

Special Comment

Moody's U.S. Public Finance

September 2009

Methodology Update: Ratings Impact of Debt Service Reserve Funds That Rely on Financial Guarantor Surety Bonds

Summary Opinion

The downgrades of several financial guarantors over the past eighteen months have heightened Moody's concerns regarding the adequacy of debt service reserves funded with financial guarantor surety bonds. The purpose of this report is to discuss our views on the credit impact of downgraded surety providers on the bonds secured by those debt service reserve surety policies. As described in greater detail below, the impact will depend on the sector, the rating level of the surety provider and the credit fundamentals of the issuer.

As a result of the downgrade of a surety provider, the surety bond may no longer provide sufficient security to maintain the ratings of an issuer's debt, particularly when compared to other similar transactions with fully funded debt service reserve funds ("DSRF") in the form of cash or unconditional bank facilities. If the rating on an issuer's DSRF surety provider falls to below investment grade, Moody's expects an issuer to take steps to replace that reserve fund. Failure to do so could result in a modest rating downgrade if the issuer lacks a high degree of revenue raising ability or alternate sources of liquidity to support debt service. If the DSRF is a fundamental credit consideration, failure to replace the surety could result in a significant downgrade. For the majority of U.S. public finance issuers, we do not expect significant rating revisions for debt supported by DSRFs provided by financial guarantors that are still rated investment grade.

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DSRFs have historically been incorporated into financing structures as a credit mitigant by a variety of governmental, infrastructure, not for profit organizations and project finance issuers. The level of credit support that a debt service reserve provides – whether cash funded or surety funded – depends on the type of security, the nature of the enterprise, and the stability of the primary source of revenues pledged to repay the debt.

Some issuers have taken deliberate steps to respond to Moody's concerns by replacing DSRF sureties with bank letters of credit, with cash, with bond proceeds or some combination of options. Certain issuers with healthy debt service coverage ratios can rebuild a cash reserve out of surplus generated cashflows and it is notable that certain issuers have deliberately replaced reserves in order to preserve credit quality. In Appendix A we provide several case studies highlighting issuer responses to downgraded DSRF surety providers. However, many issuers still have not taken action. Moody's will follow-up with project finance, infrastructure and certain public finance issuers who have not as yet addressed the liquidity concerns arising out of debt service reserve sureties provided by speculative grade financial guarantors.

Reserves important during economic downturn

Moody's views DSRFs as credit positive, even more so if they are well sized and structured. For maximum benefit, the DSRF size and structure should provide full and timely liquidity, as well as timely replenishment of the reserve once drawn upon. The value of replenishable DSRFs becomes more important during periods of economic downturns, heightened competition or the confluence of operating and financial stresses that are temporary but unpredictable. These events can lead to lower than projected revenues, higher than budgeted maintenance and operating costs, which ultimately result in thinner debt service coverage ratios.

A DSRF serves two essential functions. First, the fund itself bridges financing gaps to prevent a default in the event of a catastrophe or some occurrence leading to a shortfall in pledged revenues. Second, the "tripwire" provisions, whereby specified actions are required in the event the DSRF has to be tapped to pay debt, force management to take steps for the protection of the bondholders even to the detriment of other constituencies. DSRFs are particularly important where material event risks exist or the enterprise operates within a highly competitive market. In these instances, Moody's views a cash-funded DSRF that is available to ensure timely debt service repayment over the life of the debt as providing a material credit benefit.

Value of DSRFs varies by sector, rating level and credit fundamentals

Generally, the presence of a DSRF in and of itself likely provides a relatively modest amount of credit support for bonds issued by the majority of U.S. public finance issuers. In sectors where liquidity is typically high and revenue raising or cost cutting viable, the DSRF provided minimal benefit to the rating at the time the rating was assigned and therefore has minimal impact if the strength of the DSRF deteriorates. These sectors include U.S. municipal utilities, as well as the more highly rated colleges, universities, health care and not-for-profit issuers. Many of these entities have either a monopoly position, or sufficient pricing flexibility, revenue raising ability, liquidity or other strengths that support the fundamental credit analysis supporting the rating.

For the majority of U.S. public finance issuers, we do not expect significant rating revisions for debt supported by DSRFs provided by financial guarantors that are still rated investment grade. For U.S. municipal issuers that have DSRFs funded by non-investment grade rated surety providers, we will evaluate credits based on the ability to raise revenues, pass through or cut costs, and tap other liquidity sources for debt service.

In contrast, DSRFs have historically constituted an important credit feature for project finance and infrastructure enterprises, becoming virtually standard across wide segments of the market. Infrastructure enterprises that rely on operating revenues to provide for ongoing operating expenses including operation and maintenance costs and debt service payments face varying degrees of operating risk and demand risk. For these enterprises, DSRFs have helped to ensure some bondholder protections during anomalous or difficult operating periods. Generally, DSRFs have been sized in an amount sufficient to provide for six months or twelve months of debt service payments. ***Moody's will look for project finance and infrastructure credits***

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to develop a plan over a short term horizon to replace or supplement debt service reserve sureties when the surety provider's rating drops significantly below the level originally expected.

Figure 1 below setouts the expected credit impact of DSRF's funded by financial guarantor surety bonds by sector.

Figure 1: Framework for Evaluating Debt Service Reserve Funds

Other Sources of Liquidity	High	U.S. ports	U.S. public airports	U.S. municipal utilities, colleges and universities, health care
	Medium	Concession toll roads, power projects, solid waste	Concession airports, State HFAs	U.S. public toll roads
	Low	U.S. housing projects, PFI/PPP, Stadiums	Mass transit agencies	Joint Power Authorities
		Low	Medium	High

Ability to raise revenues and / or cut costs

Expected credit impact of DSRFs funded with financial guarantor surety bonds:

- Limited to no credit impact
- Potential for moderate credit impact
- Potential for greatest credit impact

Generally project financings and infrastructure credits have less financial flexibility, less direct revenue raising ability, and are more dependent on support from a DSRF to maintain their rating. Likewise, enterprises that are allowed to distribute via an "open loop" indenture provision the excess net revenues on a periodic basis after payment of debt service are likely more dependent on a DSRF to maintain the rating.

Higher rated issuers are likely to be less impacted by surety provider downgrades. Higher rated credits are likely to have greater financial flexibility, such as greater revenue raising ability and higher liquidity, than lower rated credits. These credits are less likely to rely exclusively on a DSRF during a period of unanticipated operating pressure. While it is very unlikely that highly rated issuers will ever need to rely on their debt service reserves, the simple presence of the reserves still improves their credit quality. With that in mind, we may look for such issuers to set out a plan to replace non-investment grade surety policies with cash funded reserves or another acceptable credit substitute; failure to do so might lead to a modest rather than severe downgrade.

DSRFs are important for more volatile enterprises

Revenue and expense volatility are also important factors to consider when assessing the importance of a DSRF. For instance, Joint Power Authorities ("JPAs"), stadiums, power projects and gas prepay bonds all have significant counterparty exposure, which could subject the issuer to a sudden loss of revenues following the default of the counterparty while the issuer searches for a replacement. Utilities meanwhile may have significant cost volatility (and potentially revenue volatility as well depending on off-system sales) and concession toll roads have potentially significant revenue volatility. In these sectors Moody's views a debt service reserve as more important, particularly for lower rated credits, than in less volatile sectors.

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Issuers that have extensive swap portfolios also have significant counterparty exposure, in addition to interest rate and remarketing exposure and put risk. In these cases the presence of a DSRF likely is an important rating factor although will be evaluated in the context of a review of other factors including internal and external liquidity and debt service coverage. In these instances, Moody's will look to an issuer to replace a lower rated surety policy with cash or other acceptable credit substitute in order to maintain a given rating.

Certain credits benefit from extremely strong revenue-setting mechanisms, as is the case for public power issuers, Canadian airports, and many U.S. airports. These revenue setting mechanisms allow an issuer to pass on all or most negative cashflow variances to their customer base. Under such mechanisms, a conventional debt service coverage ratio metric may be weak but it is almost irrelevant – the key credit metric is rather the adequacy of liquidity reserves to bridge the period between the negative variance that emerges and reimbursement being received through a tariff adjustment for subsequent periods. In such cases, the reserve fund plays an important role in ensuring full and timely debt service payments and any threat to the adequacy of reserves would likely have a material negative impact on the rating.

DSRFs offset abatement risk for lease-backed debt

While a DSRF is a common security feature and credit strength for lease-backed securities, it is particularly important where interruption of use or occupancy could result in abatement of lease payments, as is common in California. In these cases the DSRF provides a limited source of funds to continue debt service payments during a period of lease payment interruption. The reserve can serve as a source of funds to supplement rental interruption insurance if receipt of insurance proceeds is delayed for the repair or replacement of a project, if repairs take longer than the period covered by rental interruption insurance, or in the event of an uninsured risk. In transactions in which payments are contingent upon project completion and acceptance, the reserve can provide payment to investors in case of construction delay if capitalized interest is depleted.

For most state or municipal leases with abatement risk, Moody's views the absence of a debt service reserve or the presence of one that is only partially funded or funded by a surety from a non-investment grade provider as a distinct weakness. The rating impact would depend on the specific transaction's characteristics and our assessment of the role the obligor would assume in the case of an abatement scenario. Specifically, Moody's will consider the strength of the estimated project cash flows if relevant and the obligor's own liquidity, including the ability to borrow from internal funds or other component units. Moody's is less likely to make a rating distinction for the presence of a weak debt service reserve fund if the obligor has sufficient liquidity to deal with a temporary disruption in rental payments for highly essential projects.

Moral obligation debt aided by replenishable reserves

Certain municipal credits derive their ratings from the credit support provided by a state "moral obligation" pledge to replenish a DSRF. These credits typically derive significant credit enhancement through the reserve replenishment mechanism, and without the reserve many of these ratings would be rated lower by several notches. Typically an effective moral obligation pledge is structured so that if the primary source of debt repayment is not available, the DSRF would be tapped to pay full and timely debt service. Some states covenant to request appropriation of funds to replenish the reserve, while other states will have a standing authority to replenish the reserve. In cases where the reserve requirement was met with a surety policy and the policy gets drawn upon, the state's funds would be used to repay the surety provider. Since most moral obligation bonds rated by Moody's are in the A1 to Aa2 range, Moody's will look for the issuers to replace the surety providers when the providers' ratings have dropped significantly below the level originally expected.

Conclusion

Given the importance of DSRFs to certain sectors, particularly during this period of economic and fiscal stress, Moody's will follow-up with project finance, infrastructure and certain public finance issuers who have not as yet addressed the liquidity concerns arising out of debt service reserve sureties provided by speculative grade financial guarantors. Moody's will evaluate the credit risks arising from the lack of sufficient DSRF liquidity relative to the overall credit profile of each issuer and take rating actions as warranted.

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Privatized Military Housing

In June & July 2009, Moody's issued multi-notch downgrades for 20 military housing credits, with a total principal of approximately \$8.6 billion outstanding, due to the downgrades of the financial guarantors who provided the surety bonds on the debt service reserves of these credits. When reviewing the rating on a military housing bond financing, Moody's looks for a debt service reserve fund to be funded at maximum annual debt service. The reserve fund is an important credit factor in this sector as it provides a financial and time buffer to enable the project to return to financial stability, in the event that net operating income from the project declines as a result of economic downturns, heightened competition from "outside of the gate" housing, military deployments or base realignments. Although the surety bond providers were downgraded, the issuers of these credits did not replace the sureties with either cash or higher rated securities or providers. The downgrades were based on an analysis of the credit which incorporated the rating of the surety bond provider, the performance of the financings and the fundamental credit factors of the base and the housing.

Metropolitan Nashville Airport Authority

Moody's Investors Service assigned a negative outlook in May 2008 to the A2 rating of the Metropolitan Nashville Airport Authority's Airport Revenue Bonds. The rating acknowledges the Authority's credit strengths including its dominant market share in the Nashville metropolitan area, stable enplanement growth, manageable debt load and aggressive debt amortization. However, the negative outlook reflects concerns regarding the Authority's reliance on Financial Guaranty Insurance Company (FGIC) sureties to fulfill the DSRF requirements on the outstanding debt with the exception of Series 2008A&B and the Series 2003 Passenger Facility Charge Bonds. On March 24, 2009 Moody's downgraded the insurance financial strength ratings of FGIC to Caa3 with a negative outlook. MBIA has agreed to reinsure portions of the FGIC liabilities including the surety. The MBIA reinsurance agreement does not currently meet Moody's requirements for credit substitution therefore Moody's does not currently apply MBIA ratings to this surety.

The airport has taken positive steps to provide additional support by providing a line of credit with First Tennessee Bank, N.A. (rated A3/P-2, negative outlook) which can only be used for debt service payment shortfalls. However, in Moody's view, this liquidity facility does not completely remedy the loss of value in the debt service reserve surety because it is not legally pledged to the bondholders and it is smaller than the DSRF requirement. However it demonstrates the airport's interest in addressing the weakened position faced by bondholders as a result of the deterioration of the credit quality of the DSRF surety provider.

Clark County Public Utility District 1, Washington

On May 2, 2009 Moody's assigned ratings of A1 to the Clark County (WA) Public Utility District 1 Electric System Revenue Bonds 2009 and the Generating System Revenue Bonds 2009 with a stable outlook. The rating notes that several of the surety providers – AMBAC and FGIC backing the DSRF have deteriorated significantly in credit quality. However, Moody's also expects that the District will take steps in the near term to ensure that the debt service reserve is fully supported by strong creditworthy instruments. It is Moody's understanding that the District is reviewing its options and that a plan will be put in place shortly to address concerns regarding the DSRF requirement.

Los Angeles County Metropolitan Transit Authority

The Los Angeles County Metropolitan Transit Authority (LACMTA)—a major issuer of sales-tax backed debt for transit projects—has replaced downgraded debt service reserve sureties in both of its key indentures. Moody's currently rates LACMTA's Proposition A sales tax bonds (First Senior Lien) Aa3, while the Proposition C sales tax bonds (Second Senior Lien) are rated A1, both with stable outlooks. Both indentures require a surety rated at least Aa3 by Moody's and AA- by Standard & Poor's at the time of purchase, but do not require replacement in the event of a downgrade. If a surety provider files for bankruptcy however, the surety would need to be replaced.

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The Proposition A reserve requirement is currently about \$156 million, with approximately \$71 million in cash and the remainder funded with a surety policy provided by FSA (Aa3, under review for downgrade). In 2008, a \$111.5 million FGIC (no longer rated by Moody's) surety was calculated as part of the reserve; however following the deterioration of FGIC's credit quality and in conjunction with a bond issue, LACMTA purchased the FSA surety and added \$23.2 million in cash to the reserve. While the FGIC policy remains in the reserve, LACMTA no longer considers it in the calculation of the reserve balance.

The Proposition C reserve requirement is currently approximately \$129.8 million and is entirely satisfied by cash and investments. While this reserve benefits from four surety policies with MBIA (B3, Negative Outlook), they are no longer included in the calculation of the reserve fund balance due to the credit deterioration of MBIA. In connection with refunding bonds issued this year, LACMTA added approximately \$44.25 million in cash to replace the MBIA sureties. Moody's considers the preemptive actions taken by LACMTA to replace the sureties to be positive for bondholders.

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Moody's Related Research

Rating Methodologies:

- [The Role of Bond Covenants in Municipal Finance Analysis, June, 2005 \(93039\)](#)
- [The Determinants of Credit Quality, May 2002 \(75047\)](#)
- [Operating Risk in Privately-Financed Public Infrastructure \(PFI/PPP/P3\) Projects, December 2007, \(106407\)](#)
- [Military Housing Surety MUR, 2008 \(108687\)](#)

Special Comments:

- [PFI/PPP/P3: Credit Roadmap, March 2009,\(115322\)](#)
- [Low DSCR in PFI projects – a warning light, not the end of the road, July 2009, \(119121\)](#)

To access any of these reports, click on the entry above. Note that these references are current as of the date of publication of this report and that more recent reports may be available. All research may not be available to all clients.

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Report Number: 119665

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