MOODY'S
INVESTORS SERVICE

SPECIAL COMMENT

Direct Bank Loans Carry Credit Risks Similar to Variable Rate Demand Bonds for Public Finance Issuers

Established Rating Methodologies Guide Moody's Credit Assessment of Direct Bank Loans, but Timely Issuer Disclosure of Loans Is Essential

Table of Contents:

SUMMARY 1
DIRECT BANK LENDING TO MUNICIPAL ISSUERS ON THE RISE IN 2011; TREND LIKELY TO CONTINUE THROUGH 2012 2
DIRECT BANK LOAN CREDIT RISKS ANALOGOUS TO VRDB CREDIT RISKS 3
RATING METHODOLOGIES INCORPORATE CREDIT RISKS OF DIRECT BANK LOANS 5
SURVEILLANCE PROCEDURES SUPPORT IDENTIFICATION OF DIRECT LOANS; ISSUER DISCLOSURE REMAINS A KEY DETERMINANT OF RATING ACCURACY 6
MOODY'S RELATED RESEARCH 7

Analyst Contacts:

NEW YORK 1.212.553.1653

Thomas Jacobs 1.212.553.0131
Vice President-Senior Credit Officer
thomas.jacobs@moodys.com

CHICAGO 1.312.706.9950

Rachel Cortez 1.312.706.9956
Vice President-Senior Analyst
rachel.cortez@moodys.com

SAN FRANCISCO 1.415.274.1708

Deepa Patel 1.530.758.1708
Analyst
deepa.patel@moodys.com

» contacts continued on the last page

Summary

During the past 18 months, we have observed an increase in direct bank loans to municipal issuers, and we expect this trend to continue for the foreseeable future.

The key credit implications for municipal borrowers, all of which are incorporated into our established rating methodologies, are the following:

» **Increased Availability of Bank Liquidity:** The availability of direct bank loans as an alternative to capital market transactions is a credit positive for the municipal sector. It increases the availability of credit and liquidity to issuers and provides an alternative to Variable Rate Demand Bonds (VRDBs) for municipal borrowers as the market works its way through the high volume of VRDB support facility expirations in 2011 and 2012.

» **Credit Risks Similar to VRDBs:** Unlike VRDBs, direct loans do not expose the municipal issuer to remarketing risk. Direct loans also do not carry the risks associated with bank credit deterioration and market dislocation, which can lead to failed VRDB remarketings. However, other risks of direct loans are similar to those found in VRDBs, including interest rate variability, repayment acceleration risks, and market access and renewal risks. Although these risks are absent in the fixed rate, fully amortizing structures that are the staple of the municipal bond market, direct loans do not introduce any adverse credit risks to the borrower not found in VRDBs.

» **Heightened Importance of Disclosure:** Our tools and processes identify direct loans entered into by borrowers that we rate through ongoing surveillance. Ideally, incorporation of direct loans into our analysis of an issuer's credit quality, like any other change in a rated issuer's debt profile, is facilitated by the issuer's disclosure of these transactions as they occur.

Direct Bank Lending to Municipal Issuers on the Rise in 2011; Trend Likely to Continue Through 2012

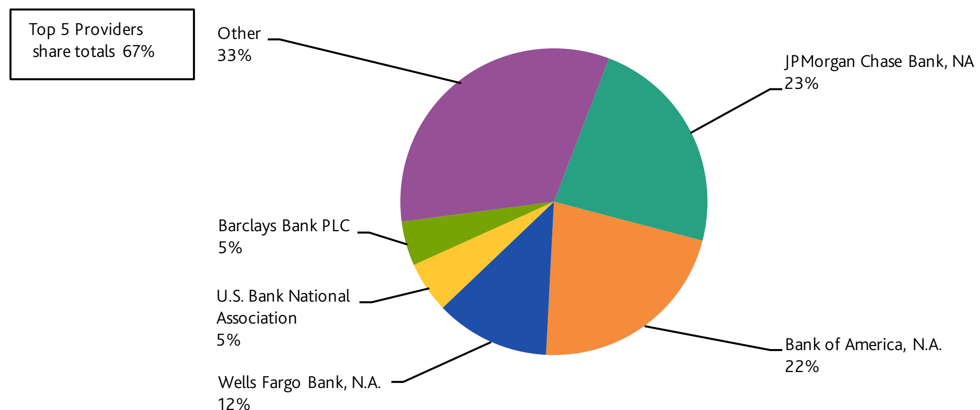
Some banks have found that, under current market conditions, direct lending is more profitable than providing VRDB support facilities to some municipal issuers. The relative profitability of direct lending is driven by low funding costs, advantageous regulatory treatment, and earnings in the form of tax exempt interest rather than taxable support facility fees. Second, direct borrowing is often less expensive for municipal issuers. In a direct borrowing, the issuer is not required to prepare an offering document, which can be time-consuming and expensive, or provide ongoing disclosure to the market.

High Support Facility Expiration Volume from Heavy VRDB Issuance in 2008

The municipal market is currently working its way through an unusually high volume of credit and liquidity support expirations associated with the heavy issuance of VRDBs in 2008. Many of these VRDBs refinanced auction rate securities and insured floaters when the market for those structures collapsed three years ago. To hedge the interest rate risk associated with VRDBs, many municipal issuers entered into floating-to-fixed interest rate swaps for the life of the VRDBs. High termination payments on these fixed payer swaps (which reflect the decline in long-term fixed rates during the past three years), have made the cost of refinancing VRDBs into long term fixed rate debt prohibitively high for many municipal issuers.

In the face of a significant reduction in the number of banks providing VRDB liquidity support, direct bank loans have increasingly become an alternative financing option for municipal issuers. As the demand for new liquidity to support VRDBs has increased, the number of banks providing liquidity facilities has decreased. Numerous banks have chosen to reduce or discontinue their involvement in the letter of credit (LOC) and standby bond purchase agreement (SBPA) market. Others no longer have the credit ratings required to be competitive providers of LOCs and SBPAs. Just five banks (JPMorgan Chase, Bank of America, Wells Fargo, Barclays, and US Bank) accounted for 67% of the VRDB support facility extensions and substitutions during the first half of 2011 (Figure 1).

FIGURE 1
Leading Providers of Credit and Liquidity Support to Issues With Support Facilities that Expired During 1st Half of 2011



Source: Moody's

Scope of Direct Bank Loan Market as an Alternative Financing Option

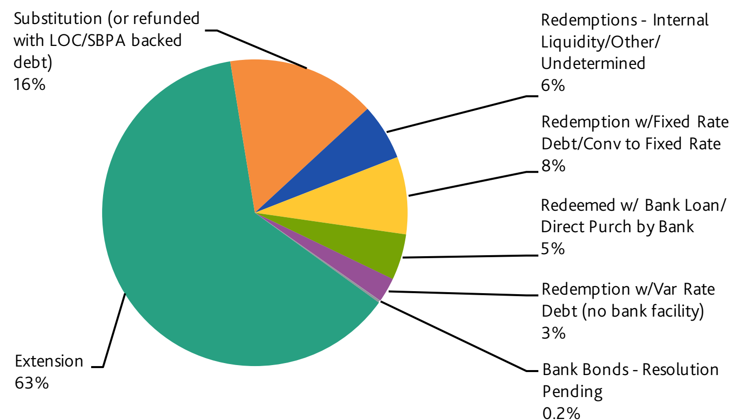
Many of the direct bank loans in the current market are refinancing VRDBs with expiring liquidity support. In other cases, direct loans provide a new money financing alternative to bank-supported VRDBs. We estimate direct loans entered into as an alternative to bank-supported VRDBs over the last 18 months total between $15 billion and $20 billion. We have observed direct loans to issuers in most public finance sectors, including state governments, local governments, higher education institutions, health care organizations, and transportation entities.

Despite the increased use of direct loans by public finance issuers, by far the most common methods for addressing expiring liquidity facilities are renewal and replacement: these options were used by 79% of issuers of Moody's rated VRDBs with liquidity facilities that expired in the first half of 2011 (Figure 2). As additional liquidity facilities expire throughout 2011 and 2012, we will continue to monitor and report on trends in this market.

FIGURE 2

Extensions Were Primary Means of Resolving Bank Facility Expirations in the 1st Half of 2011

By number of transactions, Moody's rated



Source: Moody's

Direct Bank Loan Credit Risks Analogous to VRDB Credit Risks

Our review of recent direct bank loan transactions by municipal issuers reveals consistent similarities between the structures of direct loans and those of rated VRDBs with liquidity facilities (Figure 3). An opinion on the risks to a borrower relating to either a direct loan or a bank-supported VRDB requires a detailed review of specific terms unique to each transaction, which is not in the scope of this report. Based on elements that are common to VRDBs and most of the direct loans we have analyzed, we have found these two debt structures to be subject to the same fundamental credit risks, many of which are absent in the fixed rate, amortizing debt structures that have long been the mainstay of public finance borrowing. Increased reliance on direct loans does not, in and of itself, introduce any new risks to the market or to individual credits that have used them to replace outstanding VRDBs.

FIGURE 3
Direct Bank Loans and VRDBs Share Most of the Same Risks

Risk	VRDBs	Direct Bank Loans
Remarketing Risk	Yes	No
Renewal Risk	Yes	Yes
Interest Rate Risk Associated with Variable Rate Index Fluctuations	Yes	Yes
Interest Rate Risk Associated with Credit Quality of the Bank	Yes	No
Acceleration Risk	Yes	Yes

Remarketing Risk

Unlike VRDBs, direct loans do not carry remarketing risk for the term of the loan. VRDBs are puttable at par by investors at regular intervals, usually daily or weekly. Puts are often supported by credit or liquidity facilities (support facilities) provided by highly rated commercial banks, which are drawn upon in the event that tendered bonds cannot be remarketed to new investors. Under direct loans, the bank does not have the option of putting the loan back to the issuer during the term of the loan. The issuer is not required to repay the loan at any time prior to the maturity date established in the loan agreement.

Renewal Risk

Renewal risk is found in both VRDBs and most direct loans. Should an issuer fail to arrange an extension or substitution of an expiring VRDB support facility, the borrower may be required to repay the VRDB immediately or within an accelerated timeframe at an elevated penalty interest rate. The borrower's credit quality could be impaired if it cannot refinance the debt before the increased interest payments and accelerated amortization of the bank bonds cause significant cash flow and/or liquidity pressures.

The direct loans that we have observed are in place for similar lengths of time (one to five years) as most of the liquidity facilities that support VRDBs. At the end of the loan term, borrowers must make arrangements to redeem the loan with other borrowing proceeds or available liquidity. If the loan is not repaid, the interest rate steps up and principal must be paid under term out provisions comparable to those found in VRDB support facilities. As with bank-supported VRDBs, the issuer's ability to arrange for a replacement is highly dependent on the issuer's access to the capital markets upon the maturity of the direct loan agreement.

Interest Rate Risk

Most of the direct bank loans to public finance borrowers that we have observed during the past 18 months are structured with variable interest rates as alternatives to VRDBs, although we have seen some direct loans with fixed rates. Interest on VRDBs floats at rates set by the remarketing agent on each reset date. Interest on most variable rate direct loans is indexed to either the London Interbank Offered Rate (LIBOR) or the Securities Industry and Financial Markets Association (SIFMA) rate. In either case, should interest rates rise to levels above those for which the issuer has budgeted, the unbudgeted interest expenditures could cause the issuer's cash flow, liquidity, and credit quality to weaken, particularly if interest rates are elevated for an extended period.

In addition to a spike in interest rates driven by general market conditions, a municipal issuer of bank-supported VRDBs bears additional interest rate risk relating to potential credit deterioration of itself, the liquidity support provider, or both. In a direct loan in which the interest rate is tied to a market index, the spread to the index paid by the borrower can increase if the borrower's credit deteriorates; the borrower's cost, however, cannot increase due to deterioration of the bank's credit.

Acceleration Risk

Acceleration risk is present in both direct loans and bank supported VRDBs. The reimbursement provisions of VRDB support facilities specify events of default that can trigger mandatory tenders of outstanding bonds to the support provider and acceleration of the issuer's repayment obligation. Events of default on a direct bank loan may also lead to acceleration of the issuer's obligation to repay the lender. In most of the direct loans we have analyzed, the events of default leading to acceleration are analogous to those found in VRDB support facilities for comparable credits. In both structures, in addition to payment default on the loan or parity debt, acceleration can be triggered by a variety of other defaults including bankruptcy, insolvency, repudiation, rating maintenance, cash flow coverage, liquidity, material adverse change (MAC) clauses, and other financial thresholds. Specific default provisions vary widely by sector and specific transaction.

We carefully evaluate acceleration risk on a case-by-case basis in our credit analysis of issuers whose debt profiles include VRDBs, direct loans and other obligations that can be subject to acceleration. In our assessment of acceleration risk for both VRDBs and direct loans, we look carefully at the degree of deterioration needed to trigger a non-payment default resulting in acceleration.

The timing of acceleration can vary slightly between direct loans and VRDBs, but we consider the likelihood of acceleration by the bank to be the same. In a direct loan, acceleration is an immediate demand for repayment upon the occurrence of an event of default. In a VRDB support facility, acceleration can be delayed slightly because, before demanding repayment, the bank must trigger a mandatory tender funded with a draw on the facility. In both cases, however, a lender's decision to accelerate a loan or off-balance sheet commitment will be based entirely on credit considerations with a view to protecting the bank's interests as quickly as possible. If a credit problem arises, a VRDB support provider will use every tool available to protect its interests. If acceleration is an available remedy, funding a mandatory tender will not deter a support provider from using it.

Rating Methodologies Incorporate Credit Risks of Direct Bank Loans

The rating methodologies that guide our analysis of public finance credits also cover the risks associated with variable rate debt. The methodologies, which are listed on page 7, provide for the analysis of an issuer's overall debt structure: short and long term, amortizing and non-amortizing, fixed and variable rate, and rated and unrated. We review the terms of all borrowing agreements to which the issuer is a party, including principal amounts outstanding, interest rates, and repayment schedules. We also review any covenants to which the issuer has agreed, including minimum benchmarks of operating performance and liquidity. Finally, we review the penalties an issuer may face for violating a covenant, as well as the provisions for the notice and "cure" periods to correct covenant violations. Our analytic approach provides for a credit rating that incorporates the entirety of an issuer's credit fundamentals, which, in addition to debt, include liquidity, operating performance, management, and other important considerations. The probability that any of an issuer's obligations could be accelerated under circumstances that would pressure the issuer's resources to the detriment of other creditors is reflected in our ratings.

Surveillance Procedures Support Identification of Direct Loans; Issuer Disclosure Remains a Key Determinant of Rating Accuracy

One of the advantages of direct loans for municipal issuers is lower borrowing costs due to the absence of a need to prepare public offering documents for the borrowing. This advantage for the issuer can pose a disadvantage to investors in the issuer's outstanding rated debt, as information on a privately placed loan may not be available until the subsequent financial statement or continuing disclosure filing is made available.

Our ongoing surveillance process includes various strategies to minimize the likelihood that a municipal issuer with an underlying Moody's rating will enter into a privately placed bank loan without our knowledge and subsequent communication of any associated risks to investors. These strategies are described below.

- We closely monitor and are in frequent contact with issuers with expiring VRDB support facilities to understand their borrowing plans, which alerts us to many of the direct loans used to address expiring facilities.
- Analysts regularly communicate with management teams of high-profile and frequent issuers with large amounts of debt outstanding and encourage them to notify of us of any planned financings.
- At the time of new sales that we rate, we review each issuer's outstanding debt in detail.
- We regularly search publically available information for all of our rated issuers, including financial statements and disclosure documents that reference direct loan arrangements.

Our surveillance tools and processes identify direct loans entered into by borrowers that we rate. Early disclosure of loan arrangements by issuers will ensure their incorporation in our ratings before they are identified through ongoing surveillance.

Moody's Related Research

Special Comments, Sector Comments and Special Reports:

- US Muni Sector Skillfully Navigating Deluge of Bank Facility Expirations, August 2011 (134705)
- US Municipal Variable Rate Market: Review of 2010 Market Trends and Expected Developments in 2011, March 2011 (131315)
- Bank Lending to Municipalities Is Credit Positive for Both, February 2011 (131346)
- Municipal Market Investor Confidence: Linkages to Credit Quality, January 2011 (129670)
- Evaluating Market Access for Short-Term Municipal Market Products, December 2009 (120997)
- Potential Risks of Variable Rate Debt and Interest Rate Swaps for U.S. State and Local Governments are Heightened by Economic and Financial Crisis, October 2009 (120182)
- Risks of Variable Rate Debt No Longer Hidden, December 2008 (113702)

Rating Methodologies:

- US Not for Profit Private and Public Higher Education, August 2011(134044)
- Not for Profit Hospitals and Health Systems, January 2008 (105813)
- Moody's State Rating Methodology, November 2004 (89335)
- General Obligation Bonds Issued by US Local Governments, October 2009 (119982)

Request for Comment:

- Moody's Proposes Updated Rating Methodology for Variable Rate Demand bonds and Commercial Paper Supported by Self Liquidity, July 2011 (134401)

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.

» contacts continued from page 1

Analyst Contacts:

NEW YORK 1.212.553.1653

Naomi Richman 1.212.553.0014
Managing Director-Public Finance
naomi.richman@moodys.com

Timothy F. Blake 1.212.553.4524
Managing Director-Public Finance
timothy.blake@moodys.com

Report Number: 135849

Authors
Thomas Jacobs
Rachel Cortez
Deepa Patel

Senior Production Associates
Ginger Kipps
Cassina Brooks

© 2011 Moody's Investors Service, Inc. and/or its licensors and affiliates (collectively, "MOODY'S"). All rights reserved.

CREDIT RATINGS ARE MOODY'S INVESTORS SERVICE, INC.'S ("MIS") CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT OR DEBT-LIKE SECURITIES. MIS DEFINES CREDIT RISK AS THE RISK THAT AN ENTITY MAY NOT MEET ITS CONTRACTUAL, FINANCIAL OBLIGATIONS AS THEY COME DUE AND ANY ESTIMATED FINANCIAL LOSS IN THE EVENT OF DEFAULT. CREDIT RATINGS DO NOT ADDRESS ANY OTHER RISK, INCLUDING BUT NOT LIMITED TO: LIQUIDITY RISK, MARKET VALUE RISK, OR PRICE VOLATILITY. CREDIT RATINGS ARE NOT STATEMENTS OF CURRENT OR HISTORICAL FACT. CREDIT RATINGS DO NOT CONSTITUTE INVESTMENT OR FINANCIAL ADVICE, AND CREDIT RATINGS ARE NOT RECOMMENDATIONS TO PURCHASE, SELL, OR HOLD PARTICULAR SECURITIES. CREDIT RATINGS DO NOT COMMENT ON THE SUITABILITY OF AN INVESTMENT FOR ANY PARTICULAR INVESTOR. MIS ISSUES ITS CREDIT RATINGS WITH THE EXPECTATION AND UNDERSTANDING THAT EACH INVESTOR WILL MAKE ITS OWN STUDY AND EVALUATION OF EACH SECURITY THAT IS UNDER CONSIDERATION FOR PURCHASE, HOLDING, OR SALE.

ALL INFORMATION CONTAINED HEREIN IS PROTECTED BY LAW, INCLUDING BUT NOT LIMITED TO, COPYRIGHT LAW, AND NONE OF SUCH INFORMATION MAY BE COPIED OR OTHERWISE REPRODUCED, REPACKAGED, FURTHER TRANSMITTED, TRANSFERRED, DISSEMINATED, REDISTRIBUTED OR RESOLD, OR STORED FOR SUBSEQUENT USE FOR ANY SUCH PURPOSE, IN WHOLE OR IN PART, IN ANY FORM OR MANNER OR BY ANY MEANS WHATSOEVER, BY ANY PERSON WITHOUT MOODY'S PRIOR WRITTEN CONSENT. All information contained herein is obtained by MOODY'S from sources believed by it to be accurate and reliable. Because of the possibility of human or mechanical error as well as other factors, however, all information contained herein is provided "AS IS" without warranty of any kind. MOODY'S adopts all necessary measures so that the information it uses in assigning a credit rating is of sufficient quality and from sources MOODY'S considers to be reliable including, when appropriate, independent third-party sources. However, MOODY'S is not an auditor and cannot in every instance independently verify or validate information received in the rating process. Under no circumstances shall MOODY'S have any liability to any person or entity for (a) any loss or damage in whole or in part caused by, resulting from, or relating to, any error (negligent or otherwise) or other circumstance or contingency within or outside the control of MOODY'S or any of its directors, officers, employees or agents in connection with the procurement, collection, compilation, analysis, interpretation, communication, publication or delivery of any such information, or (b) any direct, indirect, special, consequential, compensatory or incidental damages whatsoever (including without limitation, lost profits), even if MOODY'S is advised in advance of the possibility of such damages, resulting from the use of or inability to use, any such information. The ratings, financial reporting analysis, projections, and other observations, if any, constituting part of the information contained herein are, and must be construed solely as, statements of opinion and not statements of fact or recommendations to purchase, sell or hold any securities. Each user of the information contained herein must make its own study and evaluation of each security it may consider purchasing, holding or selling. NO WARRANTY, EXPRESS OR IMPLIED, AS TO THE ACCURACY, TIMELINESS, COMPLETENESS, MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OF ANY SUCH RATING OR OTHER OPINION OR INFORMATION IS GIVEN OR MADE BY MOODY'S IN ANY FORM OR MANNER WHATSOEVER.

MIS, a wholly-owned credit rating agency subsidiary of Moody's Corporation ("MCO"), hereby discloses that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by MIS have, prior to assignment of any rating, agreed to pay to MIS for appraisal and rating services rendered by it fees ranging from $1,500 to approximately $2,500,000. MCO and MIS also maintain policies and procedures to address the independence of MIS's ratings and rating processes. Information regarding certain affiliations that may exist between directors of MCO and rated entities, and between entities who hold ratings from MIS and have also publicly reported to the SEC an ownership interest in MCO of more than 5%, is posted annually at www.moodys.com under the heading "Shareholder Relations — Corporate Governance — Director and Shareholder Affiliation Policy."

Any publication into Australia of this document is by MOODY'S affiliate, Moody's Investors Service Pty Limited ABN 61 003 399 657, which holds Australian Financial Services License no. 336969. This document is intended to be provided only to "wholesale clients" within the meaning of section 761G of the Corporations Act 2001. By continuing to access this document from within Australia, you represent to MOODY'S that you are, or are accessing the document as a representative of, a "wholesale client" and that neither you nor the entity you represent will directly or indirectly disseminate this document or its contents to "retail clients" within the meaning of section 761G of the Corporations Act 2001.

Notwithstanding the foregoing, credit ratings assigned on and after October 1, 2010 by Moody's Japan K.K. ("MJKK") are MJKK's current opinions of the relative future credit risk of entities, credit commitments, or debt or debt-like securities. In such a case, "MIS" in the foregoing statements shall be deemed to be replaced with "MJKK".

MJKK is a wholly-owned credit rating agency subsidiary of Moody's Group Japan G.K., which is wholly owned by Moody's Overseas Holdings Inc., a wholly-owned subsidiary of MCO.

This credit rating is an opinion as to the creditworthiness or a debt obligation of the issuer, not on the equity securities of the issuer or any form of security that is available to retail investors. It would be dangerous for retail investors to make any investment decision based on this credit rating. If in doubt you should contact your financial or other professional adviser.

MOODY'S
INVESTORS SERVICE