

SPECIAL COMMENT

German Bank Restructuring Act Reduces Systemic Support for Subordinated Debtholders

Table of Contents:

SUMMARY OPINION	1
THE NEW LEGAL ENVIRONMENT AND ITS MAIN IMPLICATIONS	2
MOODY'S VIEW ON THE RISK TRAJECTORY FOR VARIOUS CLASSES OF DEBT	3
EXCURSUS: INCLUDING REGIONAL AND LOCAL GOVERNMENT SUPPORT IN SUBORDINATED DEBT RATINGS ON A SELECTIVE BASIS	5
LOOKING AT THE BROADER PICTURE: THE EUROPEAN PERSPECTIVE	6
APPENDIX	7
Support provided to German Financial Institutions during the financial crisis (as of February 2011)	7
Support assumptions for the German banking universe	8
Moody's approach to incorporating systemic support in bank ratings	8
MOODY'S RELATED RESEARCH	10

Analyst Contacts:

FRANKFURT	49.69.70730.700
Mathias Kuelpmann, CFA	49.69.70730.928
Senior Vice President	
Mathias.Kuelpmann@moodys.com	
Katharina Barten	49.69.70730.765
Vice President – Senior Credit Officer	
Katharina.Barten@moodys.com	
Carola Schuler	49.69.70730.766
Managing Director – Banking	
Carola.Schuler@moodys.com	

» contacts continued on the last page

Summary Opinion

The German Bank Restructuring Act came into effect on 1 January 2011, with the proposed aim of establishing a framework for resolving banks in distress. The act allows the German regulator to trigger losses outside of liquidation on senior debt, and on subordinated bank debt that is typically classified as Lower Tier 2 or Tier 3 capital for regulatory purposes. Even though theoretically possible, Moody's believes that, for the time being, the regulator is unlikely to impose losses on senior debt due to the need to preserve access to funding and stability in the current fragile economic environment.

In the immediate term, however, the law does materially reduce the likelihood of government support for Lower Tier 2 and Tier 3 securities, in the following referred to as subordinated debt, in the context of bank bailouts. Therefore, Moody's has excluded its assumption of government support for this category of debt, which has resulted in average rating downgrades of two and a half notches with a maximum of seven notches. Going forward, while this class of debt may in our view continue to benefit from the support of a parent or cooperative association, there will be no assumption of government support except in special situations, where some degree of regional government support may be forthcoming to a distressed institution. This situation could arise if 1) a regional government has a material stake in a bank, potentially having granted substantial amounts of support already, or 2) if unwinding a bank is not an option because of its cooperative framework and ownership not being transferable outside of the public sector, as in the case of savings banks.

On 17 February 2011, we downgraded the ratings of 248 subordinated debt securities, together with the subordinated tranches of the relevant debt programs issued or guaranteed by 24 banks in Germany,¹ which completed our review for downgrade for Lower Tier 2 instruments initiated on 16 December 2010.²

This report details the reasoning behind these rating actions. The rating action is part of a broader re-assessment of government support Moody's currently conducts globally. We have highlighted the underlying principles in our report "[Supported Bank Debt Ratings at Risk of Downgrade Due to New Approaches to Bank Resolution](#)" (14 February 2011).

¹ See "[Moody's downgrades German banks' subordinated debt](#)" 17 February 2011

² See "[Moody's places German banks' subordinated debt on review for downgrade](#)" 16 December 2010

Prior to the implementation of the Bank Restructuring Act, we rated senior subordinated debt one notch below a bank's long-term senior unsecured debt and deposit rating, thereby incorporating uplift from all possible external sources of support, including from a parent, cooperative association,³ and all levels of government. To reflect the changed regulatory framework, we have now moved the rating anchor down the rating ladder to the Adjusted Baseline Credit Assessment (Adjusted BCA), which captures a bank's standalone credit strength and incorporates any support that may be forthcoming from a parent or cooperative association, but excludes an assumption of systemic support. Going forward, we will rate the subordinated debt of German banks one notch below the Adjusted BCA, and as noted may include an assumption of support from a regional government in special situations only.

The new legal environment and its main implications

Throughout the credit crisis, the German government has provided financial support in various forms and to an unprecedented degree,⁴ with all instruments along a bank's capital structure benefiting from these measures, except for hybrid debt. This intervention was aimed at preventing widespread, severe disruption of the financial markets because of the failure of some credit institutions. When the government implemented support measures, it was legally not in a position to differentiate between different classes of debt and impose losses selectively, or, indeed, to prevent shareholders from benefiting from this support. With the introduction of the Bank Restructuring Act, this is no longer the situation. The law gives the regulator the necessary tools to provide support on a more selective basis, that is, to support some classes of debt while imposing losses on others.

From a credit perspective, two major components of the Bank Restructuring Act affect our support assumptions: 1) the so-called reorganisation plan (hereafter referred to as "reorganisation proceedings"), and 2) the transfer order⁵ that results in the break-up of a bank. Conceptually, the latter can be described as the *ultima ratio* if all other measures have failed, including reorganisation proceedings.

- » **Reorganisation proceedings** allow for a voluntary restructuring of a struggling institution at the discretion of shareholders and debtholders. The German financial regulatory body, *Bundesanstalt für Finanzdienstleistungsaufsicht* (BaFin), will ensure the orderly implementation of reorganisation proceedings once they are agreed on by shareholders and creditors. However, BaFin is not permitted to take any actions that might affect the rights of shareholders and debtholders.
- » A **transfer order**, on the other hand, gives the regulator discretionary power to arrange for the transfer of systemically relevant assets and liabilities to a "good bank", while leaving all other assets and liabilities within the remaining entity. We anticipate that all debt in a remaining entity would very likely suffer losses upon its insolvency and subsequent liquidation.

³ Cooperative support is given within the German cooperative sector (Volks- und Raiffeisenbanken) and to public-sector banks that are members of the association of public-sector banks (Sparkassen-Finanzgruppe).

⁴ For details, please refer to the Appendix.

⁵ The transfer order is codified as an amendment of the German Banking Act (KWG) as part of the Bank Restructuring Act.

EXHIBIT 1

Major tools according to the Bank Restructuring Act

	Reorganisation Proceedings	Transfer Order
Initiator	Management	Regulator
Instruments	(a) Debt / Equity Swap (b) Haircuts (c) Bridge Bank	Transfer Order
Decision	Debtholders vote, court approves	Regulator decides
Timeframe	3-4 months	Short term
Financing	Bank Levy	

Source: Moody's Investors Service

Both the reorganisation proceedings and the transfer order allow for differentiation among debt instruments along the capital structure and change their loss-absorption capacity in the event of distress.

Moody's view on the risk trajectory for various classes of debt

In this section, we describe in detail the implications of the Bank Restructuring Act for the various asset classes we rate. There are two important observations to bear in mind: 1) The law provides a neutral framework that does not single out any class or classes of debt. 2) Unlike the grandfathering currently being discussed in the wider context of European resolution regimes,⁶ the act applies to all existing and future liabilities of German banks.

Subordinated Debt Ratings

The introduction of the act and the changed stance of the German regulator have led us to alter our assumptions of systemic support for subordinated debt, so that we now adopt the same support assumptions for subordinated debt as we did for hybrid securities in November 2009. Accordingly, we now anchor a bank's subordinated debt ratings to its Adjusted BCA, which takes into account the probability of support from a parent or cooperative association, but excludes systemic support except in special circumstances, where support for a distressed bank likely would be forthcoming from a regional and/or local government.

We take the view that, if **reorganisation proceedings** are instigated, stakeholders and debtholders are likely to agree to a reorganisation plan that involves haircuts for subordinated debtholders. We base this view on the ranking order of claims, whereby subordinated debt instruments absorb losses before senior debt. Moreover, we consider it likely that, in a scenario where the act is enforced, a bank – unless supported and restructured – would face losses exceeding its equity and hybrid capital, in which case some investors would almost certainly be required to forego claims in order for the institution to be stabilised. Holders of subordinated debt instruments are therefore highly likely to take losses. It is important to note that the extent to which creditors' claims are affected is at shareholders and

⁶ [“European Commission's 'Bail-In' Proposals Indicate Lower Support in Future for Senior Bank Debt”](#) 10 January 2011

debtholders' discretion. Shareholders and debtholders can impose losses on subordinated debt as long as this asset class does not suffer more than it would without reorganisation proceedings. This is likely to result in a very low barrier, as the alternative in most cases will be insolvency.

If BaFin applies a **transfer order**, the economic consequences for subordinated debtholders will be similar, although achieved in a different manner. Stakeholders and debtholders will lose control of the restructuring process, and instead the regulator will decide which assets and liabilities will be transferred to a supported "good" bank. We anticipate that subordinated debt instruments will be apportioned to a "bad" bank without a material adverse effect on the stability of financial markets. In line with existing German insolvency laws, a bad bank may then be liquidated, and subordinated debt holders will suffer losses.

Senior Unsecured Ratings

The new act allows for loss-participation by all debtholders and does not single out any specific class of debt. Therefore, in principle, senior debt could be included in the economic failure of a bank and suffer losses outside of insolvency. Similar to subordinated debt, this could be achieved either directly, by shareholder and debtholder agreement as part of **reorganisation proceedings**, or indirectly, by **transfer order** and subsequent potential insolvency. However, we anticipate that under reorganisation proceedings, senior unsecured bondholders would be unlikely to agree to a voluntary haircut, given their senior ranking. Moreover, it would be difficult to overrule this asset class given its relative size and importance.

More importantly, supporting senior debt could be an essential part of an action taken to avoid major disruptions to the financial system from a bank failure. Market conditions are still too fragile to allow for any losses on senior debt without causing potential disruptions. In addition, systemic support for a bank's senior debt is likely to be more acceptable from the perspective of politicians and the general public in the future because of 1) the partial allocation of bailout costs to capital holders and all classes of debt below senior debt; and 2) the introduction of the bank levy.⁷ Through the latter, the government has the option to allocate the costs of a bank's rescue back to the banking system. The government may pre-finance the costs of a bailout if the bank levy fund is insufficient at the time of support, but can – and certainly will – reallocate the costs back to the banking system after the rescue.

On the other hand, we also note that in the future support may be provided on a more selective basis. This is because 1) some banks may have to forego some of their current systemic relevance, making regulatory intervention to prevent insolvency less likely; and 2) the still-fragile markets will eventually recover, such that imposing losses on senior debt will no longer potentially destabilise the entire financial system.

Although we believe that senior debt is likely to be supported in the future, it must be noted that our ratings currently reflect extraordinary levels of support, that is, more "notches" of systemic support than before the crisis started. This applies particularly to banks that have received government support during the crisis. We expect this "extraordinary" support to diminish as and when the crisis subsides, and we will need to reduce the emphasis we currently place on systemic support in our ratings of senior unsecured debt instruments over time to reflect this. Accordingly, we plan to extract "extraordinary" support from our ratings on an issuer-by-issuer basis over the next 12 months. Because our ratings on German banks currently incorporate a substantial level of uplift for systemic support (three notches on an asset-weighted basis), rating stability will in many cases hinge on a bank's ability

⁷ ["German Bank Levy Is Credit Negative, but Manageable"](#) 10 January 2011

to restore its pre-crisis standalone financial strength – or in some cases exceed its pre-crisis standalone metrics – in order to offset the reduction of our support assumptions.

Deposits and Covered Bonds

Deposits are excluded from the reorganisation proceedings to the extent that they benefit from a deposit insurance scheme. Given their importance to a bank's funding base and their sensitivity to withdrawal by depositors, we do not expect deposits to be subject to any losses as a result of the act's introduction.

The same applies to the German Pfandbrief. Under the act, the cover pool and covered bonds will need to stay together and we expect them to end up in the "good bank", as the Pfandbrief is one of the backbones of the wholesale-funded part of the German banking system. An amendment to the Covered Bond Law allows for a constrained banking licence for the cover pool, which provides for immediate access to liquidity from the central bank based on repo contracts.

Excursus: Including regional government support in subordinated debt ratings on a selective basis

Regional government support is of particular importance to the German banking sector. Public-sector banks in Germany, particularly the nine Landesbanken and the local savings banks, are deeply entrenched in their respective areas and in many cases benefit from public ownership by regional governments. In addition, these credit institutions have important roles in their respective regions. We therefore include regional government support in their long-term senior unsecured debt and deposit rating ratings.

In line with "[Moody's Guidelines for Rating Hybrid Securities and Subordinated Debt](#)" (November 2009), we decided to withdraw regional government support from our ratings of these banks' subordinated debt, with the notable exceptions of Bayerische Landesbank and Sparkasse KoelnBonn, the latter being the only savings bank affected.

Regarding the Landesbanken, we continue to acknowledge both the position of regional governments as owners of the Landesbanken, as well as their interest in these banks as major credit providers in their respective regions. However, we have removed regional government support uplift from their subordinated debt ratings, as under the new act we can no longer take support for this asset class for granted. We also believe that, in cases of repeated distress in the sector, the central government may use the tools available to it under the act to pressure this group of banks to downsize and consolidate, making the situation less predictable for subordinated debtholders.

We make an exception in the case of Bayerische Landesbank, in whose ratings we include some degree of regional government support, given 1) the high amount of capital provided to it during the financial crisis, including a €10 billion equity injection; and 2) its 94% ownership by the regional government of Bavaria (rated Aaa).

The second exception is Sparkasse KoelnBonn, in whose subordinated debt rating we continue to include local government support, as we consider that a break-up or unwinding as a result of a transfer order is not an option in this case. Sparkasse KoelnBonn is 100% owned by the cities of Cologne and Bonn, with ownership not transferable outside of the public sector. Given the strong cohesion of the savings bank sector, and because the municipalities are members of regional savings bank associations, we believe a solution would be found within the savings bank sector if this bank were to come under stress.

Looking at the broader picture: The European perspective

Putting the new German legislation into perspective, the Bank Restructuring Act is part of a broader shift in the European regulatory landscape. During the financial crisis, many governments realised that the liquidation of a systemically important bank could cause severe instability in both the financial system and real economy. At the same time, they realised that in most cases there were no tools available to differentiate between different classes of debt, and that they therefore had to rescue banks in their entirety.

There is now consensus among the majority of European Union member states and market participants that the legal and regulatory framework for the restructuring of credit institutions is best addressed – and unified – at a European level, in order to avoid regulatory arbitrage and any kind of forum shopping. Moreover, many systemically important banks operate across borders.

As such, the European Commission published a consultation paper in early January suggesting an EU-wide framework for crisis management in the financial sector.⁸ This paper outlines suggestions to market participants, which include the establishment of a bank resolution regime. According to the explanatory addendum to the Bank Restructuring Act, the German regulatory framework already accords with the main principles of the suggested framework. We consider it likely that the main features of the newly established German bank resolution regime will be introduced in all member states, and as the new regulatory framework emerges, we will act accordingly.

⁸ [“European Commission’s ‘Bail-In’ Proposals Indicate Lower Support in Future for Senior Bank Debt”](#) 10 January 2011

Appendix

Support provided to German Financial Institutions during the financial crisis (as of February 2011)

EXHIBIT 2

Support & Stabilisation Measures (€ in billions)

Company	Federal Government (SoFFin)		Regional/Local Governments		Co-Operative Associations
	Liquidity Guarantees	(Hybrid) Capital Injections	Guarantees (Asset Protection)	(Hybrid) Capital Injections	Guarantees / Hybrid Capital
Aareal Bank AG*	4.0	0,38**			
BayernLB	4.73		4.8	10.0	
Commerzbank AG	5.0	18.2			
Corealcredit Bank AG*	0.5				
Deutsche Apotheker- und Ärztebank eG					0.2
Deutsche Pfandbriefbank AG, HRE Holding AG*	15.0	7.7			
Düsseldorfer Hypothekenbank AG*	2.4				
DZ Bank AG					1.1
HSH Nordbank AG	17.0		10.0	3.0	
IKB Deutsche Industriebank AG	9.7				
Landesbank Baden-Wuerttemberg (LBBW)			12.7	5.0	
Sicherungseinrichtungsgesellschaft deutscher Banken mbH*	5.4				
Sparkasse Köln/Bonn				0.35	0.3
WestLB / EAA Erste Abwicklungsanstalt		3.0	8.5		5.5
Total***	63.7	29.3	36.0	18.4	7.1

Funds from the German government were provided via a special fund for the Stabilisation of Financial Markets (SoFFin) which is administered by the Financial Markets Stabilisation Agency (FMSA). Apart from the support already provided, SoFFin is no longer available to provide new support. Going forward support will be provided by FMSA drawing on the newly established Restructuring Fund which can provide up to €100 billion guarantees and draw up to €20 billion in cash and will be funded by the Bank Levy.

* not rated by Moody's;

** Aareal returned hybrid capital in July 2010;

*** minor supported banks have not been included, e.g. NOSPA (unrated);

Source: Financial Markets Stabilisation Agency, Company data, Moody's research

Support assumptions for the German banking universe

EXHIBIT 3

Name	BFSR	BCA	Adjusted BCA	Current LT Bank Deposit Rating	Current Subordinated Debt Rating
Bausparkasse Mainz AG	C-	Baa1	Baa1	A3	
Bayerische Landesbank	D-	Ba3	Ba1	A1	Baa3
Bremer Landesbank Kreditanstalt Oldenburg GZ	C	A3	A2	Aa2	A3
Commerzbank AG	C-	Baa1**	Baa1**	Aa3 *	Baa2 *
DekaBank Deutsche Girozentrale	C	A3	A2	Aa2	A3
Depfa Bank PLC	E+	B2	B2	Baa3	B3
Deutsche Apotheker- und Aertztebank eG	D	Ba2	Baa1	A2	Baa2
Deutsche Bank AG	C+	A2	A2	Aa3	A3
Deutsche Hypothekenbank AG	D+	Ba1	A3	A1	Baa1
Deutsche Postbank AG	D+	Baa3	Baa1	A1	Baa2
Deutsche Schiffsbank AG	D	Ba2	Baa1	A2	
Dt Pfandbriefbank	E+	B1	B1	A3	B2
DVB Bank S.E.	D+	Baa3	A2	A1	A3
DZ BANK AG Deutsche Zentral-Genossenschaftsb.	C-	Baa1	A2	Aa3	A3
Eurohypo AG	D-	Ba3	Baa3 **	A1 *	Ba1 *
HSN Nordbank AG	E+	B1	Ba2	A3	Ba3
IKB Deutsche Industriebank AG	E	Caa1	Caa1	Baa3	Caa2
KfW IPEX-Bank GmbH	C-	Baa1	Aa3	Aa3	
Kreissparkasse Koeln	C	A3	A2	Aa2	
Landesbank Baden-Wuerttemberg	C-	Baa2	A3	Aa2	Baa1
Landesbank Berlin AG	D+	Baa3	Baa1	A1	Baa2
Landesbank Hessen-Thuringen GZ	C-	Baa2	A3	Aa2	Baa1
Landesbank Saar	D	Ba2	Baa3	A1	
Muenchener Hypothekenbank eG	C-	Baa2	A2	A1	A3
Norddeutsche Landesbank GZ	C-	Baa1	A2	Aa2	A3
NRW.Bank	C-	Baa2	Baa2	Aa1	
OSV - Ostdeutscher Sparkassenverband	C+	A2	A2	Aa3	
Sparkasse KoelnBonn	D-	Ba3	Baa3	A1	Baa2
Sparkassen-Finanzgruppe	C+	A2	A2	Aa2	
Sparkassenverband Baden-Wuerttemberg	C+	A2	A2	Aa3	
UBS DEUTSCHLAND AG	D+	Baa3	A2	A2	
UniCredit Bank AG	C-	Baa2	Baa1	A1	Baa2
Volkswagen Bank GmbH	C-	Baa1	A3	A2	Baa1
Volvo Auto Bank Deutschland GmbH	C- *	Baa2**	Baa2**	Baa2 *	
Westfaelisch-Lipp. Spk.- und Giroverb.	C+	A2	A2	Aa3	
WestLB AG	E+	B2	Ba3	A3	
WGZ BANK AG Westdeutsche Genos.-Zentralb.	C	A3	A2	Aa3	

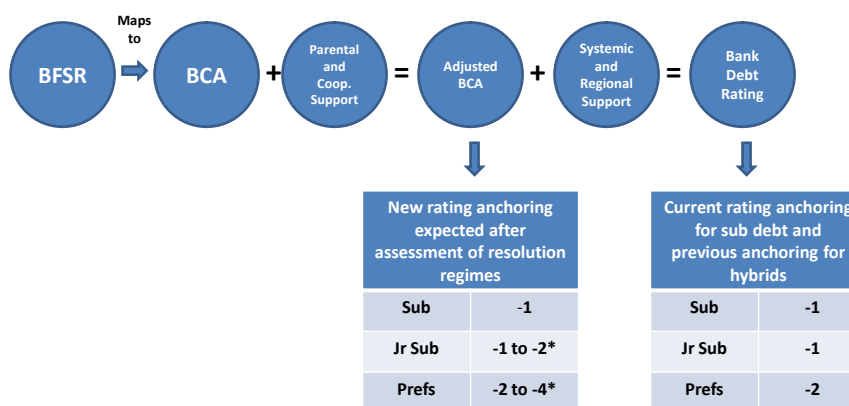
* Rating under review for possible downgrade, ** BCA and / or adj. BCA to be assessed as part of the review

Moody's approach to incorporating systemic support in bank ratings

Joint default analysis (JDA) is Moody's main methodology for assessing external support and incorporating it in banks' ratings.⁹ According to the JDA methodology, a bank's deposit and debt ratings are based on: (i) its standalone bank financial strength rating (BFSR), which translates into a baseline credit assessment (BCA);¹⁰ and (ii) our assessment of external support, including systemic support, when applicable. Figure 1 below summarises the broad analytic concepts underpinning the bank rating process by highlighting the relationship between the BFSR, the BCA, and the supported local- and foreign-currency deposit ratings.

EXHIBIT 4

Expected anchoring of subordinated debt securities after assessment of resolution regimes



* Hybrids are already notches off from the Adjusted BCA. For dated junior subordinated securities with principal write-down features, the rating may be positioned 4 notches below the Adjusted BCA.

Moody's uses the local-currency deposit rating as the reference point when "notching" ratings on non-deposit obligations, based on differences in expected loss. The various classes of liabilities issued by banks are notched down from the local-currency deposit rating to reflect their higher risk of non-payment and lower priority of claim. In general, systemic support implied in the deposit and senior unsecured debt ratings of banks are the same.

Moody's currently factors in distinct levels of external support for different debt classes, based on our past experiences. We have identified four sources of potential external support for banks. These are: (i) support from the parent; (ii) support from a cooperative or mutual group; (iii) support from a regional or local government; and (iv) systemic support (i.e. support from the national government level).

Bank Deposit Ratings incorporate both the BFSR and Moody's opinion regarding available external support. For **hybrid debt instruments**, Moody's uses a different approach and uses the adjusted BCA as the anchor rating, because there is significant evidence that the rating of hybrid capital does not benefit from systemic and regional support at a time of financial distress. The adjusted BCA includes parental and cooperative support, but excludes systemic and regional support. On the other hand, we rate **senior unsecured debt** at the same level as the local-currency deposit rating. As subordinated debt and senior unsecured debt rise and fall *pari passu* in a going concern scenario, we used to rate subordinated debt for German banks one notch below the senior unsecured debt rating until recently.

⁹ See "Incorporation of Joint Default Analysis into Moody's Bank Ratings: A Refined Methodology", published in March 2007.

¹⁰ The BFSR is expressed on a separate scale from A to E, while the BCA translates the BFSR into Moody's traditional long-term rating scale.

As such, both ratings used to incorporate systemic support. As explained in this Special Comment, Moody's has now changed in its approach moving away from anchoring subordinated debt to the local-currency deposit rating, instead using the adjusted BCA measure, similar to hybrid debt instruments.

Moody's Related Research

Rating Methodology:

- » [Incorporation of Joint-Default Analysis into Moody's Bank Ratings: A Refined Methodology, March 2007 \(102639\)](#)
- » [Moody's Guidelines for Rating Bank Hybrid Securities and Subordinated Debt, November 2009 \(120307\)](#)
- » [Global Bank Rating Methodology webpage](#)

Special Comments and Special Reports:

- » [Supported Bank Debt Ratings at Risk of Downgrade Due to New Approaches to Bank Resolution, February 2011 \(131068\)](#)
- » [Calibrating Bank Ratings in the Context of the Global Financial Crisis, February 2009 \(114705\)](#)
- » [European Commission's 'Bail-In' Proposals Indicate Lower Support in Future for Senior Bank Debt, January 2011 \(129951\)](#)
- » [German Bank Levy Is Credit Negative, but Manageable, January 2011 \(129953\)](#)

For other bank support-related publications, see our dedicated webpage:

- » www.moodys.com/banksystemicsupport

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:

Swen Metzler, CFA 49.69.70730.762
 Assistant Vice President – Analyst
 Swen.Metzler@moodys.com

Claude Raab, CFA 49.69.70730.906
 Assistant Vice President – Analyst
 Claude.Raab@moodys.com

Thomas Boemoser, CFA 49.69.70730.779
 Analyst
 Thomas.Boemoser@moodys.com

Report Number: 131128

Author
 Mathias Kuelpmann

Production Associate
 Kerstin Thoma

© 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.