratio for all 63 cases, and found that the ratio did not correlate to IDB repayment in the way predicted by S&P, and in fact tended in the other direction (lower ratio countries were more likely to delay repayment to the IDB, rather than higher ratio countries). Staff at the World Bank and AfDB reported similar results in their own track record.

Beyond the conceptual problems with how the multilateral debt ratio is calculated, S&P also misrepresents payment delays at MDBs by implicitly treating them the same as at commercial banks. On the rare occasions that MDB borrowers delay repayment on sovereign loans, they invariably repay both principal and interest—unlike commercial banks where borrowers frequently never pay the loan back at all. MDBs never write off loans, ²⁷ and as a result the notions of sovereign "default" and subsequent "loss given default" are not applicable in a meaningful way to MDBs. Sovereign borrowers remain shareholders of MDBs even while not repaying their loans, and have always eventually become current again to continue accessing MDB services. Hence, while MDBs do face periods of lost net income during non-repayment events, they are fundamentally different than with a commercial bank, which face very substantial losses from defaults.

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. "There's very low defaults in multilateral sector, and even in default in the end they pay," said one MDB treasury staffer. "They [S&P] say they make adjustments, but when you see the calculations they are certainly not sufficient." Sovereign borrowers view MDBs not simply as 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 an MDB loan is more

²⁶ Interviews with IDB treasury staff.

²⁷ MDBs have participated in debt relief initiatives like Highly Indebted Poor Countries (HIPC) and Multilateral Debt Relief Initiative (MDRI), but this is not technically considered a loan write off.

than a mere financial decision, and as the historical record has shown, countries that do stop payment invariably repay principal and interest.

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 promised by governments should MDB be unable to pay off bondholders due to financial crises. It accounts for the vast majority of total shareholder capital at most MDBs (Figure 7).

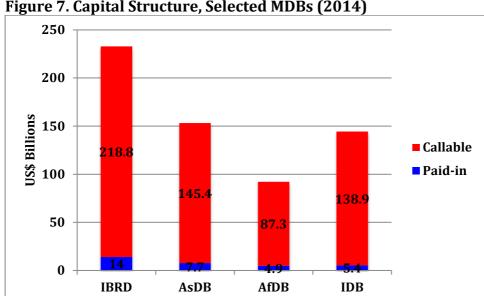


Figure 7. Capital Structure, Selected MDBs (2014)

Source: Fiscal year 2014 financial statements.

Calculating exactly how callable capital should be valued in financial terms is not a simple task. It is an obligation by shareholder countries via international treaty as part of their membership to an MDB, but it is not a guarantee that can be called by the MDB under clearly defined circumstances, as with other types of financial guarantees. Instead, those who would pay the guarantee—MDB shareholders—are the same ones 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 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.28 However, S&P takes a much more stringent view

²⁸ 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

on how much credit to give callable capital than Moody's. In practice, S&P only credits callable capital from governments that are themselves rated AAA for the World Bank and major regional MDBs (S&P 2012, p. 26). 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 (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.

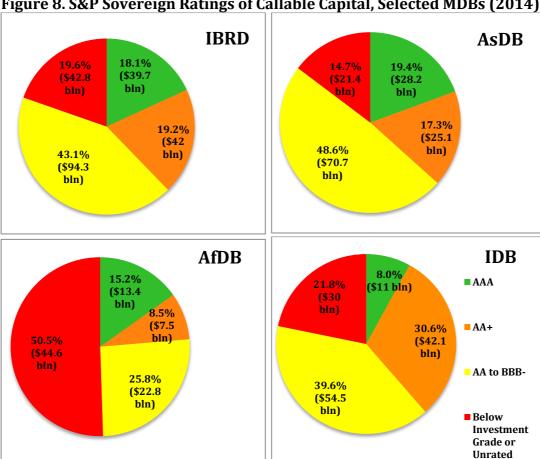


Figure 8. S&P Sovereign Ratings of Callable Capital, Selected MDBs (2014)

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

Note: IDB data does note include a small portion of temporary callable capital from Canada in 2014.

While it is reasonable to not give full credit for all callable capital equally, 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. Sub-AAA callable capital has been radically devalued in S&P's new methodology, to the point that MDBs are suddenly engaging in, as one official put it, "soul searching as regards the quality and value of callable capital." Another said, "We agree it [sub-AAA callable capital] shouldn't have same value

MDBs with sub-AAA stand-alone ratings (like IDB and AfDB currently), even though their final issuer rating is AAA.

as AAA, but we think that it should have some value. And they give zero credit for it." S&P's methodology is effectively declaring tens of billions of dollars in international obligations in an instrument designed more than seven decades ago to promote global development to be essentially worthless.

One reason why S&P uses this highly restrictive approach to accounting for callable capital is that it actually attempts to incorporate it into the RAC ratio as a final step in its rating process. That is, when an MDB's "stand-alone" rating is completed, S&P will increase an MDB's rating up to three notches based on its callable capital. 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 increased to \$33.3 billion, and the RAC with shareholder support became 24%—just above the threshold needed to achieve a AAA rating.

This works out in a relatively proportionate way in the case of the IDB, but leads to some other MDBs appearing tremendously well capitalized (Table 3). 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.

As a hypothetical exercise, ²⁹ adding AAA callable capital in equity suggests that the IBRD could add \$400 billion to its loan portfolio (US\$157 billion as of 2015) under the same risk profile as currently, and still have a RAC of 25% (Table 3). Asking if the potential loan portfolio increases in Table 3 were realistic elicited amusement from MDB financial staff. "No chance," said one flatly. "These numbers aren't real, they're just S&P's way of looking sophisticated so they can give AAA ratings to the big MDBs." The numbers highlight the conceptual confusion on S&P's part on how to cope with callable capital within their quantitative RAC framework.

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

MDB	RAC (2013)	RAC + AAA Callable Capital	Hypothetical Added Loan Portfolio at 25% RAC (\$ blns)
IBRD	28%	56%	409.3
IDB	17%	24%	3.2
AsDB	19%	49%	110.4
AfDB	17%	41%*	20.8
Total			543.7

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

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²⁹ Not considering statutory limits, loan demand and absorptive capacity among borrowers, administrative capacity at MDBs, or capital market resource raising requirements to fund loans, among others.

Note: RAC includes all MDB-specific adjustments, as detailed in S&P 2014. Hypothetical portfolio is calculated assuming the same risk-weighting profile calculated by S&P for existing 2013 portfolios.

* Despite the 41% RAC after including AAA callable capital, the AfDB was in 2013 close to losing its overall AAA rating—callable capital can only increase a rating by three notches in S&P's methodology (regardless of the amount), and the AfDB's stand-alone rating was AA.

5. Do Credit Rating Agencies Influence MDB Development Operations?

While the previous section critiqued the conceptual basis and internal logic of S&P's MDB methodology, this section provides evidence on how the methodology has actually impacted MDB operations in practice. One might presume that, since none of the four MDBs considered here have experienced a downgrade as a result of S&P's new methodology, that it is simply an elaborate facade used by S&P to placate regulators, but with no real influence on MDB activity.

In fact, officials from all four MDBs analyzed here³⁰ confirmed that the impact of the new methodology has been very substantial, forcing MDBs to modify not just relatively obscure financial policies but also daily decisions on individual lending operations in the interests of maintaining their all-important AAA rating. The application of S&P's new methodology resulted in the three major regional MDBs (especially the AfDB and IDB) appearing to be right on the edge of being downgraded. As a result, the impact that each loan operation might have on MDB ratings has quickly become an integral part of MDB decision-making processes, along with more traditional criteria such as need, development impact and implementation capacity. "S&P has become the de facto regulator for us," one MDB official said. "Everything we do, we test immediately to see how it will impact the rating."

A risk staffer in one MDB said that they assume if their RAC drops to 13% or so, they might be downgraded—although they can't be totally sure and thus need to factor in a buffer. Each proposed new operation is tested to see how it will impact the RAC, and in some cases developmentally strong projects will be turned down due to these financial considerations. "We calculate that for each loan in each country, and determine how much additional lending would help or hurt our RAC," the staffer said. The RAC formula is also now the key driver for deciding overall country lending envelopes, which the staffer said are recalculated each quarter to ensure no threat to the RAC.

A treasury staffer described one particular case of a lower-middle income country that was "graduating" out of the concessional lending to the concessional lending window. "There was a lot of reluctance to lend on the part of treasury, because this is a riskier country," the staffer said. "We did the calculations and found that the diversification impact [i.e. reducing the concentration penalty] far outweighed the single country risk, so we went ahead. But if it hadn't, we might

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 $^{^{30}}$ As well as from the Andean Development Corporation (CAF) and European Bank for Reconstruction and Development (EBRD).

not have been able to open up lending," thus leaving the country without access to either concessional or non-concessional lending.

These new considerations have been baffling for operations staff accustomed to focusing mainly on developmental criteria. A vice-president of operations at one of the major MDBs voiced frustration with how S&P's evaluation had become central to operational discussions. "You cannot overstate the impact that this methodology has had on our operations—it has in a way changed our entire business model. Formerly we assigned our resources strictly based on need and absorption capacity. But bit by bit the S&P methodology has become the main driver of our allocation decisions...I can't simply push resources on smaller economies to improve our portfolio, they can't absorb it. And at the same time I have huge demands from countries that I cannot serve because of the impact on our capital ratio. It [S&P's methodology] has become a major constraint, if not the major constraint."

The factor having the most direct impact on MDB operations is how S&P calculates the risks posed by loan portfolio concentration, according to all MDB staff interviewed. The nature of MDBs indicates that they should undertake lending operations in cycle-neutral or at times counter-cyclical fashion—that is, lend more during difficult economic times—but should not act pro-cyclically in a way that would accentuate economic swings. However, the concentration penalty encourages pro-cyclicality. The S&P methodology has built-in incentives for MDBs to reduce lending during times of crisis, and to expand lending to countries that are performing strong economically—exactly the opposite of what an MDB should be doing in pursuit of its development mandate—in an effort to maintain a AAA bond rating.³¹

The concentration penalty has been a major problem since the introduction of S&P's new methodology for the AfDB and IDB in particular. The AfDB severely restricted lending to two major borrower countries badly in need of support during a time of traumatic political and economic turmoil, Egypt and Tunisia. Egypt—by far the largest borrower from the AfDB between 2005 and 2010, averaging over US\$500 million in approvals annually—was suddenly cut off, with no loans granted between 2012 and 2014, despite the urgent need of Egypt for financing. As one AfDB official said, "The North African countries were most efficient at using our resources, and had a big portfolio. Then they got downgraded and we had to back off, arguably when they needed us the most...The Egyptians were very upset." 32

The IDB has faced a similar situation due to Argentina, which was rated as "selective default" by S&P since 2001—the lowest possible rating—and represented 16.5% of IDB's portfolio in 2013. This combination of low rating and

³¹ S&P does recognize the importance of MDBs lending counter-cyclically in the "Policy Importance" factor, which forms part of an MDB's "Business Profile" that together with the "Financial Profile" generate the stand-alone rating. See S&P 2014a, pp. 17-30.

³² This may also partly explain why the EBRD—initially tasked only to operate in former communist countries of eastern Europe and central Asia—launched operations in North Africa in 2011. See EBRD, 2012, p. 12-13.

high share of the portfolio translated into a very high concentration penalty in S&P's methodology. According to the Argentine executive director, this led to "some pretty drastic cuts to our envelope in the last two years, due to the impact that more loans would have had in S&P's methodology." After the RAC methodology became operational in 2013, IDB lending to Argentina dropped from an average of US\$1.3 billion annually in 2010-2012 to US\$660 million in 2014 and US\$750 million in 2015.

Beyond the difficulties S&P's RAC creates lending to individual countries, it also impacts the aggregate size of MDB loan portfolios as a ratio to their equity capital. The very high loan portfolio concentration penalty combined with the limited recognition of PCT mean that MDBs now "consume" their equity capital at a much faster rate than prior to the introduction of the S&P methodology, meaning their headroom to expand lending is much reduced.

MDBs have engaged in creative financial engineering to address the impacts of the new S&P methodology on their capital adequacy. In lieu of a new round of capital increases—which are politically difficult and time-consuming—MDBs have been piloting new options to clear space off the balance sheet. This has included a synthetic exchange of a portion of loan portfolios between the AfDB, IDB and World Bank, with the express purpose of reducing S&P's concentration penalty charged against the first two (AfDB 2015, p. 112).³⁴ While successful, MDB staffers in the involved banks expressed some trepidation that they were engaged in such complex financial engineering "to circumvent the shortcoming of one rating agency," said one. "If the methodology changes, the benefits of the operation might also completely change."

Another method to demonstrate the impact of S&P's rating approach would be to undertake time series statistical analysis on lending patterns. Because of the short time period since the methodology was introduced (effective for MDB operations as of 2013), insufficient data is available now to make such a study, but it may be worthwhile in future years. Even with more time and data, such an analysis would be difficult because it is not possible to determine the criteria used to decide each country's lending envelope in a given year. Hence a country's allocation may have declined or risen, but it would not be immediately clear if it was due to a rating methodology issue or some other factor (political considerations, development need, absorptive capacity, etc.).

Although not on the same magnitude as the impact on lending, it is also worth noting how S&P's methodology is consuming MDB staff time. All MDBs consulted have entire teams dedicated to reverse-engineering the methodology and calculating operational impacts on the RAC on an ongoing basis. The concern on the rating has permeated through different levels of management and up to the board level. This was confirmed during two separate workshops with executive

³³ Andrea Molinari, IDB executive director for Argentina, 10 June 2015.

³⁴ It was only after finalizing this exchange that the AfDB was able to provide substantial financing again to Egypt, in the form of a US\$500 million budget support loan approved in December 2015.

directors of the IDB³⁵ and World Bank,³⁶ during which numerous executive directors noted the sudden increase in references to S&P's methodology when making decisions on lending operations and financial management. While financial concerns have always been present in MDBs, they have taken on a heightened importance and represent a substantial cost of time and energy that could be spent focusing on the MDB's developmental mandate. Should the other CRAs move in the direction of S&P's quantitative RAC approach (which several MDB staffers expressed nervousness about), this situation could worsen. ³⁷

Conclusions

This study has examined the influence that the unique financing model of multilateral development banks (MDBs) has in shaping their ability to pursue their development mandate. The fact that MDBs can raise substantial financing on international capital markets at very low interest rates has been a key element to their success as a type of international organization. However, it also means that government shareholder "principals" do not entirely control MDB finances, as they do in IOs directly supplied with budgetary allocations. In the case of MDBs, bond buyers and by extension credit rating agencies (CRAs) also have a major say in how MDBs are run—and they have no particular interest in the development goals that MDBs are pursuing on behalf of member governments.

Previous research has shown how the need for MDBs to ingratiate themselves with capital market players shaped lending policies and even membership of major MDBs in their early years (Kapur et al., 1997 and Humphrey 2016). The present study has analyzed the current situation, and found that the methodologies used by the major credit rating agencies (CRAs)—in particularly Standard & Poor's (S&P)—are having a substantial negative impact on the ability of MDBs to undertake their development mission. By analyzing MDBs in a manner too similar to commercial banks, CRAs are fundamentally mischaracterizing what MDBs are designed to do and underestimating their unique financial strengths.

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 (Humphrey, 2014). However, the revised CRA methodologies implemented after 2012 have restricted MDBs even further. This impact is felt in 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. The overall result embeds strong incentives for

³⁵ Annual retreat of IDB Executive Board, Washington D.C., 30 July 2015.

 $^{^{36}\,\}text{Workshop}$ on credit rating agencies and MDBs organized by G24 for World Bank executive directors, Washington D.C., 31 July 2015.

³⁷ As one treasury staffer put it, "The other agencies are looking over their shoulders and saying, "why is S&P getting all this attention?" So soon they will come up with their own models. If the other agencies have models that are different, then we've got to deal with three or four models, each one with different criteria and giving different results."

MDBs to protect their AAA bond rating by i) acting even more conservatively than previously in utilizing their capital for development and ii) engaging in procyclical lending to individual countries facing difficulties, even when this conflicts with their development mandate.

The fact that CRA methodology is able to have such a major impact on the operations of the world's most important development organizations is a testament to the importance of how the need for external resources shapes organizational behavior. Governments are happy to be relieved of budgetary pressure to fund development projects by MDBs' ability to tap capital markets for resources. But the trade off is that governments lose some of their control to private market players like S&P, who have no responsibility to uphold MDBs' developmental mandate.

These findings add to our understanding of what makes MDBs tick. The role of major shareholder governments is obviously significant in shaping MDB policy and actions, as are considerations of how to best achieve developmental outcomes and internal MDB staff culture, among other factors. However, a deeper awareness and understanding of their financial model is essential to obtain a more rounded and complete view of the various factors that explain MDB activities. In the language of the principal-agent framework often used in academic literature, the views of capital market players—most notably CRAs—are an important factor limiting the control government principals are able to exercise over MDB agents—a power these principals have in other types of IOs funded by direct budgetary allocations.

The influence of capital markets over MDBs has always been present, but did not present substantial problems until recently. After the initial difficulties in obtaining a AAA rating, the World Bank and, subsequently, major regional MDBs faced minimal restrictions from CRAs, who were largely content to grant a AAA rating on the basis of the backing of highly rated non-borrower countries, notably the US. But in the wake of the global financial crisis, CRAs faced pressure to overhaul their ratings, and their new methodologies (especially that of S&P) have resulted on substantial restrictions for MDBs, limiting their ability to pursue the development goals set by their government shareholder principals.

The empirical issues examined in this paper—the details of the new S&P methodology—represent only one aspect of how capital markets and financial pressures shape MDB behavior. Considerably more research could be undertaken in this direction. In relation to CRAs, one could in the coming years (after sufficient time has passed) use a data-driven approach to see how lending patterns may have changed overall and in relation to specific countries in the wake of the introduction of new CRA methodologies. As well, one could attempt to reverse-engineer S&P's methodology and apply it to previous years, to see what ratings would result.

More broadly, it would be fascinating to track bond yields over the years for different MDBs and test for correlations with either political or economic events, thus getting more directly at how capital markets perceive MDBs. A detailed

study of how non-AAA rated MDBs interface with capital markets in general and CRAs in particular would also be worthwhile, to get a sense of how varying development mandates, geographic specializations and governance/ownership arrangements impact MDB financial potential. Similar work could further be undertaken in relation to national development banks, many of which fund themselves at least in part by issuing debt on capital markets.³⁸

The paper was not intended to reflect directly on the motivations of CRAs—the focus is rather on how CRAs as an exogenous variable influence MDBs. Nonetheless the findings outlined here are a curious case to fit into the growing body of IPE literature on the role of CRAs. While the literature has focused largely on why CRAs over-rate assets (such as asset-backed securities in the runup to the 2008 crisis), in this case they are under-rating a certain asset class. A closer look at this case might help shed light on the validity of existing theoretical understanding of CRA behavior. In particular, digging deeper into why S&P chose to move ahead with such a highly quantitative and restrictive methodology for MDBs, while Moody's and Fitch have not, could potentially be revealing of incentives faced by CRAs and their relations to governments and regulators.

The findings presented here have substantial policy relevance. Calls for MDBs to ramp up their lending may sound good in the context of a G20 proclamation to achieve the Sustainable Development Goals (G20, 2015), but this may run up against a less forgiving reality in the capital markets, which would be the main suppliers of resources if there is any hope at all of actually moving from "billions to trillions". Assuming that governments are not going to pay these trillions, then bond investors and CRAs will have a say in the matter. Major shareholder governments could take policy action against CRAs, as they are likely to have influence both formal (through the authority delegated to CRAs as "agents" to smooth the functioning of capital markets) and informal (through economic and political clout). One would expect the industrialized shareholders would have an incentive to do so, since their capital is not being put to the most effective use in MDB operations, in part because of CRA methodology.

These tensions between development goals and the need to fund in capital markets are likely to become even more important going forward, as donor aid budgets to support MDB lending to the poorest countries declines. For example, the AsDB is now folding its concessional window for the poorest countries into its market-based non-concessional window, for the explicit purpose of leveraging greater resources than would be possible just through donations (AsDB, 2014). The September 2016 initial credit rating of the World Bank's IDA indicates that it, too, is likely to tap capital markets in the near future (S&P, 2016).

³⁸ For example, China Development Bank—the largest development bank in the world, with US\$1.5 trillion in assets at end-2015—gets about 75% of its resources from bond issues (Humphrey, 2014).

The basic underlying model of MDBs remains as relevant now as when the World Bank was first created in 1944, as the new Asian Infrastructure Investment Bank and New Development Bank attest. This highly successful form of international organization is clearly here to stay, and an accurate understanding its financial model and dependence on capital markets—in both academia and the policy world—is essential to more fully appreciate the incentives and pressures that drive MDB behavior.

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Tim Turner, Chief Risk Officer, 12 June 2015

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Trevor de Kock, Treasury, 26 June 2015

AsDB

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

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George Richardson, World Bank Head of Capital Markets, 23 January 2009

Other

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

Andrea Molinari, IDB Executive Director for Argentina, 10 June 2015.

Annex Table A1. MDB Bond Ratings, 2015

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

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