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SPECIAL COMMENT

Implications of a U.S. Rating Action for other Aaa Issuers

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In the event of a rating action on the U.S. sovereign – the assignment of a negative outlook, placement on review for possible downgrade, or an outright downgrade from Aaa into the Aa rating range – what other ratings might be affected and how?

» Ratings that are directly linked to the U.S. government's rating would move in lock-step with the sovereign rating action. These ratings would include those on: (i) Aaa-rated bonds issued by banks and others that are guaranteed by the U.S. government; (ii) other Aaa-rated issuers like Fannie Mae and Freddie Mac, whose own Aaa ratings are based on support from the U.S. government; and (iii) municipal supported transactions, pre-refunded municipal bonds and structured securities in which the collateral consists primarily of securities issued by (i) or (ii).

» The credit risk of other Aaa-rated U.S. companies, financial institutions, and municipal issuers and Aaa(sf)-rated structured finance vehicles might also rise if the U.S. government's rating were downgraded due to the implied increased in macroeconomic, banking system and foreign exchange risk. However, for most Aaa-rated U.S. issuers, these linkages to the US government's rating are sufficiently weak that we would expect their ratings to be resilient to a one- or a two-notch sovereign downgrade. Aaa-rated states and local governments, however, are more likely to be vulnerable to credit pressure under these circumstances than Aaa-rated corporates or Aaa (sf)-rated structured securities.

These practices are consistent with what we have done globally in situations in which highly rated sovereigns have been downgraded. This Special Comment summarizes the outlook for the U.S. government's bond rating, details the potential rating implications for other Aaa-rated and Aaa (sf)-rated U.S. credits, and explains the theoretical and empirical basis for these potential rating actions.

Potential Sovereign Rating Action in Mid-July

In our press release on the U.S. government's rating in early June, we indicated that if there has not been demonstrable progress on increasing the statutory debt limit by mid-July, the U.S. government's Aaa rating is likely to be placed under review for possible downgrade, due to the very small but rising risk of a short-lived default.

If a debt-ceiling-related default were to occur, Moody's would likely downgrade the rating shortly thereafter to reflect not only the default itself, which would presumably be very short-lived and be cured in full, but also its implications for the US government long-term creditworthiness. The extent of the downgrade would hence depend on those factors that would be influencing our long-term view of the government's fundamental creditworthiness, including (a) the speed at which the default is cured, (b) an assessment of the effect of the default on long-term Treasury borrowing costs, (c) measures put in place to prevent a recurrence, (d) the implications of any fiscal consolidation plan that might be adopted at the same time. A rating in the Aa range would be the most likely outcome. Any loss to bondholders would likely be minimal or non-existent, as Moody's anticipates that a default would be cured quickly.

If the U.S. rating is placed on review for possible downgrade but the debt limit is subsequently raised substantially and default is avoided, the Aaa rating would likely be confirmed following the review. Whether the outlook on the rating would be stable or negative would depend upon whether the outcome of the negotiations included meaningful progress toward substantial and credible long-term deficit reduction. A credible agreement on substantial deficit reduction would support a continued stable outlook; lack of such an agreement would most likely prompt the assignment of a negative outlook to the Aaa rating.

Any potential change in the U.S. government rating or outlook would very likely not affect the Aaa country ceilings[1] of the United States. As is the case in other countries, it is possible for issuers with strong credit profiles to be rated more highly than the government, up to the level of the country ceilings. Therefore, a rating action affecting the U.S. government bond rating does not necessarily affect the ratings of other highly rated issuers domiciled in the U.S. However, there are issuers whose ratings depend on direct or indirect linkages with the government bond rating.

Directly Linked Credits Expected to Move with U.S. Sovereign Rating

Directly linked credits will move in lock step with any sovereign rating action. Directly linked issuers or debt issues are those that benefit from an explicit federal government guaranty, credit enhancement or very high levels of implicit support from the federal government . These credits are generally positioned at or slightly below the sovereign bond rating.[2] Examples of directly linked credits include:

1. Government sponsored enterprises, such as Fannie Mae and Freddie Mac, the Federal Farm Credit Banks, and the Federal Home Loan Banks;

1 Moody's assigns country ceilings for both foreign currency and local currency bonds and notes to every country (or separate monetary area) in which there are rated obligors. The ceiling generally indicates the highest rating that can be assigned to a foreign-currency or local-currency denominated security issued by an entity subject to the monetary sovereignty of that country or area.

2 Certain federal lease revenue bonds are secured by rental payments that are full faith and credit obligations of the U.S. government and are currently rated between Aa1 and A2 to reflect risk of non-appropriation and legal covenants specific to the transaction. Transactions such as these which are in effect "notched down" from the government's rating would likely be downgraded to maintain the same rating gap viz. the federal government's rating.

2. Individual liabilities which are guaranteed by the FDIC;

3. Pre-refunded municipal bonds that are defeased and secured by escrows funded with U.S. Treasuries or other directly linked credits;

4. Federal lease transactions;

5. Certain U.S. guaranteed bonds of the government of Israel and one outstanding bond of the Egyptian government; and

6. Structured finance securities and housing revenue bonds secured by Fannie Mae, Ginnie Mae and Freddie Mac mortgage backed securities and supported by various types of federal credit enhancement.

Some credits that benefit from very high levels of implicit support, but no explicit guaranty, could experience downgrades even greater than that of the US government's rating if a longer-term deficit reduction plan includes provisions that might weaken implicit support levels over time. In such cases, we would reevaluate the strength of the sovereign linkage for those credits, and their ratings could move further than the sovereign if needed to reflect partial de-linkage.

If the sovereign rating is placed on review, directly linked credits would also be placed on review, and if the sovereign is assigned a negative outlook, we would also assign a negative outlook to those linked credits that currently carry an outlook. Certain rated transactions, however, such as municipal refunded bonds and structured transactions, do not carry outlooks, and so their ratings would not likely be impacted by a sovereign outlook change.

Indirect Linkages between Credit Risk of the Sovereign and Other Domestic Issuers

Sovereign rating downgrades often coincide with an increase in long-term credit risk for other domestic issuers, even in the absence of a direct credit linkage. Declining sovereign credit quality is often accompanied by

1. Deteriorating macroeconomic conditions, which also affect the credit profiles of other domestic issuers;

2. Large budget deficits or high inflation, which can prompt fiscal and monetary policy tightening that slows economic growth;

3. An increased likelihood that the sovereign will raise taxes and reduce services, adversely affecting issuers in the sectors directly impacted;

4. A contraction in domestic credit availability and, in the extreme, banking crises;

5. Large currency depreciations, which sharply increase the costs of servicing foreign currency debt.

The importance of these indirect credit linkages is supported by empirical evidence that when sovereigns default, the default rates of their domestic corporates, banks, and local and regional governments also spike upward.[3] Accordingly, the credit linkages between the sovereign and other domestic issuers will likely be greater as the sovereign's rating declines, to a degree that will depend on the magnitude of the issuer's exposure to the macroeconomy, federal taxation, the revision of government services, the domestic banking system and foreign exchange rates.

As a result of these indirect credit linkages, it is unusual for a fundamental issuer to be rated more than one or two rating notches above the sovereign's rating.

Rating Implications for U.S. Financial Institutions

We currently only have a handful of financial institutions in the United States that are rated Aaa, the same level as the government's debt rating. Included in this group are four insurers, the supported rating of one bank – The Bank of New York – and several government-sponsored entities such as Fannie Mae and Freddie Mac, Federal Farm Credit Banks and the Federal Home Loan Banks. Additionally, a number of lower rated financial institutions have issued debt instruments that carry Aaa ratings because they are guaranteed by various arms of the U.S. government, such as debt issued under the Temporary Liquidity Guarantee Program which is guaranteed by the Federal Deposit Insurance Corporation.

In the event the U.S. government's debt rating is downgraded one or two notches, the ratings of those entities that are supported by the U.S. government and those instruments guaranteed by the U.S. government will likely follow[4]. The ratings of other financial institutions that have achieved Aaa ratings on a stand-alone basis will not necessarily be affected. Included in this group are Teachers Insurance and Annuity Association of America (TIAA), United Services Automobile Association, New York Life Insurance Company and Northwestern Mutual Life Insurance Company. A downgrade of the U.S. government's rating would also cause us to reconsider our support assumptions that can impact the ratings of banks, potentially affecting U.S. banks whose ratings are in the Aa range.

Financial institutions by their nature are often inherently linked to sovereign credit risk due to:

» Direct exposures from significant amounts of sovereign debt typically held on financial institution balance sheets;

» Exposure to operating risk factors that also effect the sovereign's credit risk; and

» A high degree of correlation between the macroeconomic factors that affect financial institution asset quality and the sovereign's financial health.

These factors will generally limit the ratings of financial institutions to no more than two notches above the rating of the sovereign in which they conduct their primary operations. Analysis of a financial institutions exposure to and ability to manage the above risks will drive whether or not an entity's rating is directly tied to the sovereign or can be positioned a notch or two above.

Rating Implications for U.S. Public Finance

A variety of U.S. public finance sectors are rated based on direct linkages to the U.S. sovereign rating, while others are indirectly linked but vulnerable to reductions in federal funding for operating expenses or capital purposes.

[3] See Moody's report, "Emerging Market Corporate and Sub-Sovereign Defaults and Sovereign Crises: Perspectives on Country Risk," dated February 2009.

[4] See The GSE Debate and the U.S. Mortgage Market, January 24, 2011.

Directly linked credits include many categories of housing revenue bonds, such as those secured by mortgage-backed securities with credit enhancement provided by Fannie Mae, Freddie Mac, Ginnie Mae, or FHA insurance programs. Federal lease financings and public housing authority bonds secured by HUD capital grants also are directly linked as they are dependent on the federal government funding for debt repayment. Pre-refunded bonds that are secured by escrowed U.S. government and agency securities are also directly linked. These directly linked ratings will likely move, at least initially, in lock step with the sovereign action.

Less directly linked credits that are currently rated Aaa that would be most exposed to a sovereign action include certain U.S. states and local governments, housing programs, and federally funded not-for-profit organizations. Additional credits that are currently rated below Aaa could also be vulnerable. These include military housing revenue bonds, federal highway grant anticipation revenue bonds (GARVEEs), and health care revenue bonds that depend on federal transfers for a significant share of revenues. Variable rate demand obligations backed by an issuer's own liquidity and high short-term ratings may also be vulnerable. Those with the weakest standalone credit profiles within their rating category and greatest dependence on the U.S. government for ongoing financial support are most susceptible to downgrade.

Aaa rated U.S. state and local governments that may be most susceptible to downgrade are ones that have greater relative economic volatility and have economies that would be more sensitive to reductions in federal spending, rely more heavily on capital market access for cash flow notes and variable rate debt, and whose budgets would be most affected to cuts in federal programs such as Medicaid.

In reviewing vulnerable credits in case of a sovereign rating action, we would consider rating U.S. municipal issuers by one or two notches higher than the sovereign under certain conditions, including:

» Institutional framework: Constitutional protections that create a formal separation of powers between the sovereign and sub-sovereign governments, with distinct financial responsibilities and linkages;

» Fiscal autonomy: Independent revenue setting policy and collection, spending decisions; limited exposure to sovereign bonds;

» Economic strength or competitive position: Low correlation in economic or operating performance;

» Limited or no reliance on capital market access or bank loans to fund operating expenses, or an ability to endure volatile market conditions and sustained rate increases.

U.S. colleges and universities are likely to be resilient to a modest weakening of the U.S. government rating, as colleges and universities generally have substantial fiscal autonomy and can withstand cuts or interruptions in federal funding for research programs or federal student tuition assistance.

Rating Implications for Aaa and Aa Rated Non-Financial Companies

There are four Aaa rated non-financial companies headquartered in the U.S.: ADP, ExxonMobil, Johnson & Johnson, and Microsoft. Johnson & Johnson has a negative outlook due to concerns about increasing leverage due to its acquisition strategy. The other companies have a stable outlook. There are 18 non-financial U.S. headquartered companies with Aa senior unsecured ratings.

Under scenarios in which the sovereign rating fell by one or two notches, there would likely be little impact on the highest rated non-financial companies. Almost all companies with substantial operations in the U.S. would have weaker prospects for revenues and cash flow if lower sovereign credit quality were associated with slow economic growth and stress in the financial system. However, companies rated Aaa and Aa tend to have characteristics that provide partial insulation from the conditions that usually accompany a declining sovereign:

1. Their revenues are mainly derived from non-government sources and usually have a significant international component. Companies rated Aaa and Aa generally have very stable leadership positions in their core business. While their financial performance fluctuates somewhat with economic swings, as occurred during the recent recession, as a group these companies have remained highly profitable in past periods of economic and financial stress.

2. Aaa and Aa rated companies generate robust internal cash flow that provides a substantial cushion above their mandatory spending requirements. These companies have limited external funding needs other than to fund large acquisitions, and their leverage is low. As a result, these companies have considerable flexibility to make adjustments to maintain a very strong financial profile when macroeconomic conditions weaken. However, companies that choose to accept an enduringly weaker financial profile rather than restrain cash outlays in a deteriorating environment would be most likely to be downgraded.

3. External funding sources are not highly reliant upon the government or domestic banks. Robust and relatively transparent business models underpin very strong access to international financial debt markets. As a result, these companies almost never borrow from banks. Many rely on committed bank facilities as liquidity back-stop for commercial paper issuance. However, their revolving credit agreements are usually comprised of a diversified international bank group. Most of these companies have significant short term investments and could reallocate a portion of free cash flow to building internal liquidity instead of returning cash to shareholders – an adjustment that was made by many companies during the recent international financial crisis.

There are existing examples of more resilient companies rated 1 or 2 notches higher than an Aa rated sovereign, most notably in Japan.[5] The impact of sovereign stress is evaluated separately for each company since sensitivity to sovereign credit changes is not uniform. Considerations include the degree to which revenues are derived domestically, revenue sensitivity to macroeconomic conditions, external funding needs, and the portion of revenues that is derived from government contracts.

[5] See A Downgrade of Ratings on Japan's Government Bonds (JGBs) and Banks Could Negatively Affect Some Japanese Corporate Ratings, June 17, 2011.

Rating Implications for U.S. Infrastructure Ratings

Only two U.S. utility issuers have standalone Aaa ratings: Tennessee Valley Authority (TVA; Aaa/STA), and Bonneville Power Administration/ Energy Northwest (Aaa/RUR). TVA is classified as a government related issuer, potentially enjoying strong support from the U.S. government if required; however, its Aaa Baseline Credit Assessment suggests no need for such support. Also suggesting that TVA's rating could be resilient to at least a one-notch decline in the U.S. government rating is consistent withexisting guidance[6] in other countries: experience has shown that strong infrastructure and utility companies can potentially be positioned 1-2 notches above the sovereign rating when the sovereign rating has declined.

Most other U.S. infrastructure credits would be resilient to a modest weakening in the U.S. Government rating. For example in the airports, ports and toll roads sectors, the highest rated credits are at the Aa2 level based on standalone credit quality rather than government linkages, and privately owned utilities are generally rated A1 or lower. To the extent any explicit or implicit Federal government support has been incorporated into these ratings, that expectation has been factored into the ratings in line with the decline in the financial resources of the Federal government. For instance, there would be no short-term rating impact for Amtrak (A1/STA). With current reserves and fare revenues Amtrak could operate for several months without federal funding, and then would need to eliminate capital expenditures, and longer-term, make service cuts.

Greater potential sovereign linkage exists with Public Power and Joint Power Agencies (JPA) issuers. Some of these ratings are higher (6 at Aa1, 15 at Aa2), and there is a more direct linkage to U.S. public finance ratings, whether as counterparties in a JPA pool or as owners/ sponsors in Public Power. If public finance ratings remain resilient or are only modestly affected, there should be correspondingly fewer downgrades to Public Power or JPA ratings since many ratings display a degree of resilience to a modest downgrade of a single public finance counterparty.

Rating Implications for U.S. Structured Finance Transactions

Assessing Outstanding Structured Finance Ratings

A country's macroeconomic and financial condition as well as the health of its banks will affect the performance of the ratings on the structured finance transactions issued within it; a sovereign rating provides insight into these factors.[7] The degree of linkage between the sovereign rating and the rating on a given transaction depends on several additional factors and varies. In the U.S., certain transactions are directly dependent on the rating of the sovereign. These include transactions defeased by U.S. Treasury strips, transactions backed by FFELP government guaranteed student loans, or U.S. RMBS backed by government agency mortgages. Some transactions are directly or indirectly dependent on the ratings of key transaction parties such as swap counterparties and liquidity banks that could be affected by a downgrade of the sovereign rating. Other transactions may be less sensitive to such linkage and may also benefit from structural protections and very short remaining life that allow such transactions to be rated up to five notches above the rating of the sovereign.

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[6] See Moody's Rating Approach for European Infrastructure & Utility Companies in an Environment of Declining Sovereign Credit Quality, November 2010.

[7] See Assessing the Impact of the Eurozone Sovereign Debt Crisis on Structured Finance Transactions, April 20, 2011.

The most critical factors that we assess in considering whether a structured finance transaction can be rated higher than the sovereign and by how many notches include the following:

1. market value risk in transactions where collateral value provides the primary or secondary source of payment means for rated bonds;

2. availability of refinancing, especially for commercial obligors in the loan or commercial real estate market;

3. increased probability or severity of extreme loss scenarios due to increased economic stress attributable to the sovereign downgrade;

4. amount of credit enhancement available to each tranche in a transaction;

5. remaining life of each tranche;

6. availability of creditworthy counterparties to address operational risk.

These factors are assessed on a transaction by transaction basis.

Assigning New Structured Finance Ratings after a Sovereign Downgrade

While existing structured finance ratings have a defined structure and a certain level of credit enhancement for the life of a transaction, structured finance issuers have the flexibility to structure a new transaction differently to mitigate some of the incremental risks that a sovereign downgrade may pose. In countries with declining sovereign ratings and absent idiosyncratic risks inherent to the asset class, issuers have historically chosen to structure transactions with more credit enhancement, various triggers, and new more creditworthy transaction parties when the sovereign rating declines.[8]

As the sovereign is downgraded below A2, the increased probability of extreme loss scenarios becomes more significant and is often inconsistent with Aaa (sf). At the same time, the operational risk framework[9] that applies to our structured finance methodologies prevails and renders the ability to rate transactions Aaa (sf) less likely.

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8 This has been the case for transaction in Ireland and Greece as long as the sovereign were rated single A. At this point transactions in these countries are capped at Aa2 and Ba1 respectively.

9 See Global Structured Finance Operational Risk Guidelines: Moody's Approach to Analyzing Performance Disruption Risk, June 28, 2011.

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Report Number: 134092

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