MEMORANDUM

TO: File No. 4-610

FROM: Alicia F. Goldin
Division of Trading and Markets

DATE: May 17, 2011

RE: Meeting with Representatives of Standard & Poor's (S&P) Regarding Municipal Securities

On April 12, 2011, representatives of S&P (Rita Bolger, Senior Vice-President and Associate General Counsel, Global and Regulatory Affairs; Robin Prunty, Managing Director and Analytical Manager for U.S. state ratings; Rodney Clark, Managing Director and Deputy Chair of Global Insurance criteria; and Maureen Coleman, Ratings Legal Department) met with Commissioner Elisse B. Walter; Cyndi Rodriguez from the Office of Commissioner Walter; Martha Haines, John McWilliams, Randall Roy and Alicia Goldin from the Division of Trading and Markets; and Amy Starr and Michael Popper from the Division of Corporation Finance, to discuss issues related to the municipal securities market. The participants discussed, among other things: rating methodologies, policies and practices; the impact of bond insurance on credit ratings; conflicts of interest; and the MSRB's initiative to provide real-time municipal securities ratings information available to the public through EMMA. S&P provided the attached documents.

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January 24, 2011

S&P Requests Comments On Proposed Revisions To Bond Insurance Criteria

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- The proposed bond insurance criteria provide a comprehensive, transparent process, which utilizes nine analytical categories in a defined framework to form our rating opinions.
- With the exception of liquidity and enterprise risk management, these elements are divided into two major segments: financial risk profile and business risk profile.
- Our analysis of a firm's enterprise risk management practices would allow for a more prospective and holistic view of its risk profile and capital needs.
- Our assessment of liquidity would represent a cap on potential ratings.

NEW YORK (Standard & Poor's) Jan. 24, 2011--Standard & Poor's Ratings Services is requesting comments on its proposal published today to revise its criteria for rating bond insurers. We could lower our ratings on existing investment-grade bond insurers by one or more rating categories if the proposed criteria are adopted, unless those insurers raise additional capital or reduce risk.

If we adopt the proposed criteria, we will significantly change our rating methodology for bond insurers by introducing a framework that combines nine analytical categories in a consistent manner. We believe this should provide further clarity around our rating methodology by defining how we combine these elements. This should enable market participants to arrive at credit conclusions comparable to those of Standard & Poor's. Along with increased transparency, this will enhance the comparability of our ratings by helping market participants rank the creditworthiness of bond insurers relative to issuers in other sectors.

PROPOSAL

Standard & Poor's proposed methodology considers the following analytical categories within our ratings framework: industry risk, competitive position, management and strategy, enterprise risk management (ERM), operating performance, investments, liquidity, capital adequacy, and financial flexibility. With the exception of enterprise risk management (ERM) and liquidity, these elements would be divided into two major segments: financial risk profile and business risk profile.

The business risk profile would include the analytical categories of management and corporate strategy, industry risk, and competitive position. The business risk profile is defined by the risk/return potential for markets in which the company participates, the competitive climate within those markets, the competitive advantages and disadvantages the company offers within those markets, and the effectiveness of the company's management and corporate strategy. The business risk profile affects the financial risk profile that we believe a company can bear at a given rating level and reflects our view of a company's expected economic success. Industry risk and competitive position would have the greatest influence on the business risk profile score.

The financial risk profile takes into consideration capital adequacy, operating performance, investments, and financial flexibility. The financial risk profile is the outgrowth of decisions that management makes in the context of its business risk profile and its risk tolerances. It also reflects the operating margins we believe management can achieve in the context of the choice of businesses it participates in, its growth strategies, and its risk/reward choices. Our assessments of capital adequacy and operating performance will be the heaviest influences on scoring in this area.

In addition, we are introducing two new bond insurance criteria concepts that will be key to our analysis: weak link filters and sector stress tests. In our view, ERM, liquidity and operating leverage are aspects of a rating that can override other factors and, in certain circumstances, constrain a rating. In the case of liquidity, this would represent a cap on final ratings. We will use our weak link filter to identify this potential development. We are also adding a new sector stress test to our capital model analysis. This may drive our analysis of the loss component of a structured finance book of business.

Our proposed criteria would include processes that analyze any identified risk or set of risks that, in aggregate, in stress scenarios could significantly impair a company's financial profile. The identification of these risks would lead to lower ratings.

Further changes in our proposed criteria include:

- Introducing a leverage test to supplement our capital model.
- Consolidating and recalibrating our municipal capital charges in our capital model.
- Introducing a credit gap assessment in calculating asset-backed capital charges.

RATINGS IMPACT

We could lower our ratings on existing investment-grade bond insurers by one or more rating categories if the proposed criteria are adopted, unless those insurers raise additional capital or reduce risk. We would expect this movement to be as much as one or more ratings categories. In particular, the amount of capital needed to achieve high investment-grade ratings will increase significantly under the proposed criteria because of higher capital charges used in scoring capital and the new leverage test. A complete description and an example of our leverage test can be found in paragraphs 29 to 31 and in tables 8 and 9 of our Request for Comment.

RESPONSE DEADLINE

We encourage market participants to submit written comments on the proposed criteria by March 25, 2011. Please send your comments to CriteriaComments@StandardandPoors.com. Once the comment period is over, we will review the comments and publish the criteria.

TELECONFERENCES

Standard & Poor's will be hosting a teleconference to provide an overview of the proposed criteria to market participants on Feb. 2, 2011, at 11:00 am (EST). Live dial-in numbers are 1-866-617-1526 for the U.S. and Canada and 1-210-795-0624 for all those outside these areas. The Conference ID# is 2736583, and the Passcode is RFC. For additional call-in numbers and other details, please visit http://events.standardandpoors.com/.

DETAILS

To access the published Request for Comment document, please click here " Request For Comment: Bond Insurance Criteria" or visit www.standardandpoors.com/RfC.

The report is available to RatingsDirect subscribers on the Global Credit Portal at www.globalcreditportal.com and RatingsDirect subscribers at www.ratingsdirect.com. If you are not a RatingsDirect subscriber, you may purchase a copy of the report by calling (1) 212-438-7280 or sending an e-mail to research_request@standardandpoors.com. Ratings information can also be found on Standard & Poor's public Web site by using the Ratings search box located in the left column at www.standardandpoors.com. Members of the media may request a copy of this report by contacting the media representative provided.

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March 31, 2011

USPF Commentaries: In Case You Missed Them

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USPF Commentaries: In Case You Missed Them

Following is a recap of commentary articles on U.S. public finance topics published in the past three months. This list is updated monthly.

- U.S. States' Pension Funded Ratios Drift Downward, March 31, 2011
- What U.S. Housing Finance Reform Could Mean For The Public Finance Housing Industry, March 28, 2011
- Pennsylvania Issuer Credit Ratings For Schools Clarified, March 11, 2011
- U.S. Public Finance Defaults And Rating Transition Data: 2010 Update, March 2, 2011
- 2011 U.S. Airport Medians Report: Larger Facilities Continue To Come Out On Top, But All Feel The Recession's Effects, Feb. 28, 2011
- Credit FAQ: GASB 54: How Will It Change Fund Balance Reporting?, Feb. 24, 2011
- U.S. Public Finance Report Card: Affordable Housing Ratings Began To Show Signs Of Stability In 2010 While New Debt Issuance Increased, Feb. 23, 2011
- Credit FAQ: Texas School Districts' Declaring Financial Exigency: How Can It Affect Credit Quality?, Feb. 22, 2011
- Ratings Roundup: U.S. Public Finance Ratings Held The Line In 2010 On Difficult Financial Turf, Feb. 17, 2011
- Sector Review: U.S. Independent Schools' Fiscal 2010 Ratios: The Challenge Of Achieving Financial Sustainability, Feb. 17, 2011
- Regulatory Uncertainty And A Tepid Recovery Could Weaken The U.S. Public Power Sector's Credit Quality, Feb. 16, 2011
- Texas' Budget Challenge: Structural Changes Are Key To Avoid Persistent Deficits, Feb. 16, 2011
- The Not-For-Profit Higher Education Sector's Outlook Remains Mixed Despite A Gradual Recovery, Feb. 14, 2011
- Credit FAQ: Economic Growth And Credit Quality In An Age Of Austerity, Feb. 11, 2011
- Credit FAQ: U.S. States Brace For Health Care Reform And Higher Medicaid Spending, Jan. 27, 2011
- U.S. Housing Finance Agency Delinquencies Exceed State Averages For The First Time, Jan. 27, 2011
- S&P Comments On Recent Discussion Of Bankruptcy For States, Jan. 26, 2011
- The U.S. Health Care Sector 2011 Outlook Is Stable--But At What Cost?, Jan. 26, 2011
- Outlook Is Stable For Not-For-Profit Health Care Providers This Year, But Unsettling Times Loom, Jan. 26, 2011
- Municipal Water And Sewer Utilities' Stable Outlook Is Tinged With Funding And Regulatory Concerns, Jan. 26, 2011
- Outlook: U.S. State And Local Governments Must Navigate Turbulent Conditions To Maintain Credit Stability, Jan. 24, 2011
- High Equity Offers Shelter Amid U.S. Housing Finance Agency Woes, Jan. 11, 2011
- Q&A: Independent Schools Seek A Lesson Plan For A Sustainable Business Model, Jan. 5, 2011
- Sector Review: 20 More Counties Achieve 'AAA' Rating Despite The Recession, Jan. 5, 2011

U.S. Public Finance References

- U.S. State Ratings And Outlooks: Current List
- History Of U.S. State Ratings
- State Review Archive

- State Credit Enhancement Programs: Current List
- 'AAA'-Rated U.S. Counties: Current List
- U.S. Not-For-Profit Health Care Rating Actions, December 2010
- Global Airports And Aviation Infrastructure Ratings And Outlooks: Current List
- Global Toll Facilities Ratings And Outlooks: Current List
- U.S. Public Finance Defaults And Rating Transition Data: 2010 Update

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January 26, 2011

S&P Comments On Recent Discussion Of Bankruptcy For States

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NEW YORK (Standard & Poor's) Jan. 26, 2011--Standard & Poor's Ratings Services has received many inquiries recently from municipal market participants relating to the notion, which has been in the media, of a bill being introduced in the United States Congress to allow states to file for bankruptcy protection. We have been asked what impact such a bill, if it became law, would have on our view of states' credit quality.

We released our updated methodology for rating states on Jan. 3. Standard & Poor's publicly rates all 50 states based on an analysis of a range of financial, economic, managerial, and institutional factors. Our criteria says that most states should be able to attain at least a 'AA' rating due to their strong debt repayment history even in scenarios of very severe stress. Our criteria specifically reference the fact that states are not eligible to file for bankruptcy protection under the U.S. Bankruptcy Code. This fact has been fundamental to our analysis of the sector. Were there to be any change to the ability of states to file for bankruptcy at the federal level, we would evaluate our criteria relating to the institutional and government framework that is part of our review of the sector. It should be noted that the ability to file and the practicality of such filings would be a key component of our assessment of the credit quality of the sector.

There are many local governments that already possess authorization to file for bankruptcy protection, but we understand, based on historical data, that most have not considered it an option to address budget imbalances. Instead, what we have generally observed is an attempt to align revenue and spending (see "What Credit Concerns Does Talk Of Municipal Bankruptcy Raise?," published Dec. 15, 2009). Over the past 70 years, there have been 600 bankruptcy filings by local government entities out of a universe of about 90,000 governments, according to a Congressional Budget Office report. Thus while seeking bankruptcy protection has been a rare step for local governments in the U.S., there have been exceptions. In several cases where we have been concerned that a local government entity might file for bankruptcy protection even though we believed other options to deal with fiscal stress were available, we generally have lowered ratings.

While state governments continue to grapple with budget stress related to the Great Recession, their commitment to their legal obligation to pay debt despite the difficult economic conditions of the past three years has been very strong in our view. We believe the financial implications, in terms of increased borrowing costs and reduced market access, of a bankruptcy filing typically outweigh the benefits of restructuring debt service, which on average represents only 4% of expenditures for states.

While we expect states to continue to seek ways to reduce expenditures, we currently view it to be unlikely that a state would consider a bankruptcy filing as an option to address current or future budget gaps based on the financial implications identified above. Nevertheless, if state bankruptcy filings were authorized under the U.S. Bankruptcy Code, we would evaluate the potential impact to creditworthiness of such authorization. If a state were to file for bankruptcy protection, or we were to become aware of a state considering such a filing, we would likely reevaluate our creditworthiness opinion and take ratings actions that we deem appropriate in accordance with the "overriding factors" of our state rating methodology.

RELATED CRITERIA AND RESEARCH

- Criteria: U.S. State Ratings Methodology, Jan. 3, 2011
- What Credit Concerns Does Talk Of Municipal Bankruptcy Raise?, Dec. 15, 2009

Standard & Poor's, a part of The McGraw-Hill Companies (NYSE:MHP), is the world's foremost provider of credit ratings. With offices in 23 countries, Standard & Poor's is an important part of the world's financial infrastructure and has played a leading role for 150 years in providing investors with information and independent benchmarks for their investment and financial decisions. For more information, visit http://www.standardandpoors.com.

Criteria | Governments | U.S. Public Finance:

U.S. State Ratings Methodology

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U.S. State Ratings Methodology

(Editor's Note: This methodology replaces portions of U.S. Public Finance Criteria: GO Debt, published Oct. 12, 2006 and is related to Principles Of Corporate And Government Ratings, published June 26, 2007.)

Standard & Poor's Ratings Services is updating its methodology for rating United States state governments. We are publishing this article to help market participants better understand our approach to assigning state ratings. "Rating" refers to the rating assigned to general obligation (GO) debt of U.S. states or the issuer credit rating if no GO debt is outstanding. This methodology replaces portions of "U.S. Public Finance Criteria: GO Debt," published Oct. 12, 2006, and relates to "Principles Of Corporate And Government Ratings," published June 26, 2007. (Listen to related podcast, "Standard & Poor's Updated Methodology For Rating U.S. States," dated Jan. 18, 2011, and the related CreditMatters TV segment, "Standard & Poor's Revised Rating Criteria For U.S. States," dated March 4, 2011.)

SCOPE OF THE CRITERIA

1. These criteria apply to all U.S. state governments and U.S. Territories.

SUMMARY OF CRITERIA UPDATE

2. Standard & Poor's publicly rates all 50 U.S. states based on an analysis of a range of financial, economic, managerial, and institutional factors. Given the specific delegation of powers to states under the U.S. Constitution, we view states as having sovereign powers that warrant recognition in our criteria, and therefore we are separating our criteria for our analysis of states from our broader general obligation criteria.

3. We are keeping the existing general analytic framework for U.S. states, which involves five main factors:

- Government framework;
- Financial management;
- Economy;
- Budgetary performance; and
- Debt and liability profile.

4. We provide greater transparency on how the rating for each state is determined using the combination of the various rating factors. We assess these factors using various credit metrics as outlined in Chart 1. These criteria follow the publication of the "Request for Comment: Methodology For U.S. State Ratings," published on May 11, 2010.

IMPACT ON OUTSTANDING RATINGS

5. We do not expect any significant rating changes as a result of these criteria.

EFFECTIVE DATE AND TRANSITION

6. These criteria are effective immediately.

METHODOLOGY

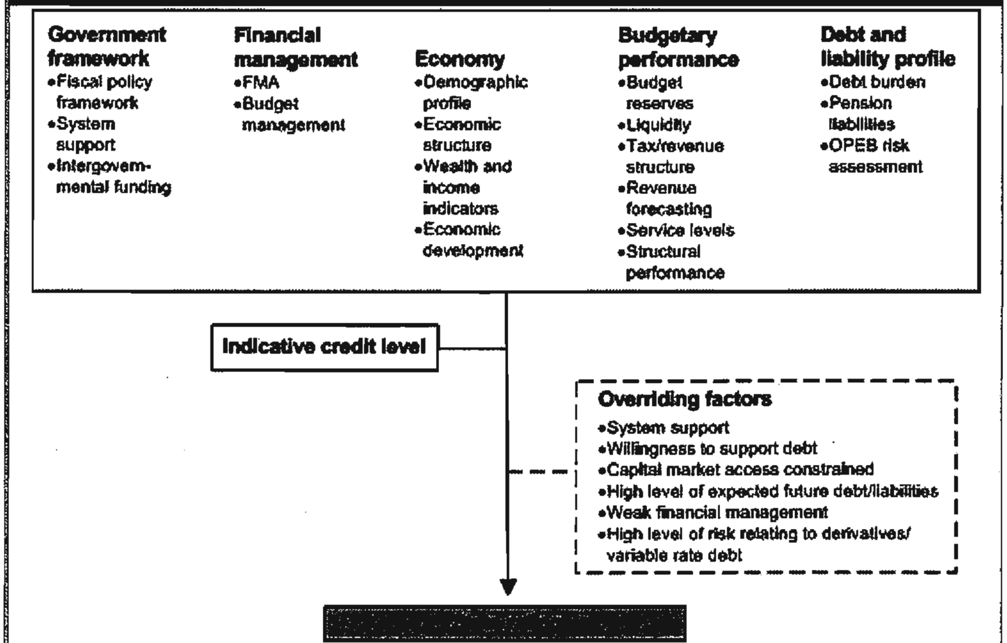
A. Overall Analytic Framework For U.S. States

7. Standard & Poor's assigns credit ratings to U.S. states and Territories based on our qualitative and quantitative analysis of a range of financial, economic, managerial, and institutional factors. Our overall analytic framework centers around the following factors:

- Government framework;
- Financial management;
- Economy;
- Budgetary performance; and
- Debt and liability profile.

8. We assess each of these factors utilizing various metrics that we score on a scale from 1 (strongest) to 4 (weakest). For each metric there may be several indicators we evaluate to develop the metric score. We score each indicator individually on the same scale and average the indicators' scores to develop the overall score for the metric. We average the metrics for each factor to develop a composite score for each. The scores for the five factors are combined and averaged with equal weighting to arrive at an overall score which is then translated to an indicative credit level as illustrated in table 1. (A glossary of selected terms is provided at the end of this article.)

Chart 1
Standard & Poor's Analytic Framework For Rating U.S. States



9. Table 1 below lists the indicative credit level that is associated with the overall score assigned. In most cases, we expect the final state rating to be within one notch of the indicative credit level, based on the state's position relative to all other states.

Table 1

Scores And Indicative Credit Level

Score	Indicative Credit Level
1-1.5	AAA
1.6-1.8	AA+
1.9-2	AA
2.1-2.2	AA-
2.3-2.4	A+
2.5-2.6	A
2.7-3	A-
3.1-4	BBB category

Note: A rating below 'BBB' is possible based on various overriding factors as outlined in paragraphs 11-18.

1. Overriding factors impacting state ratings

10. In certain circumstances, the following overriding factors may result in a rating different from the indicative credit level as follows.

11. ***System support score.*** In the case of U.S. Territories and Commonwealths, where the policy and fiscal relationship with the federal government may result in a system support score that is different from the score assigned to all states, the rating may be multiple notches below the indicative credit level, as a result of the lower system score (see "Methodology for Rating International Local and Regional Governments," published Sept. 20, 2010).

12. ***Willingness to support debt.*** We view U.S. states as generally having a strong commitment to honor their legal obligation to pay debt even during difficult or stressful economic cycles. If we believe there is a change in a state's willingness to support its debt, we will assign a rating below what is indicated, possibly by several categories. For example, were a state to choose not to pay obligations we view as debt subject to annual appropriation, we would lower the state's GO rating or ICR, as detailed in our appropriation-backed obligations criteria ("Appropriation-Backed Obligations", published June 13, 2007). Were state officials who are charged with funding debt to suggest an unwillingness to fund debt in accordance with the priority payment status, we would likely assign the state a GO rating or issuer credit rating that is no higher than the 'BB' category. The rating would be no higher than the 'B' category and would likely be lower if we determined that this lack of willingness was likely to threaten a pending debt payment.

13. ***Capital market access.*** In addition, if we deem access to the capital markets or other sources of external liquidity as questionable and we view that access as necessary for the state to maintain regular operations, we will assign a rating no higher than the 'BBB' category. The rating may remain investment grade if we believe that internal liquidity, the priority claim enjoyed by bond holders, and the state's ability to manage disbursements provides good coverage of debt service. If we believe these internal factors provide questionable coverage of debt service and we perceive difficulties accessing the market for external liquidity to pay debt obligations, this would lead to a more rapid transition below the 'BB' category.

14. We also anticipate possible but limited circumstances where we will adjust a state's rating by one notch compared with the indicative credit level in table 1. These include:

15. ***High level of expected future debt/liabilities.*** In cases where we expect that a state's identified future debt obligations are likely to increase the majority of ratios used to measure the state's debt burden to levels that are higher than one-third above those indicated for a score of '4' (see paragraphs 62-69), we will assign a rating one notch below the indicative credit level in table 1. Instances where we anticipate future debt and liability metrics to be an overriding factor in the rating include (but are not limited to) when the state authorizes a large debt program that we expect to significantly alter its current debt position, or when a contingent liability (such as the debt of another government entity or an underlying level of government) becomes a direct funding responsibility of the state. Finally, if a state's pension funded ratio were to fall below 40%, the rating will be one notch below the indicative credit level in table 1. We believe that the inclusion of this overriding factor will allow for a forward-looking assessment of future debt and liabilities and its impact on the state's future operating budget performance.

16. ***Weak financial management.*** In cases where we score a state's overall financial management at '4' (see paragraphs 32-36) the rating will be one notch lower than the indicative credit level in table 1. In our opinion, weak financial management can result in rapid credit deterioration.

17. ***High level of risk relating to derivatives/variable rate debt.*** In cases where a state has a liquidity score of '4' (see paragraphs 46-51) and also has what we consider a high level of risk relating to derivatives/variable rate debt, the rating will be one notch lower than the indicative credit level in table 1. Specifically this includes the requirement to fund any accelerated payment provisions without having funds identified and available to make these payments.

2. Relationship to sovereign rating

18. Although many economic credit factors are similar and some expenditure responsibilities are linked, we do not directly link state ratings to the rating of the U.S. The rating on a state or local government can be higher than a

sovereign rating (see "Methodology: Rating A Regional Or Local Government Higher Than Its Sovereign," published Sept. 9, 2009) if, in our view, the individual credit characteristics remain stronger than those of the sovereign in a scenario of economic or political stress. Other factors that we will review include our view of the predictability of the institutional framework that limits the risk of negative sovereign intervention and the state's ability to mitigate negative intervention from the sovereign due to the state's high financial flexibility and limited dependence on the federal government.

3. Standard & Poor's use of stress scenarios and calibration of state criteria

19. To calibrate the criteria for state ratings, Standard & Poor's uses the stress scenarios associated with each rating category level, as presented in Appendix IV of "Understanding Standard & Poor's Rating Definitions," published June 3, 2009 (hereafter called the "stress scenario article"). We believe that most states should be able to attain at least a 'AA' rating level, because we expect they should be able to meet their debt obligations, even in a very severe stress scenario, as defined in the stress scenario article. Under the U.S. Constitution, state governments have broad powers to establish their own tax structures and expenditure responsibilities and therefore possess unique administrative and financial flexibility. They are not eligible to file for bankruptcy under the U.S. Bankruptcy Code. They may adjust revenues, alter disbursements, and access reserves or other forms of liquidity when they consider it necessary in order to restore budgetary balance.

20. State public finance systems are in our view mature and accounting standards are well-developed, contributing to a high level of transparency relative to regional governments in other countries. U.S. states typically have balanced-budget requirements and well-developed revenue and expenditure monitoring policies and procedures. Although there is some variation among states in terms of economic diversity and wealth, when evaluated on a global basis we find that state economies as a whole are generally diverse and income levels are above average. The security features and priority of payment for debt service are generally well-defined and capital market access is also generally well-established. We also believe U.S. states typically have a strong commitment to their legal obligation to pay debt despite difficult economic cycles as evidenced by only one observed default for the sector in more than one hundred years.

21. When defaults have occurred, reforms have generally followed. Although eight states (Arkansas, Illinois, Indiana, Louisiana, Maryland, Michigan, Mississippi, and Pennsylvania) plus the Territory of Florida defaulted following the panic of 1837, most debt issued for state and local purposes was issued at the state level, where large amounts of debt had been issued for economic development and public improvements. Following this episode, states' borrowing abilities were curtailed, and debt issuance for economic development purposes shifted primarily to local governments. Only one state (Arkansas) defaulted on debt during the Great Depression, and following this period governments further diversified their revenue streams by increasing their reliance on personal income taxes and implementing sales taxes—largely the structure we see today. Additional improvements to states' financial controls, reporting, and disclosure followed in the postwar period.

B. Government Framework

22. Government framework is the first factor we assess to arrive at the indicative rating level. A state's government structure and political environment can affect its powers as defined by federal and state law and influence its fiscal position. Fiscal policy framework, system support, and intergovernmental funding are the metrics we use to assess government framework. Each is scored individually, and we then average the scores to determine the overall

government framework score.

1. Fiscal policy framework

23. The framework within which a state taxes, spends, and issues debt influences its ability to manage through various economic stress scenarios in our opinion. When evaluating the fiscal policy framework of a state we analyze five metrics that are averaged to determine the overall fiscal policy framework. These five metrics include: balanced budget requirement (table 2), revenue structure (table 3), disbursement autonomy (table 4), voter initiatives (table 5), and legal framework for debt (table 6).

24. ***Balanced budget requirement (table 2).*** In contrast to the federal government and many local governments, most U.S. states are required by statute or their constitution to propose or adopt a balanced budget. Others are required to ensure balance during the fiscal year. In our opinion, these requirements tend to encourage budgetary discipline.

Table 2 - As described in paragraph 25

Balanced Budget Requirement	
Score	
1	Constitutional/statutory requirement for balanced budget when introduced and adopted. The budget is required to stay in balance during the year.
2	Budget must be balanced when introduced or when adopted but no legal requirement to maintain balance during the year.
3	There is no requirement to propose or adopt a balanced budget but in our view there is a track record of doing so.
4	No balanced budget requirements exist and, in our view, there is no track record of doing so.

25. ***Revenue structure (table 3).*** Most states enjoy the flexibility to set and modify tax rates, deductions, exemptions, and collection dates. If, in our view, these can be achieved without major constitutional, legal, political, or administrative difficulty, these discretionary powers can quickly and favorably influence a state's fiscal condition.

Table 3 - As described in paragraph 26

Revenue Structure	
Score	
1	The state has autonomy to raise taxes and other revenues (rate and base); in addition, there is no constitutional constraint or extraordinary legislative threshold for approval (a simple majority requirement for approval of new taxes, for example) and state policymakers have, in our view, a proven track record of implementing tax increases as one of the alternatives to address budget imbalances.
2	The state has autonomy to raise most but not all taxes and revenues. In addition, in our view, the track record of implementing tax increases as a policy alternative to address budget imbalances is uneven, thus effectively reducing the state's revenue flexibility.
3	There are in our view significant constraints to adjusting taxes or revenues. These constraints can include constitutional prohibitions on tax increases, an above majority legislative threshold for approval , or the need to have voter approval for tax and revenue increases..
4	The state is both legally and, in our view, politically constrained in its ability to increase all key revenue sources. We view revenue flexibility as practically limited to the potential growth of the existing revenue base.

26. ***Disbursement autonomy (table 4).*** While state governments generally have broad service responsibilities, most enjoy what we view as considerable discretion in establishing funding levels for state assistance, shifting responsibilities to local government and establishing or changing disbursement dates for various programs. Absent constitutional or other legal mandates, this affords control over budgets and cash flow which, in our view, can positively affect fiscal standing. When assessing flexibility, we look at fixed costs relative to the total budget. Fixed costs include debt and contractual obligations. We also review the legal framework governing various program areas and how that affects the ability to reduce or eliminate spending and programs.

Table 4 - As described in paragraph 27

Disbursement Autonomy	
Score	
1	High degree of flexibility in adjusting disbursements; extends to nearly all program areas, including the ones with the highest impact on the budget.
2	Flexibility to adjust disbursements exists but adjustments may not be legally allowed for all program areas, including one or more of the state's largest expenditure programs such as education and health care.
3	Flexibility to adjust disbursements is constrained, and does not include the legal ability to adjust disbursements for large expenditure programs such as education and health care.
4	Flexibility to adjust disbursements is practically non-existent.

27. *Voter initiatives (table 5).* A state government's autonomy can be limited and this can affect relative credit standing in our view. Where decisions about specific tax or revenue levels, spending allocations, and debt issuance require approval from the electorate, states have reduced flexibility to respond to changing economic or financial situations, in our opinion.

Table 5 - As described in paragraph 28

Voter Initiatives	
Score	
1	Not a voter initiative state
2	State has some voter initiative activity but it has not historically negatively affected operations or limited flexibility.
3	State has an active initiative process which has affected state revenues and/or expenditures and flexibility has been diminished.
4	Initiative process is highly active and has substantially impaired operations of government in our view.

28. *Legal framework for debt (table 6).* We analyze both statutory and constitutional debt provisions.. This review includes consideration of the nature of the repayment pledge, the priority of payment for debt service, amortization features that are imbedded in constitution or statute, and legal restrictions related to debt issuance.

Table 6 - As described in paragraph 29

Legal Framework for Debt	
1	High degree of legal flexibility to issue debt for a range of purposes. There is a strong legal priority for payment of debt.
2	Some legal limitation on debt issuance which has not in our view inhibited planned issuance. There is a legal priority for payment of debt service but it is not a first claim on revenues.
3	Very limited legal right to issue debt; lack of voter support or limited access to alternative debt structures. There is no established legal priority for debt.
4	Cannot issue debt; there is a lack of voter support. There is no priority of payment for debt service.

2. System support

29. System support refers to our assessment of the predictability of the public finance system in a federal context. It is the same for all states and incorporates the predictability, transparency and accountability, and system support aspects of the institutional framework score as detailed in our criteria for rating international local and regional governments (see "Methodology For Rating International Local And Regional Governments," published Sept. 20, 2010). We assess the final element of the international public finance institutional framework, revenue and expenditure balance by the other metrics in the government framework analysis of the U.S. state criteria to capture the state constitutional and statutory differences that affect this area.

3. Intergovernmental funding

30. Table 7 details our assessment of a state's local government funding framework. How services and programs are provided across state and local governments and what the funding relationship has been over time are in our view

important considerations because they influence revenues, spending and overall budget flexibility. We review the legal requirements and historical patterns of state assistance and revenue sharing arrangements. If a state has broad discretion in adjusting spending flows to local governments or the amount of these flows are limited, we view the state as having a high level of control over budgeting and cashflow. Conversely, if a state has limited legal capacity to adjust programs and spending levels or limited political willingness to do so, we view the state as having less autonomy, especially when this funding represents a significant state budget element.

Table 7 - As described in paragraph 31

Local Government Funding Framework	
Score	
1	Level of assistance to local governments is limited or highly flexible from a legal standpoint or by historic patterns; strong ability to downstream reductions or change revenue allocations.
2	Level of assistance to local governments is high; flexibility (either legal or practical) may be limited at times.
3	Level of assistance is high and is not flexible from a legal or practical standpoint; ability to reduce local government funding is restrained.
4	Very limited flexibility exists.

C. Financial Management

31. Financial management is the second of the five major factors shown in chart 1 contributing to our assessment of the indicative credit level. Our view of the rigor of a government's financial management practices is an important factor in Standard & Poor's analysis of creditworthiness. We believe managerial decisions, policies, and practices have a direct effect on a government's financial position and operations, debt burden, and other key credit factors. A government's ability to implement timely and sound financial and operational decisions in response to economic and fiscal demands is in our view a key factor in assessing credit quality. The financial policies (Financial Management Assessment) and the budget management framework are the key metrics we use to assess financial management that are scored individually and averaged to develop an overall score for financial management.

1. Financial Management Assessment

32. Standard & Poor's analyzes the impact of financial management polices and practices through the use of the Financial Management Assessment (FMA). We believe the FMA provides a transparent assessment of a government's financial practices and highlights aspects of management that are common to most governments in a consistent manner (see "USPF Criteria: Financial Management Assessment," published June 27, 2006). Based on the current framework, a state is assigned a 'strong,' which equates to a score of 1, 'good' (score of 2), 'standard' (score of 3), or 'vulnerable' (score of 4) assessment.

2. Budget management framework

33. While the FMA outlines policies in a range of areas including budget amendments, our view of the framework for managing the budget (including legal framework as well as the policies in practice) is a factor in the high credit profile of U.S. states and we believe it is important in differentiating state credit ratings above or below the 'AA' rating level. Table 8 details our scoring methodology for this area.

Table 8 - Assessment of the framework is further detailed in paragraphs 34 and 35.

Budget Management Framework	
1	Framework is formalized, strong, and proactive; adjustments are timely, with emphasis on structural balance.

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Table 8 - Assessment of the framework is further detailed in paragraphs 34 and 35.

Budget Management Framework (cont.)	
2	Framework is good but process may be less defined and adjustments may be less timely
3	Framework is adequate; budget monitoring is established but adjustments are not timely and response is uneven.
4	Framework is weak, which effectively prohibits timely adjustment; deficits carry forward into the next fiscal year.

34. To score the budget management framework, we review whether:

- There is a formal schedule for providing revenue and spending forecast updates throughout the year;
- There are frequent (two or more times) updates during the fiscal year, especially during weak economic periods;
- Budget adjustments are implemented in a timely manner to restore balance, generally within 30-60 days of budget gap being identified;
- The executive branch/budget office has what we consider to be broad powers to adjust appropriations;
- Legislative approval is required to restore balance and if the response is timely (adjustments begin within about 30 days of the gap being identified);
- There is in our view a well-established track record of making difficult and politically unpopular revenue and spending decisions in order to restore balance during the fiscal year;
- Gap-closing solutions are in our view generally focused on structural budget balance rather than relying on non-recurring revenue or spending actions; and
- Deficits are not carried forward.

35. A state that meets all but one or two of the above budget management items will likely receive the highest score for its budget management framework while a state that exhibits only one or two of the these characteristics will likely result in the lowest score.

D. Economy

36. Economy is the third of the five major factors shown in chart 1 contributing to our assessment of the indicative credit level. Our economic review focuses on four metrics: demographic profile, economic structure including employment composition and performance, wealth and income indicators, and economic development. Each of these metrics is scored (1-4) and averaged to assess the overall economic fundamentals of a state. Where there are multiple indicators for each metric, they are also scored (1 to 4) and averaged to develop the metric score.

1. Demographic profile

37. We believe that the structure and growth characteristics of a state's population base provide critical information about revenue-generating capability as well as the costs of providing services and infrastructure. It is also a factor in revenue distribution at the federal level. We analyze historic population trends for each state relative to national trends. We also examine U.S. Census and other third party projections for future growth or decline. The age profile of the population base and changes in it over time are also considerations due to the high proportion of state spending tied to education and social service programs. To assess this we review the age dependency ratio calculated by the U.S. Census Bureau. As detailed in table 9, the key indicators of our demographic profile score are our view of:

- Population growth trends; and

- Age distribution of population.

Table 9 - As described in paragraph 38

Demographic Profile

	Indicators (scored separately then averaged)	
Score	**Population growth trends**	**Age dependency ratio***
1	Strong population growth relative to U.S.	Relatively low dependent population (more than 5% below U.S. levels).
2	Stable population trends; steady growth over time in line with U.S.	Dependent population ratio in line with U.S. levels.
3	Demographic trends are weaker than the U.S.	Dependent population is well above U.S. (0- +5%).
4	Growth has declined for more than a decade.	Dependent population has significant variance (more than 5%-10% from U.S.).

* From the U.S. Census.

2. Economic structure

38. The composition, output, and diversity of the employment base plays a role in the link between a state's economy and its ability to generate revenues. A state's economic structure can also influence the level of services it provides and can contribute to spending growth pressures. A review of the economic structure, growth trends, and how various indicators perform during economic cycles allows us to assess the relative stability or cyclicality of a state's economy. We also review changes in the structure of the economy over time to assess diversification trends and how this may affect future economic performance. As detailed in table 10, the key indicators summarize our view of:

- Employment, labor force, and unemployment trends;
- Employment composition by sector and how it compares to the national distribution; and
- Gross state product growth trends and gross state product per capita.

Table 10 - As described in paragraph 39

Economic Structure

	Indicators (scored separately then averaged)			
Score	**Unemployment**	**Employment composition/ diversity of base**	**GSP* per capita**	**GSP growth**
1	Rate 2%+ below U.S.	Employment mix in line with U.S.; limited concentration; performance tends to be less cyclical than U.S.	>100% of U.S. Gross Domestic Product (GDP)	Growth consistently above U.S.
2	Rate within 2% +/- of U.S.	Employment base exhibits some concentration that contributes to more cyclical performance than the U.S. economy as a whole.	>85% of U.S. (GDP)	Growth in line with U.S.
3	Rate 2%+ above U.S.	Employment base is concentrated; performance has been cyclical and weak relative to the U.S. over the past decade	>75% of U.S. (GDP)	Growth below the U.S. periodically.
4	Rate 5% or more above U.S.	Employment base has high level of concentration relative to U.S. distribution which has contributed to cyclical performance and weak trends over decades.	<75% of U.S. (GDP)	Growth has consistently been below U.S. levels.

* GSP—Gross state product.

39. As part of our review of the employment composition and diversity of the employment base as outlined in table 10, we analyze the largest employers in the state relative to current economic conditions to assess the potential for cyclicality and how those firms might affect future growth and development. We include regional patterns of employment in the review if an individual state benefits from proximity to other labor markets.

3. Wealth and income indicators

40. We consider wealth levels of a state as part of the economic review. We believe that how income compares to national levels and how growth rates have trended over time can provide useful information about the ability to generate additional revenues. The key indicator is to us is per capita personal income, as detailed in table 11.

Table 11 - As described in paragraph 41

Income And Wealth	
Score	**Per capita personal income rank**
1	>100% of U.S.
2	>85% of U.S.
3	75%-85% of U.S.
4	<75% of U.S.

4. Economic development

41. In addition to historic economic trends, we consider each state's economic development initiatives and future growth prospects as they are likely to affect future revenue generating capacity. We have identified areas that we believe drive future development. A state that we believe displays a preponderance of attributes in a given section below will be assigned that score. We express our assessment of economic development prospects as detailed in table 12:

Table 12 - As described in paragraph 42

Economic Development	
Score	
1	The state's resources, employment opportunities, cost of living, cost of doing business, and tax structure result in an economic environment that supports entrepreneurship, as well as significant levels of private sector investment. The majority of urban centers in the state are economically vibrant and continue to attract in-migration and investment. In addition, the state is home to the headquarters of employers with global operations, as well as prominent higher education anchors which serve as catalysts to continuous investment over time. A majority of the state's current employment is in economic sectors that are expected to perform at an above-average pace during periods of economic growth. Infrastructure is in place to support further growth and development.
2	The state's resources, employment opportunities, cost of living, cost of doing business, and tax structure result in overall growth in population and employment over time, but economic growth across the state is uneven, with only a few urban centers performing better than average, and the majority of urban centers exhibiting lackluster economic performance. Some, but not all, of the major urban centers are attracting private investment and are major centers of job creation. Higher education anchors exist, but are not situated near major urban centers or major employment centers, which could limit their effectiveness in attracting investment. Concentration of private investment and employment in economic sectors that have below-average growth prospects may limit overall economic growth.
3	We expect the state to experience limited employment and private investment growth or possibly decline for a range of reasons including one or both of the following: reliance on sectors that are experiencing structural decline in both output and employment; and a tax structure that may represent a competitive disadvantage (measured by historic levels of private investment, high cost of doing business, population flows, and recent loss of key employers).
4	Growth prospects are not evident and there is little focus by the state on economic development initiatives.

E. Budgetary Performance

42. Budgetary performance is the fourth of the five major factors shown in chart 1 contributing to our assessment of the indicative credit level. While states prepare financial statements each year using generally accepted accounting principles (GAAP), which includes accruals, the budget development, appropriations, budget monitoring, and

reserves, are expressed on a budgetary basis, which is more closely aligned with a cash basis presentation. Budget-based financial information is a primary focus of our financial review because it shows how state finances are managed day-to-day. However, we also analyze the GAAP audited financial statements and variations between GAAP and budget-based financial disclosure to gain a more complete understanding of a state's financial condition. We assess six key metrics in order to evaluate budgetary performance: budget reserves, liquidity, tax/revenue structure, revenue forecasting, service levels, and structural budget performance. These metrics are scored individually and averaged to develop an overall assessment of budgetary performance. Where there are multiple indicators for each metric, they are also scored (1 to 4) and averaged to develop the metric score.

1. Budget reserves

43. State revenues tend to be cyclical and in our view generally are sensitive to changing economic conditions. Looking at the history of revenue shortfalls for states, we believe that no budget reserve fund could be sized to completely address the potential for volatility in a severe recession or revenue downturn. However, all other factors being equal, we believe states with well-funded reserves have greater flexibility to address shortfalls should and when they occur.

44. Over the past two decades states have generally exhibited greater formalization of budget reserve policies. We believe that a clearly articulated policy and steady funding of reserves is important to allow states to manage through challenging economic cycles. In addition to the level of funding, our review (detailed in table 13) includes an analysis of how the size of the reserve compares to historic revenue and spending patterns and gaps and of the track record of funding the reserve, including any replenishment mechanisms. If there is a stated policy but there is no track record of funding the reserve in positive economic periods, we will assess the reserve at the average level it is actually funded at historically. In addition to formal budget reserves, we review financial reserves and balances identified in funds outside of the state's main operating fund or general fund that may be available for budget purposes. If there are other available reserves identified by the state in addition to the formal budgetary reserve, we will consider these as part of the overall reserve capacity of the state if they are available for state operating purposes.

Table 13 - As described in paragraph 45

Budget-Based Reserves Relative To Revenue And Spending

Score	
1	There is a formal budget-based reserve relative to revenue or spending that is above 8%. In addition, there is a formal process or a demonstrated track record of restoring the reserve following depletion.
2	There is a formal budget-based reserve relative to revenue or spending that is between 4% and 8%. In addition, there is a formal process or a demonstrated track record of restoring the reserve following depletion.
3	There is a formal budget-based reserve relative to revenue or spending that is between 1% and 4%. In addition, there is a formal process or a demonstrated track record of restoring the reserve following depletion.
4	There is no formal budget reserve fund, or reserves are funded at less than 1% over time, or there is no process for accumulating reserves. No additional reserve funds are identified or available.

Note: Refers to reserve policy levels and not actual funding level as we observe that reserves are often depleted through economic cycles.

2. Liquidity

45. Standard & Poor's believes that a state's liquidity position is an important component of its overall credit profile. We generally regard available cash as the strongest form of liquidity, but many states rely on external borrowing and disbursement adjustments in order to fund priority payments including debt service. While the ability to adjust disbursements provides short term flexibility, it could result in additional cost pressure or fiscal strain later in the fiscal year if disbursement delays are frequent and represent a significant portion of the total budget. When assessing liquidity for a state, we focus on the resources it is legally allowed to access to fund cash flow requirements. In

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analyzing liquidity, we consider four areas: a)cash monitoring capabilities, b)cash flow predictability, c)internal cash flow generation capacity, and d) external cash flow borrowing. We combine our view of these four areas to arrive at our liquidity score. Below is a description of each of these areas and how they are combined into the overall score.

46. ***(a) Cash monitoring capabilities.*** We analyze states' cash monitoring capabilities to determine whether they include daily monitoring of balances and well-developed forecasting tools that enable swift reaction to imbalances. We also consider the ability to adjust disbursements and collections.

47. ***(b) Cash flow predictability.*** We evaluate the fluctuation in receipts and disbursements during the year and determine mismatches and how these change from year to year.

48. ***(c) Internal cash flow generation capacity.*** States often have what we view as broad discretion to access liquidity from other than general funds. We examine whether all funds are immediately available--which provides a high degree of flexibility--or whether legislative or executive authority is required to shift resources from other funds to cover key operating fund requirements. We also factor into our review of liquidity the level of reserves available for cash flow purposes across state government.

49. ***(d) External cash flow borrowing.*** We review borrowing for operations and how that has fluctuated over time.

50. Table 14 details the characteristics that we would generally expect to see at different levels for our liquidity score resulting from the combination of the above factors. We expect that a single state would exhibit most but not all of the characteristics listed.

Table 14 - As described in paragraphs 46-50

Liquidity	
Score	
1	Strong cash monitoring capabilities including regular cash flow forecasting; broad authority to access liquidity from pooled funds which allows for highly predictable cash management; receipts and disbursements are aligned; broad authority to adjust disbursements; little or no reliance on external borrowing and if necessary is conducted with ease.
2	Well-established cash monitoring capabilities and periodic cash flow forecasting. Access to pooled cash is available but may be limited to certain funds; receipts and disbursements may not be totally aligned during the fiscal year; well-defined contingencies are in place to augment internal resources; external borrowing is conducted with ease and stable over time relative to the size of the budget; ability to manage disbursements may be limited in some areas.
3	Cash monitoring is generally comprehensive but cash forecasting may be less established; access to internal liquidity is not sufficient to address timing or is restricted; recurring receipts and cash disbursements are not aligned and there may be variability that leads to external borrowing requiring regular adjustments through the course of the budget year, internal estimation of cash flow needs difficult to predict.
4	Cash monitoring is weak and cash forecasting is not done on a regular basis. Liquidity is weak and needs are volatile at times; state is meeting certain obligations only by deeply delaying payment on other obligations; ability to access pooled cash is limited; external borrowing is common and not predictable in terms of size and frequency; borrowing for cash flow is expanding relative to the size of the budget and may cross fiscal years.

3. Tax/revenue structure

51. Levying and collecting taxes has been a key tool for states in managing through a range of economic cycles. We believe that a state's tax structure, including the range of taxes, the ability and willingness to adjust them, and how they align with economic activity within its borders is an important credit factor. Our analysis of revenue structure considers the diversity of revenue sources (table 15) and the revenue adjustment history (table 16). In making these assessments we focus our analysis on the principal operating funds of the state.

52. ***Diversity of revenue sources.*** We evaluate the range of taxes levied and other revenues generated by each state and what the relative contributions are from each source. This includes a review of both the tax base and the rates to understand how they align with a state's economy and ultimately how they affect the volatility and predictability of

revenues.

Table 15 - As described in paragraph 53

Revenue Diversity Score	
Score	
1	State has contributions from at least two major sources that generally contribute more than 15%-30% each.
2	State relies on one key revenue source, generally providing more than 65% to fund operations but revenue aligns with key economic strengths of the state.
3	State relies on one key revenue source for more than 65% of revenues; key revenue source does not align closely to economic fundamentals.
4	State relies on one revenue source to fund more than 90% of operations.

53. ***Revenue adjustment history.*** While we measure the legal framework for levying taxes and adjusting the tax rate and base as part of the government framework, we assess a state's practical ability and willingness to use these powers if needed as part of our assessment of the state's financial flexibility and performance.

Table 16 - As described in paragraph 54

Revenue Adjustment History	
Score	
1	Strong track record of revenue adjustments in our view; adjustments are timely.
2	There is demonstrated track record of revenue adjustments in our view; response is generally less timely and may lag by a fiscal year.
3	Revenue adjustments are made periodically but they are not timely and may lag structural imbalance by more than a year.
4	Revenue adjustments are not implemented.

4. Revenue forecasting

54. State revenues tend to be volatile during economic downturns because they rely on personal income tax, sales tax, corporate income tax, and other economically sensitive sources. We have observed that these sources tend to react more swiftly to changing economic conditions. As a result, the revenue forecasting process is part of our review for each state. Specifically, we review what economic sources and assumptions provide the foundation for the forecast and how the economic assumptions and forecast compare to those of other states. We also evaluate the process in place to establish the forecast to determine if it is an independent process or a forecast negotiated by the executive and legislative branches. We analyze forecasts to determine whether they align with the current economic environment and historic performance.

Table 17 - As described in paragraph 55

Revenue Forecasting	
Score	
1	There is a formal independent revenue forecast that guides budget development and the forecast is reviewed several times during fiscal year.
2	There is a formal and detailed revenue forecast; may be done by executive and legislative branch separately with an attempt to align the forecast in advance of budget approval based on economic considerations.
3	The revenue forecast is detailed and comprehensive but the final outcome may be "negotiated" and there is some level of political influence over outcome.
4	There is no formal revenue forecasting process.

5. Service levels

55. The range and level of services provided by each state varies significantly. We believe that assessing expenditure composition and how this has changed over time is useful in assessing service levels and flexibility. Our analysis

focuses on the legal requirements to provide services, the discretion available in providing services, and the predictability of the services provided, as detailed in table 18.

56. ***Legal requirements to provide services.*** We believe that the legal framework for funding various service responsibilities is important to the extent that it creates or constrains budget flexibility. Spending for Medicaid is an example of a federally mandated program that is costly and usually difficult to adjust. Certain states provide a high level of services under the program, while others provide less. These differences will affect overall budget flexibility. Other services may have a constitutional or statutory basis of funding. Funding for K-12 education is a constitutional obligation for nearly all states. A state defending a legal challenge to its funding system could face additional spending requirements, which could diminish flexibility.

57. ***Discretionary vs. non-discretionary expenditures.*** When evaluating the range of services provided we analyze which are non-discretionary (mandates, statutory, constitutionally required, or contractual) and difficult to reduce versus those that are discretionary.

58. ***Predictability.*** When evaluating state spending, we review how predictable the expenses are: do they fluctuate with the economic environment (social service programs are an example), are they regularly tied to other statutory actions (stringent prison sentencing laws translating to higher prison costs), or influenced by other policies or factors specific to a state (debt vs. pay-as-you-go policies or collective bargaining agreements).

Table 18 - As described in paragraphs 56-59

Service Levels	
Score	
1	Expenditures are predictable as measured by variance from budget expectations; high degree of flexibility to reduce services/expenditures in most program areas. This flexibility is measured in terms of the legal ability and our view of the political willingness to make adjustments.
2	Expenditures are generally predictable as measured by variance from budget expectations, but may experience cyclical trends; ability to cut services and expenditures is good in our view, but may not extend to all program areas from a practical or legal standpoint.
3	Expenditures tend to be cyclical and less predictable with variances relative to budget common in certain program areas; ability to cut services/ expenditures is adequate in our view but many program areas are excluded from a practical or legal standpoint.
4	Expenditures are very cyclical and unpredictable and variances relative to the budget are common for many program areas; the state has exhibited a persistent reluctance or inability in our view to reduce expenditures and service levels.

6. Structural budget performance

59. Table 19 details our assessment of structural budget performance. We consider a state's budget to be structurally balanced if recurring revenues equal or exceed recurring operating expenditures. We recognize that structural balance is difficult to maintain during economic downturns when revenue performance is weak and support expenses may increase, but we believe it is also difficult during periods of strong economic growth when excess revenue can lead to expansion of programs and services. Most state governments that do multi-year financial planning will almost always show out-year gaps regardless of the economic climate as scarce resources are balanced against virtually unlimited spending needs. Periods of imbalance are common for states but we believe that a track record of aligning recurring revenues and expenditures over time is an important element of fiscal performance.

Table 19 - As described in paragraph 60

Structural Budget Performance	
Score	
1	Surpluses are regularly recorded in periods of positive economic growth; surpluses are used to fund reserves and other non recurring items. In periods of economic decline, focus on addressing budget imbalance includes structural solutions (generally more than 50% of the gap) rather than all one time measures.

Table 19 - As described in paragraph 60

Structural Budget Performance (cont.)	
2	Balanced operating results are typically achieved during periods of positive economic growth; commitment to reserves and non-recurring program areas is not formalized and may not be consistent; in periods of decline, focus on budget balance may be more reliant on non-recurring measures (more than 50% of the gap) to restore balance.
3	Balanced operating results may be achieved in positive economic periods but there is limited commitment to reserves and non-recurring program areas (surpluses largely fund higher recurring spending). In periods of economic and revenue decline, focus on budget balance may be more reliant on non-recurring measures (more than 75% of the gap) to restore balance.
4	There is limited focus on structural budget balance; deficits are regularly carried forward into future fiscal years and reserves are not funded in periods of positive economic growth.

F. Debt And Liability Profile

60. The debt and liability profile is the fifth of the five major factors in our assessment of the indicative credit level. In particular, we review debt service expenditures and how they are prioritized versus funding of other long-term liabilities and operating costs for future tax streams and other revenue sources. We evaluate three key metrics which we score individually and weight equally: debt burden, pension liabilities, and other post employment benefits. For each metric there may be multiple indicators that we score separately and then average to develop the overall score for the metric.

1. Debt burden

61. Standard & Poor's debt ratio calculations for states aggregate all tax-supported debt, including GO bonds, appropriation obligations, and special-tax bonds such as sales, personal income, and gas tax bonds. In general, our tax-supported debt calculation do not include debt that is issued for true enterprises or is self-supported, such as toll revenue bonds if revenues are sufficient to cover debt service costs. (see "USPF Criteria: Debt Statement Analysis," published Aug. 22, 2006). Once we have determined a net direct tax supported debt figure, we calculate various ratios, as indicated in tables 20, 21, 22, 23, and 24.

62. We do not include grant anticipation revenue (GARVEE) bonds in state debt calculations if they are payable solely from dedicated federal revenues. We will also exclude bonds secured by tobacco settlement revenues from state debt calculations if they conform to our stress scenarios for rating such debt and are payable exclusively from settlement revenues. We exclude contingent obligations or moral obligation debt from the tax-supported debt calculation if there has been no state support required and we expect no need for support in the future see ("Moral Obligation Bonds," published June 27, 2006). There have not been a wide range of securitizations of assets or future revenues, but we will evaluate other structures to determine if they should be included as tax supported debt or a contingent liability. Similarly, as the use of public-private partnerships expands, we will evaluate the nature of a state's obligation under various long-term agreements to determine whether the obligation is considered part of a state's tax-supported debt burden or a contingent liability.

63. We examine a variety of ratios to measure debt burden. We score these individually and then average them to develop a score for debt burden. The indicators that we score include:

64. ***Debt per capita (table 20)*** Table 20 shows the scoring ranges for tax-supported debt per capita, based on the population that is served and pays for the debt.

Table 20 - As described in paragraph 65

Tax-Supported Debt Per Capita	
1	Below $500 (Low)

Table 20 - As described in paragraph 65

Tax-Supported Debt Per Capita (cont.)	
2	\$500-\$2,000 (Moderate)
3	\$2,000-\$3,500 (Moderately high)
4	Above \$3,500 (High)

65. ***Debt as a percentage of personal income (table 21)*** We consider the ratio of debt to personal income to be relevant because we believe the capacity to pay is a critical factor in debt analysis.

Table 21 - As described in paragraph 66

Tax-Supported Debt/Personal Income	
1	Below 2% (Low)
2	2%-4% (Moderate)
3	4%-7% (Moderately high)
4	Above 7% (High)

66. ***Debt service as a percentage of expenditures (table 22)*** We believe the ratio of debt service to expenditures is an important indicator, as it indicates the level of inflexibility that debt places on the budget. The ratio of debt service to operating revenue and debt service to operating expenditures usually track closely, although distortions in the first ratio can occur if nonrecurring revenues are factored into state revenue bases.

Table 22 - As described in paragraph 67

Tax-Supported Debt Service As A % of General Government Spending	
1	Below 2% (Low)
2	2%-6% (Moderate)
3	6%-10% (Moderately high)
4	Above 10% (High)

67. ***Debt to gross state product (table 23)*** We use the ratio of debt to gross state product widely for sovereign and non-U.S. public finance and we believe it should allow enhanced comparability for government ratings.

Table 23 - As described in paragraph 68

Tax-Supported Debt As A % Of Gross State Product	
1	Below 2% (Low)
2	2%-4% (Moderate)
3	4%-7% (Moderately high)
4	Above 7% (High)

68. ***Debt amortization (table 24)*** Serial amortization is a common feature for government debt issuance in the U.S. We believe that debt service relative to the size of the budget is an important affordability measure but needs to be evaluated in the context of the overall debt amortization schedule. A low debt service carrying charge ratio could simply be a function of a very slow 30-year amortization, which we view differently from a 15-year schedule. We consider the benchmark of 50% of principal repaid in 10 years to be average. This indicator assumes serial debt amortization where rapid amortization can allow new debt to be issued without affecting debt burden measures.

Table 24 - As described in paragraph 69

Debt Amortization (10 year)	
1	80%-100% (Very Rapid)
2	60%-80% (Rapid)

Table 24 - As described in paragraph 69

Debt Amortization (10 year) (cont.)	
3	40%-60% (Average)
4	Less than 40% (Slow)

2. Pension liabilities

69. We review state pension liabilities and trends related to funding progress. This analysis focuses on the principal state pension plans and includes changes in assets and liabilities, funded ratios, and unfunded actuarial accrued liabilities. Pension asset valuations can change, as can the actuarial liabilities. A state's commitment to funding the annual required contribution and how substantive and volatile these contributions are relative to the total budget are key credit considerations. We have historically not included pension liabilities in our calculation of tax supported debt ratios due to variation in how the liabilities are calculated. Specifically, under current accounting standards, there are a broad range of actuarial methods and assumptions allowed by the Governmental Accounting Standards Board (GASB) for governments in the U.S. and interest earnings assumptions differ by state. However, we have consistently analyzed and reported pension liabilities for states relative to population and personal income to allow a comparative framework for evaluating these liabilities relative to state tax supported debt. Our assessment of pension liabilities includes the following four indicators which are averaged to develop an overall score:

- Pension funded ratio (table 25),
- Pension funding levels (table 26),
- Unfunded pension liabilities per capita (table 27), and
- Unfunded pension liabilities relative to personal income (table 28).

We typically derive this information from audit reports as well as actuarial reports.

Table 25 - As described in paragraph 70

Pension Funded Ratio	
Strong (1)	90% or above
Above average (2)	80%-90%
Below average (3)	60%-80%
Weak (4)	60% or below

Table 26 - As described in paragraph 70

Pension Funding Levels	
Strong (1)	Consistently funds annual required contributions (ARC).
Above average (2)	Funds ARC in most years but occasionally contributes less.
Below average (3)	Has not funded ARC for 3 years.
Weak (4)	Has not funded ARC for more than 3 years.

Table 27 - As described in paragraph 70

Unfunded State Pension Liabilities Per Capita	
Strong (1)	Below $500
Above average (2)	$501-$2,000
Below average (3)	$2,001-$3,500
Weak (4)	Above $3,500

Table 28 - As described in paragraph 70

Ratio Of State Pension Liabilities To Personal Income	
Strong (1)	Below 2%
Above average (2)	2.1%-4%
Below average (3)	4.1%-7%
Weak (4)	Above 7%

3. Other post employment benefits (OPEB) risk assessment

70. Our analysis of OPEB liabilities is similar to that of pensions, although our overall assessment is a combined one as detailed in table 29. The legal and practical flexibility that a state has to adjust these liabilities and the overall strategy to manage the cost of these benefits will affect future contribution rates and budgetary requirements. All states are now reporting OPEB liabilities pursuant to GASB Statement 45. Currently, OPEB expenditures are funded generally on a pay-as-you-go basis. Under GASB Statement 45, liabilities attributable to OPEB and the annual required contribution for employers are actuarially determined and reported.

Table 29 - As described in paragraph 71

OPEB Risk Assessment	
Low (1)	Limited benefits provided or benefit consists of allowing some participation in the health plan (cost paid entirely by the retiree, implicit subsidy recorded), high level of discretion to change benefits, pay-go costs are not significantly different from the actuarial required contribution.
Moderate (2)	Moderate/average liability relative to other states, proactive management of the liability in our view, some flexibility to adjust benefit levels, contributions in excess of the annual pay-go amount have been made in order to accumulate assets to address the liability.
Elevated (3)	Above-average liability relative to other states, options to address the liability are being considered but plans are not well-developed in our view, there may be some flexibility to adjust benefits but changes have been limited.
High (4)	High liability relative to other states, high level of benefits that are viewed as inflexible based on statute/constitution/contract terms, a lack of management action to address the liability in our view which will lead to accelerating pay-go contributions.

APPENDIX

On May 11, 2010, Standard & Poor's published "Request for Comment: Methodology For U.S. State Ratings". We received several responses from market participants addressed to the criteria comments mailbox. The comments addressed a wide range of issues that extended beyond the questions asked in the RFC but in general there was a positive response to the enhanced transparency and greater clarity of the proposed criteria.

- On the first question regarding separating the GO criteria for U.S. states from the broader GO criteria, nearly all market participants agreed with this.
- On the second question, regarding whether the proposed rating factors and individual metrics focus on the key factors affecting state government, most market participants agreed that the information was useful in evaluating state creditworthiness. There was a range of opinions on the equal weighting of factors. There was also feedback that the security features of state debt and default history of the sector should be highlighted more significantly.
- On the third question regarding scoring each individual metric in order to establish an overall score for each factor and translating that score to an indicative credit level, there was some feedback that the scoring would allow for greater transparency. Other market participants expressed reservations about how the scores would be utilized.

There were other comments and observations on specific aspects of the methodology. We have analyzed each comment and have made some adjustments to the methodology. The main changes between the criteria presented in the Request For Comment and the final criteria as described in this article are the following:

- We have expanded the discussion of institutional framework (see "Standard & Poor's use of stress scenarios and calibration of state criteria") to highlight that the priority of payment, security features and the state sector's strong commitment to their legal obligation to pay debt are fundamental to our analysis of the state sector and contribute to its high credit profile.
- We have added additional clarity to the section "Overriding factors impacting state ratings."
- We have streamlined the metrics in the economic section and explained our approach to analyzing economic indicators for US states in a global context.
- We have adjusted the "reserve" section to better capture funding patterns as well as policy.
- We have changed the "future debt" metric as part of the Debt and Liability Profile score. We believe that forward looking measures are important to credit analysis and we will instead include this in the section "Overriding factors impacting state ratings" (see paragraph 16).
- In the area of pension liabilities, we added two additional measures, state pension liabilities per capita and state pension liabilities relative to personal income, to our assessment of this factor. We eliminated the three year average when assessing the funded ratio since nearly all state pension plans are subject to smoothing currently which phases in gains and losses over a multi year period.

GLOSSARY

Accelerated payment provisions. This term refers to an investor's ability to require early repayment of principal that is not scheduled based on certain events, with repayment required on a compressed timeframe, generally less than 180 days.

Bank bond exposure. Refers to bonds purchased by a bank following a failed remarketing (outlined under the terms of a letter of credit reimbursement agreement or a standby bond purchase agreement). The bonds typically have a significantly higher interest rate and a significantly shorter maturity schedule than the original bond.

Balanced budget. Many states have balanced budget requirements that require them to pass a budget that provides sufficient revenues to fund all expenditures at the time of passage.

Budget reserves. Excess financial resources accumulated either formally or informally to address budget balance or other requirements of a government.

Independent revenue estimating process. A forecast developed by a group of subject matter experts which can include economists, business leaders and practitioners based on knowledge of current economic conditions and the existing tax structure.

Contingent obligations. Includes explicit or implicit obligations that a state may incur under certain circumstances and that could affect its financial position if the state absorbs these obligations and is fully responsible for them. Contingent obligations are generally not recorded in the state's balance sheet and often are not disclosed as off-balance sheet liabilities.

Debt service. Principal and interest payable during the fiscal year.

Deficit. The result achieved when operating revenues and recurring transfers in are less than operating expenditures and recurring transfers out.

GAAP. Generally accepted accounting principles are the common set of accounting principles, standards, and procedures that most governments utilize. For local and state governments, GAAP is determined by the Governmental Accounting Standards Board (GASB).

Gross state product (GSP). A measurement of the economic output of a state. It is the value added in production by the labor and property located in a state. GSP for a state is the sum of the gross product originating in all industries in a state. GSP is considered the state counterpart of the nation's gross domestic product (GDP), the U.S. Bureau of Economic Analysis' featured measure of U.S. output.

Moral obligation debt. Moral obligation debt represents a commitment by a state to seek future appropriations for payment of debt service or replenishment of a debt service reserve fund should it fall below its required level.

Other post employment benefits (OPEB). Includes retiree health care, along with dental, vision, disability, long-term care, and life insurance benefits.

Revenue forecast. The forecast developed by a state that underlies its budget. This would be the expected revenue based on assumptions reflecting the conditions a state expects to exist and adjustments (authorized/proposed) to the rates/fees or the base they are levied on.

Self-supported. Debt is considered self-supported if it is funded by an enterprise operation without any subsidy or support from the state government.

Structural budget balance. Results from matching recurring operating revenues to recurring expenditures. In measuring structural budget balance we do not include nonrecurring intergovernmental transfers, proceeds from the sale of assets, and non-recurring capital expenditures.

Tax-supported debt. When calculating tax-supported obligations, we include GO bonds, appropriation obligations, and special-tax bonds such as sales, personal income, and gas tax bonds. We typically include debt secured by revenues or assessments and charges levied state wide. In general, our tax-supported debt calculation will not include debt that is issued for true enterprise or self-sustaining purposes, such as toll revenue bonds if revenues are sufficient to cover debt service costs (see "USPF Criteria: Debt Statement Analysis," Aug. 22, 2006). We do not include grant anticipation revenue (GARVEE) bonds in state debt calculations if they are payable solely from dedicated federal revenues. We will also exclude bonds secured by tobacco settlement revenues from state debt calculations if they conform to our stress scenarios for rating such debt and are payable exclusively from settlement revenues.

Related Criteria And Research

- Principles Of Corporate And Government Ratings, June 26, 2007
- USPF Criteria: GO Debt, Oct. 12, 2006
- USPF Criteria: Appropriation-Backed Obligations, June 13, 2007
- USPF Criteria: Financial Management Assessment, June 27, 2006
- USPF Criteria: Debt Statement Analysis, Aug. 22, 2006
- Pension Funding And Policy Challenges Loom For U.S. States, July 8, 2010
- USPF Report Card: 2009 State Debt Review: Significant Challenges Lie Ahead, Dec. 16, 2009
- U.S. States' OPEB Liabilities And Funding Strategies Vary Widely , June 3, 2009

- Methodology For Rating International Local And Regional Governments, Sept. 20, 2010

These criteria represent the specific application of fundamental principles that define credit risk and ratings opinions. Their use is determined by issuer- or issue-specific attributes as well as Standard & Poor's Ratings Services' assessment of the credit and, if applicable, structural risks for a given issuer or issue rating. Methodology and assumptions may change from time to time as a result of market and economic conditions, issuer- or issue-specific factors, or new empirical evidence that would affect our credit judgment.

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January 24, 2011

Outlook: U.S. State And Local Governments Must Navigate Turbulent Conditions To Maintain Credit Stability

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Outlook: U.S. State And Local Governments Must Navigate Turbulent Conditions To Maintain Credit Stability

Many U.S. state and local governments have been making difficult policy and budget choices in an effort to balance their budgets. These actions, along with federal fiscal support, helped credit quality for most U.S. public finance issuers to remain stable in 2010. But because of the slow progress of recovery from the Great Recession, we believe that continued revenue decreases for state and local government may increase fiscal strain on budgets, and monitoring of liquidity will be especially important in 2011. (Watch related CreditMatters TV segment titled, "To Preserve Credit Quality, U.S State And Local Governments Face Hard Choices," dated March 9, 2011.)

Throughout difficult economic periods, including during and after the Great Recession, we have generally seen on the part of state and local governments what we consider to be a very strong commitment to their debt obligations, which for us has been an important credit consideration over time. Although we view budgets as inherently political documents, liquidity and cash management has remained largely apolitical in our view. If we were to observe a change to this or a weakening of issuers' commitment to their debt obligations, we think the credit implications could be significant.

Overview

- State and local governments will likely continue to operate in a constrained revenue environment, with many issuers having to make difficult policy choices.
- Managing liquidity will likely be key for many state and local government issuers.
- Municipal bond market volatility may increase in 2011, creating a more difficult interest rate environment.
- A majority of state and local government issuers rated by Standard & Poor's will likely remain medium to high investment grade.

The diversity of the municipal market defies easy generalization. Standard & Poor's maintains ratings on approximately 17,500 distinct municipal issuers, but this does not encompass the entire municipal market, which tends to be self-selecting. That is, municipal issuers of lower credit quality tend not to request ratings. Correspondingly, the universe of rated municipalities is, as a general proposition, more creditworthy and, of course, less likely to default. In terms of credit performance, in the majority of cases, we believe general obligation and other types of direct debts of state and local governments we rate will continue to be retired as scheduled. These debt types frequently hold a legally advantaged status compared to other obligations of these governments.

As an exception to the usual general obligation situation, we occasionally observe that local governments have issued or guaranteed debts intended to finance projects less directly related to traditional core municipal services. Depending upon the structure or the additional budgetary pressure these debts can represent, we have seen examples of these debts coming under material credit pressure.

A significant amount of municipal debt is repaid from the revenues of essential service enterprises; for example, those that provide water or wastewater treatment services. In general, we have observed that the issuers of these essential service revenue bonds typically enjoy a strong market position. In addition, revenue bond issuers often have strong rate-raising authority, enhancing repayment capacity.

Another form of municipal debt includes various types of land-backed bonds, many of which are unrated by Standard & Poor's. These bonds, typically repaid from assessments on properties in a residential development, are often intended to finance infrastructure for incomplete residential development projects. Unrated debt issued for incomplete property developments may, as in recent years, continue to exhibit higher rates of distress, in our view.

We expect that there may be an increased number of rating downgrades in 2011, yet we believe the majority of state and local government issuers we rate will likely retain solidly medium-to-high investment grade ratings. Setting the stage for 2011 is the presence of several notable conditions that, in our view, almost all state and local government issuers will confront. Among these are:

- An economic recovery that will likely continue to be weak generally;
- The persistence of budget gaps requiring difficult policy decisions;
- The potential for a more challenging bond market for issuers;
- The heightened role of financial liquidity as a credit quality bellwether among municipal issuers, particularly for those with severe structural budget misalignments and issuers of certain types of variable-rate debt;
- A new regulatory regime as a result of the Dodd-Frank Financial Reform legislation; and
- An increased focus on issuer pension and other retiree benefits packages.

A Weak Economic Recovery May Continue To Depress Revenues

We expect the difficult economic environment to continue for many municipal issuers in 2011. The severity and nature of the recent recession suggests to us that economic recovery could be slow. Standard & Poor's forecasts U.S. economic growth of 3.0% during 2011, below the average 5.0% GDP gain observed during the last eight economic recoveries from recession dating to the early 1960s (see "Economic Research: U.S. Risks To The Forecast: Ring Out The Old Recession, Bring In The... ?" published on Dec. 21, 2010 and "U.S. Economic Forecast: A More Prosperous 2011?", published on Jan. 5, 2011 on RatingsDirect on the Global Credit Portal). The current economic growth forecast for 2011 of 3%, if it were to materialize, may not be sufficient to have an appreciable effect on the unemployment rate. According to our baseline economic forecast, the national unemployment rate is only projected to decline to 9.4% in 2011 from 9.7% in 2010. Reduced spending, be it from lower incomes or from saving more, translates to lower overall demand, employment, and tax revenues.

We believe that the housing market is likely to continue to provide an additional source of economic pressure. According to the 20-city S&P/Case-Shiller Home Price Index, as of October 2010, home prices remain 29.6% below their July 2006 peak. Standard & Poor's believes further deterioration is possible, if not likely, and could rival the April 2009 trough of 33% below the peak (see "U.S. Weekly Financial Notes: Doubling-Up On A Double Dip" published on Dec. 29, 2010). With the lag between market prices for real estate and the assessment process relevant to property tax revenues, in our view, home price trends offer further evidence of a relatively long and slow recovery for state and local government finances.

Even if a more robust economic recovery takes hold, we expect that state and local government revenues may continue to demonstrate a muted response to the recovery owing to reduced federal aid and the expiration of previously adopted temporary tax increases. This is in addition to the typical historical lag between economic growth and improved state and local government tax revenues. On the other hand, according to the U.S. Census Bureau, third quarter state tax receipts increased 4.8% ($7.6 billion) and combined state and local tax revenues grew 5.2% ($284.3 billion) compared to the same period last year. Year-to-date total state tax revenue, which was up 1.26% through September 2010, posted the first annual increase since 2008.

Ongoing Budget Gaps And Difficult Policy Decisions Continue To Challenge Municipal Issuers

If the economic recovery staggers in combination with the above-mentioned revenue reductions, we think that fiscal strain may evolve into outright budget crises for particular locales that have low reserves and thin financial liquidity. Most U.S. states and local governments are required by law to balance their annual budgets, which can necessitate, in the absence of extraordinary federal support, difficult service cuts or tax increases when resources are insufficient to fund baseline spending trends. If this occurs, policymakers face difficult decisions representing zero-sum tradeoffs among stakeholders, many of whom will have contradictory objectives. We have seen that cuts to certain government services in favor of others can be contentious, and ongoing high rates of unemployment place pressure on states' social service infrastructure networks. Some governments may (for example) underfund contributions to their pension systems rather than cut, say, current public safety services in an attempt to defer the most difficult of decisions.

Because these decisions reflect an issuer's financial management, even if the issuer who makes such decisions does not face immediate, severe credit challenges, we could see an erosion of long-term credit ratings among state or local governments that choose to adopt what we consider to be short-term measures that carry longer-term credit implications.

Even with difficult policy choices, Standard & Poor's continues to expect that most issuers that we rate will retain strong or even very strong capacity and willingness to meet their debt obligations. The bulk of most states' general funds are spent on education and human services, including health care and the funding of federal matching requirements for Medicaid. Considering that the median debt service among U.S. states was 3.0% of total expenditures (as a portion of governmental funds in fiscal 2009), redirecting these funds away from debt service would yield relatively little in freed up cash flow.

Beyond achieving relatively little savings, we believe that a defaulted debt service payment would likely result in a loss of access to the capital markets, which has predominantly been the source of funding for capital and infrastructure projects for state and local governments.

For some governments, capital market access can also be critical for funding operations. Many governments' cash receipts do not align with their disbursements schedules. Governments often manage this mismatch by issuing short-term notes to smooth their annual cash flow cycles. For these governments there is a strong incentive to retain the creditworthiness necessary to sell cash flow notes in order to sustain even the most basic of functions.

Some of the states with the most severe projected budget gaps, notably California and Illinois, have structural budget reform on their agendas for the upcoming legislative sessions. Reconciliation of structural revenue and spending misalignments may not be achieved in one fiscal year, but initial indications in some states suggests that the discussion may continue in earnest during 2011.

Debt Markets: A Changed Landscape With Limited Credit Implications

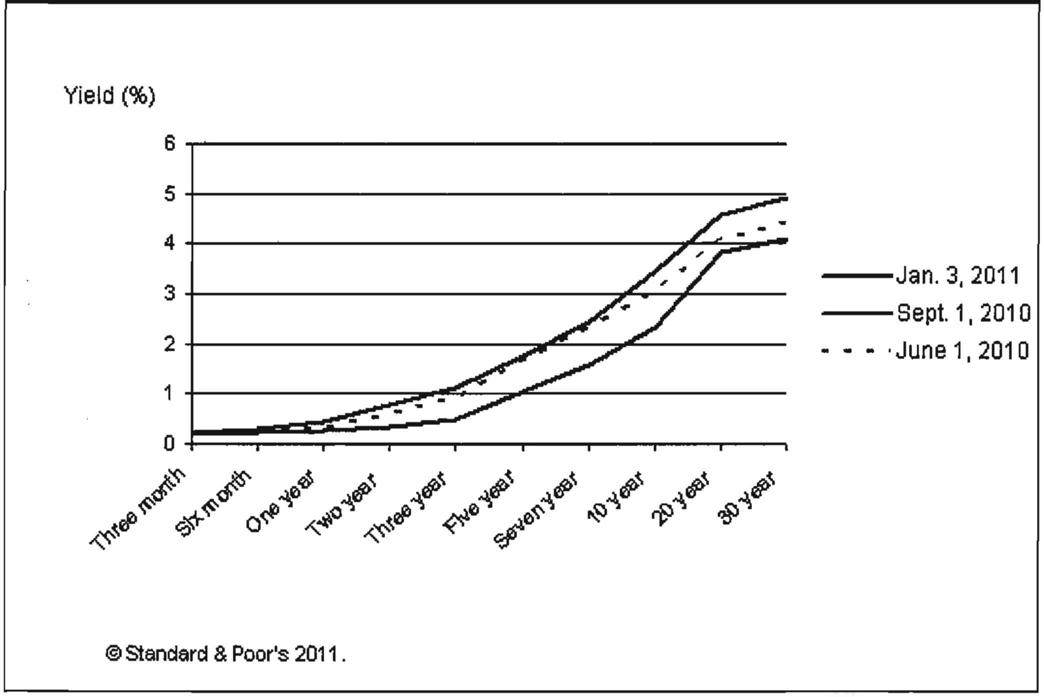
We expect the possibility of greater market volatility in the prices for municipal securities in 2011. We believe that notable rating downgrades, specific instances of severe fiscal problems, and a generally softer environment for municipal credit could occur. We also believe, however, that fundamental credit performance throughout the market -- as measured by default rates relative to debt outstanding in the market -- will likely remain mostly stable with the possibility for a modest uptick, in light of the difficult economic and revenue environment. In 2010, the S&P/Investortools Municipal Bond Index, which includes $1.27 trillion of municipal debt outstanding, saw newly defaulted bonds of $2.65 billion, or 0.21% of the index. This is actually somewhat of a decline compared to 2009, in which there was $2.9 billion of new defaults. Overall, the balance of defaulted bonds in the index rose to $6.89 billion (0.54% of the index) from $5.14 billion in 2009 (0.42%). Of the defaulted bonds in the index, 75% are conduit revenue bonds that actually reflect corporate credit quality (such as certain industrial development revenue bonds), land-secured financings, or health care related issuers. None of the defaulted bonds are of traditional general obligation debts of states or localities. There was only one default among issuers with Standard & Poor's ratings in 2009 (a non-investment grade housing issue) and three in 2010 (all were non-investment grade).

Municipal issuers could face selling bonds to a narrower investor base in 2011 compared to 2009 and 2010. The Build America Bond (BAB) program expired at the end of 2010, and without it, we expect issuers to revert to selling traditional tax-exempt debt, which tends to appeal only to investors subject to U.S. federal income taxes. We believe an increased supply of tax-exempt paper in the market could result in higher interest rates for issuers in need of financing.

Although noteworthy for the municipal market, expiration of the BABs program has little direct bearing on the credit quality of most issuers in our view. By allowing issuers to sell federally subsidized bonds to taxable investors, the BAB program broadened the municipal investor base. If the ability to issue taxable debt siphoned the overall supply of debt away from the tax-exempt market, it likely benefited issuers in the form of lower tax-exempt yields during the last two years.

Late in 2010 municipal tax-exempt rates ('AAA'; 30-year) edged higher and surpassed those of 30-year Treasury bonds, according to Bloomberg data. In our view, any number of factors has likely been causing the yield curve to steepen; among them could be the extension of the Bush-era federal income tax rates, anticipated expiration of the BAB program, or concerns about credit risk in the municipal market. Straightforward supply and demand dynamics could also be a factor. Toward the end of 2010, total municipal issuance reached $431 billion, surpassing the previous record in 2007 when $429.9 billion was issued. A more sanguine interpretation of market rates is that longer-term Treasury rates are higher in response to investor optimism about the economy, and municipal rates are simply tracking the Treasury market.

U.S. Municipal Bond General Obligation 'AAA' Yield Curve



Adequate Financial Liquidity Is A Key To Credit Stability; Refinancing Risk Is Possible

Potential for inadequate liquidity serves as a bellwether to the risk of immediate and potentially severe credit deterioration, particularly for those with significant budget misalignments and issuers of certain types of variable-rate debt, in our view. Ultimately, the possibility of having insufficient cash to meet debt obligations is at the heart of our credit analysis. In 2011, we believe there is a heightened risk among some issuers that protracted multi-year structural budget deficits may culminate in insufficient cash flow for operations. We observe that credit pressure can become acute when, facing a significant budget gap, there is incomplete fiscal adjustment coupled with inadequate access to cash. Such a predicament could fit the profile of -- and be a precursor to -- an issuer facing a rating downgrade.

For states, budgets provide the legal mechanism by which funds are appropriated. Unless budgeted spending is reduced or taxes are increased in the face of underperforming revenue, states tend to tap reserves, engage in internal cash borrowing, or defer certain disbursements to sustain operations mandated by budget laws. Depending upon their starting cash positions, some states (and local governments) have fewer of these options than others. For many states, fiscal 2012, which for most states begins on July 1, is the fourth consecutive budget year in which a sizeable budget gap must be closed. Our initial analysis suggests that total state projected budget gaps may exceed $100 billion and could approach as much as 20% of total state budgets. Fiscal 2012 could be the fourth consecutive year in which total state budget gaps are projected at $100 billion or more. States that fail to make the necessary budget adjustments and whose sources of liquidity approach depletion could face downgrades.

We have seen states occasionally generate fiscal and cash flow relief by withholding payments to (or extracting payments from) local agencies. State transfer payments are an important source of revenue for many local governments around the country, particularly school districts. When state liquidity is sufficiently stressed, we have observed that state governments occasionally defer disbursements to local agencies, even when those disbursements are budgeted. As a result, cash and liquidity management, including scenario analyses, can be an important part of credit stability at the local level during the current phase of the economic cycle.

Insofar as state governments withhold expected funding or shift service mandates to local levels of government, budget pressures at the local level could be compounded. We believe that local governments, with a relatively greater reliance on property tax revenues, could particularly experience losses from the real estate downturn of the past two to three years in 2011, given the lag in assessment processes. If this coincides with state funding reductions or increased service delivery responsibilities, we believe there is a potential for greater budget stress among some local governments. Those in this predicament could, in our view, face among the most difficult budget choices going into fiscal 2012.

Another type of liquidity-based credit risk we see for 2011 relates to variable-rate debt exposure. When the dismantling of the approximately $200 billion auction-rate securities (ARS) market occurred in 2008, many issuers restructured these debts into variable-rate demand obligations (VRDO). The VRDOs typically require third-party liquidity support, which is frequently sold to issuers by banks in three-year agreements. As 2011 approached, Bloomberg data indicated that more than $100 billion in bank liquidity facilities are estimated to expire. Given the higher cost of bank liquidity, some issuers have refinanced their obligations into alternative variable-rate structures. These alternatives generally have a blend of traits from bond anticipation notes (BANs), extendible commercial paper, and traditional VRDOs. We are also seeing a trend toward direct purchase of obligations by banks subject to the terms of some form of purchase agreement. Under some of these structures, the potential for accelerated repayment causing sudden and significant demands on an issuer's liquidity could have credit implications. (Please see the article "Credit FAQ: Changes And Challenges In The Variable-Rate Debt Market," published March 10, 2010). We anticipate this will likely be a prevalent analytic factor for issuers with this exposure in 2011.

Financial Reform: A Continuation Of Existing Trends In The Municipal Sector

We saw the financial crisis begin a shift in the relationship between municipalities and banks, as bank liquidity and credit availability became more limited throughout the economy. We believe the Dodd-Frank financial reform legislation will likely encourage this trend because we expect higher capital requirements for banks in the future. During the crisis, we saw a number of municipalities maintained portions of their debt in short-term instruments and confronted reduced access to low-cost bank liquidity support. In response, governments began to utilize versions of the aforementioned new variable-rate debt structures. These structures frequently sell in the market as short-term securities to be retired from the proceeds of remarketing offerings. Instead of depending on external bank liquidity to backstop a market disruption, the new structures tend to depend on sustained investor confidence. Consistent with this evolution in the municipal market, Dodd-Frank appears to facilitate a longer-term change in the relationship between municipal issuers and investors by giving investors more prominence on the Municipal Securities Rulemaking Board. (Please see the article, "U.S. Financial Regulations: Positive Change Amid Uncertainty And Missed Opportunities", published on Aug. 5, 2010). In general, we believe that use of these debt structures increases an obligor's market confidence sensitivity and the importance of financial liquidity in its credit profile.

Pension Scrutiny To Continue And Intensify

Significant market losses in 2008 weakened state and local government pension funding levels. We have seen the steep losses in asset values and large unfunded estimated pension liabilities receive considerable attention and have led some commentators to express concern about governmental solvency. In light of asset market volatility and as the public dialogue concerning off-balance-sheet liabilities has progressed, underlying pension plan assumptions, such as rates of return on invested plan assets, have come under scrutiny (please see "Pension Funding And Policy Challenges Loom For U.S. States" published July 8, 2010).

Several states have embarked on pension reform initiatives, including or considering steps such as increasing employee contributions to pension asset trusts, raising retirement ages for benefits eligibility, or outright benefits reductions. Reform efforts of various governments are at different stages and, in some cases, we believe the implications of the initiatives are mixed. For example, a re-examination of, and potential downward adjustment to, a particular pension plan's assumed rate of return could have the effect of magnifying the estimated unfunded pension liabilities. Even reform that contains the growth of long-term pension liabilities through the creation of new benefit plan tiers or the introduction of partially defined-contribution plans for employees hired after a certain date could, in our view, entail risk to the sponsoring government's budget. Although restructured pension plans that include new tiers or hybrid (partially defined contribution) arrangements could make pension benefits more affordable in the longer run, we believe that the new structures could in some cases deprive existing pension plans of additional needed contributions in the near-to-medium term. Once new benefit plan tiers are created, current contributions are typically deposited in the asset trust funds of the new plans and are legally not available to the closed plans.

In our view, governments' overall liability profile encompasses pension and other long-term liabilities as well as bonded debt. We believe that pension and other retirement liabilities may represent a source of material credit pressure in the years to come but, in most cases, are not immediately jeopardizing the debt-paying capacities of the governments we rate. However, our analysis also considers whether governments are funding the actuarial-based annual required contributions (ARCs). We believe that those that are not may preserve budget capacity in the near-term while possibly establishing the groundwork for compromised credit quality in the future.

Fiscal Pressure Does Not Necessarily Imperil Debt Payment

Despite a difficult economic and revenue environment, Standard & Poor's believes that very few governments are likely to repudiate their debt obligations. Indeed, we continue to believe that most governments are likely to make the difficult tradeoffs in a limited-resource environment precisely so they may preserve funding for important (sometimes legally required) programs and to protect their credit and market access.

In short, several state and local governments may endure fiscal strain and even budget crises during 2011, but we view these as different from debt crises. Even if headlines occasionally conflate the two, governmental budgets are not necessarily synonymous with debt paying capacity. In our view, budgets and fiscal positions reflect issuers' financial management and are, thus, incorporated into their credit profiles, but they do not tell the whole story.

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March 2, 2011

U.S. Public Finance Defaults And Rating Transition Data: 2010 Update

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U.S. Public Finance Defaults And Rating Transition Data: 2010 Update

(Editor's Note: This is one of a series of articles on 2010 defaults and rating transitions.)

Standard & Poor's Ratings Services has updated its data on the performance and default rates of U.S. public finance (USPF) ratings through year-end 2010. The data suggest to us the following:

- Cumulative average default rates continue to maintain a rank ordering commensurate with the rating category;
- USPF ratings tend to be more stable in higher rating categories; and
- Overall, the USPF sector remains significantly stable in nature and of sound credit quality, although defaults have occurred across all sectors.

As a general proposition, for the years relevant to our study, unenhanced debt (i.e., debt obligations not supported by financial guarantees, structuring techniques, multiple-party features, or other external credit support) rated by Standard & Poor's has shown significant credit stability throughout a broad range of events, including a changed economic environment, federal government mandates, tax reform measures, and any number of influences on general credit.

The study tracked the behavior of unenhanced rated debt obligations from Jan. 1, 1986 to Jan. 1, 2011; aggregate and sector data are also included in this study. The public finance-wide conclusions and the aggregated tables focus on unenhanced debt and exclude public finance structured and housing debt, as debt obligations issued in those sectors typically include some form of enhancement or have ratings that are dependent on multiple obligors. In the sector breakdowns, housing information is shown on an issue basis rather than an issuer basis; methodologically, therefore, we have not included this information with the other public finance data. Credit types included in the study are:

- General obligation,
- Lease/appropriation/moral obligation,
- Special tax (sales, gas, etc.),
- Special district,
- Water and sewer revenue,
- Public power,
- Airports,
- Ports,
- Toll roads and bridges,
- Parking,
- Various types of bond pools,
- Transit,
- Public and private higher education,
- Auxiliary higher education debt,
- Independent schools,
- Hospitals (stand-alone and systems),

- Continuing care, and
- Physicians' practices.

2010 Performance

Three USPF (non-housing) issues defaulted in 2010, compared to an annual mean of 1.68 and a median of 1 default since 1986 (see charts 1 and 2). All three defaulted issues in 2010 held speculative grade ratings prior to defaulting. The defaulted issues were obligations of issuers in the transportation, health care, and utilities subsectors (one of each). In contrast to 2009, when there were three, there were no defaults of rated housing sector issues in 2010. Since 1986, the median annual number of defaults of housing entities is one. We believe a contributing factor to the absence of a significant number of defaults in 2010, as in other years, is the generally resilient nature of the sector overall. The three USPF issues rated by Standard & Poor's that defaulted during 2010 were:

- Xenia Rural Water District, Iowa's 2006 water revenue bonds;
- Connector 2000 Association Inc., South Carolina's 1998 series A and B toll road revenue senior lien secured bonds; and
- Valley Health System, California's series 1993 certificates of participation (COPs) and series 1996A hospital revenue bonds.

All three issues had been suffering from marginal or insufficient debt service coverage and diminishing reserves for a number of years.

From a rating transition perspective, upgrades exceeded downgrades in 2010, but to a lesser degree than in 2008 and 2009. Upgrades resulting primarily from previously announced criteria changes tapered off significantly in the second half of 2010 (see tables 1 and 2). The absolute number of rating downgrades for 2010, at 451, represented more than a threefold increase over 2008. We believe this reflects the consequences of the recession and reinforces the idea that, despite a continuation of the trend of more upgrades than downgrades, we believe that credit pressures are present and will likely continue into 2011, as the slow recovery and the legacy of the recent recession continue to slow the upward credit quality momentum seen in recent years.

The state and local government sector (tax-secured, appropriation, and utility revenue debt) continued to account for most of our upgrades. Upgrades also exceeded downgrades in the higher education sector, which benefited from what we consider strong performance and demand. Downgrades edged out by one upgrades in the transportation sector, while the not-for-profit health care sector turned slightly positive. The housing sector saw generally negative performance.

Additional information on recent one-, three-, and 10-year ratings performance is detailed in Appendix I.

Chart 1

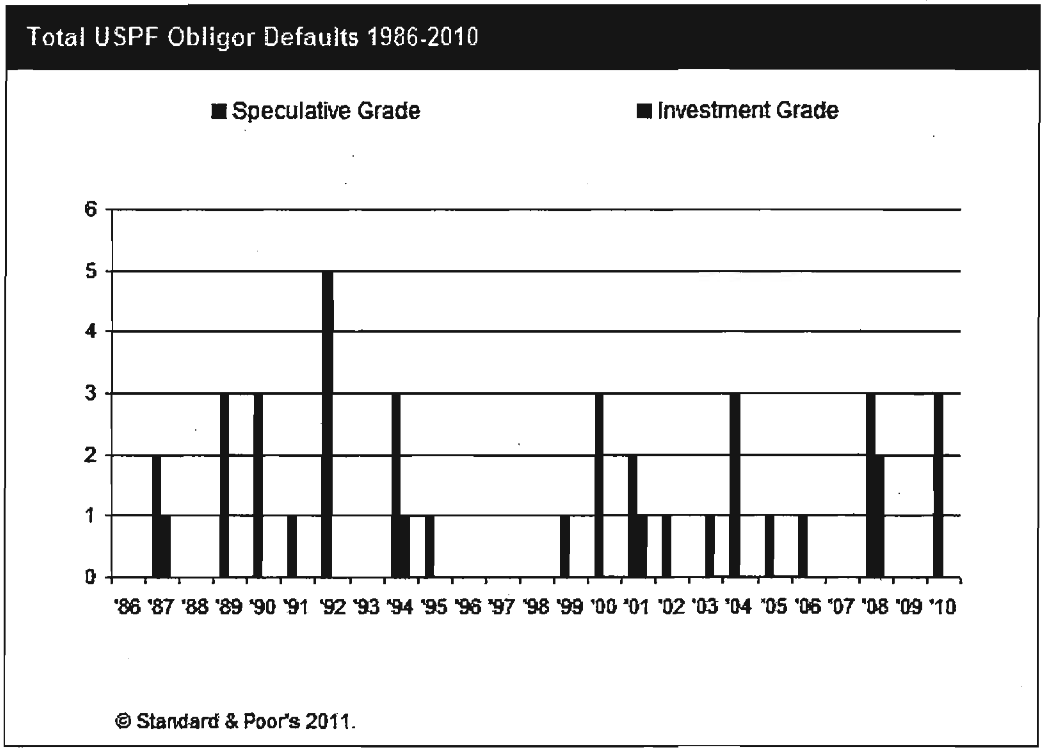
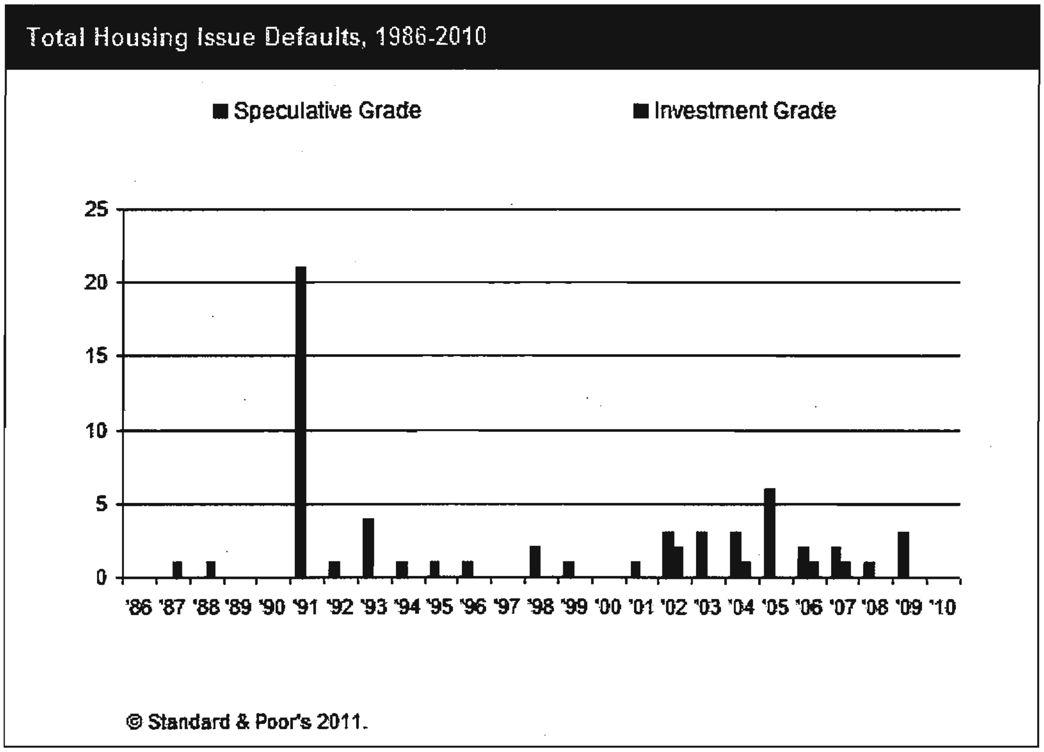

Total USPF Obligor Defaults 1986-2010
Speculative Grade
Investment Grade
6
5
4
3
2
1
0
'86 '87 '88 '89 '90 '91 '92 '93 '94 '95 '96 '97 '98 '99 '00 '01 '02 '03 '04 '05 '06 '07 '08 '09 '10
© Standard & Poor's 2011.

Chart 2



The Outlook For 2011

We believe that a stubbornly slow economic recovery, a continued difficult housing market, an increased urgency to make and implement difficult policy decisions, the potential for a more challenging bond market for issuers, increased regulation and an increased focus on issuer pension and other retiree benefit packages are the headwinds facing municipal issuers as we enter 2011. Given the usual lag between economic conditions and their effect on certain state and local government revenues, we expect governments to find the going tough in the next 12-24 months. We expect the difficult economic environment to continue for many municipal issuers in 2011. Standard & Poor's forecast of U.S. economic growth of 3.1% is well below the average gain of 5.0% seen during the recoveries from the last eight economic recessions dating back to the early 1960s. We believe that if the current economic growth forecast were to materialize it might not prove sufficient to have an appreciable effect on overall job creation. In turn, we expect that a subdued recovery in employment will likely result in reduced spending, ultimately impacting tax revenue. We believe that these effects, coupled with the ongoing adjustments due to the expiration of federal stimulus revenue and extensions require difficult, often contentious decisions be made by issuers to maintain financial standing.

Effective financial management will remain a key component, in our view, arguably increasing in importance, as the effects of the recent economic difficulties are addressed. We believe most governments will be able to make and implement the tough choices that they consider necessary. We also believe, however, that acute problems are possible. While rating downgrades will likely continue to increase in number, we do not expect defaults or downgrades to be as frequent as they have been in the corporate sector as a result of the recession. However, we believe that if governments consistently rely heavily on debt and other one-time solutions and continue to ignore or postpone difficult service provision, revenue enhancement, pension and other postemployment benefit funding needs in the hope that economic growth will bail out their finances, they could be setting themselves up for greater hardship in the near future.

For most of the other U.S. public finance sectors, including higher education, transportation, utilities and public power, we have seen the recent economic recession translate into weakened resources and reduced demand. In our opinion, overall credit quality in these sectors will likely remain under pressure, as the aforementioned slow economic recovery does little to bolster economic activity-driven demand and revenue. In our view, as evidenced by the trends noted herein, not-for-profit health care providers have started to stabilize after a difficult two- to three-year period. However, in our view, uncertainties, primarily related to health care reform, continue to exist, lending a degree of caution regarding the positive momentum. Finally, we think the outlook for the housing sector remains uncertain, as downgrades significantly exceeded upgrades in 2010 for the second consecutive year.

Transition Rates

The study's transition analysis reveals the degree to which ratings change over time. In the transition tables the vertical axis shows the rating at the beginning of the year, the horizontal axis the rating at the end of the year. If ratings never changed, 100% would appear along the diagonal. We believe the data show that, generally speaking, public finance ratings were highly stable during the period, particularly at the uppermost end of the scale (see tables 3 through 7). At the 'AAA' level, for example, about 97% of ratings during the relevant years remained at 'AAA' one year later as shown in table 3. At 'BBB', however, ratings were about 87% likely to be at the same level a year later. During the period studied, higher rating categories experienced higher rating stability, without exception. Generally, for ratings 'A' or lower, the numbers to the left of the diagonal are greater than those to the right (excluding ratings that have been withdrawn, which are designated as NR), showing a trend of more upgrades than downgrades over the years. The same general trend is borne out by examining rating transitions by modifier, although we believe the sample size renders any conclusions tentative, particularly at the speculative grade levels (see tables 4 and 6). Across sectors, we observe the general trend of ratings volatility increasing as credit quality declines, but directional movement varies. In health care, downgrades were more likely than upgrades across the entire rating scale. In housing, issues below investment grade similarly had more downgrades than upgrades. In all other sectors, upgrades were more likely than downgrades for ratings below the 'AA' category.

Default Analysis

Standard & Poor's-rated USPF obligor default counts over the course of the study vary from no defaults in seven of the years covered to a high of five defaults in 1992 and 2008 (see table 8). Of the 42 total defaults in the study, 40 were non-investment grade immediately before the default as demonstrated in chart 3. On an issue basis, housing defaults total 63 over the span and have ranged from zero to a high of 21 on an annual basis (see table 9). Of the 21 defaults occurring in 1991, it should be noted that 19 were related to the failure of Executive Life Insurance Co. as an investment agreement provider. A list of each USPF default and each housing default is provided in tables 10 and 11, respectively.

Although the number of defaults over these years has been, relatively speaking, low, we do believe securities issued by municipalities can still bear meaningful default risk. For one thing, over the years in question the municipal market has tended to be self-selecting -- municipal issuers of lower credit quality have tended not to request ratings. Correspondingly, the universe of rated municipalities was, as a general proposition, more creditworthy and, of course, less likely to default. When the entirety of public finance issuers and issues is evaluated, as opposed to simply the rated universe, however, more defaults appear. Data from Standard & Poor's Securities Evaluations show over 1,400 issue defaults during the same period. In our opinion, this comparison suggests a level of credit risk attendant to the universe of municipal finance that is greater than one might discern from a default study of Standard & Poor's-rated municipals alone.

Chart 3

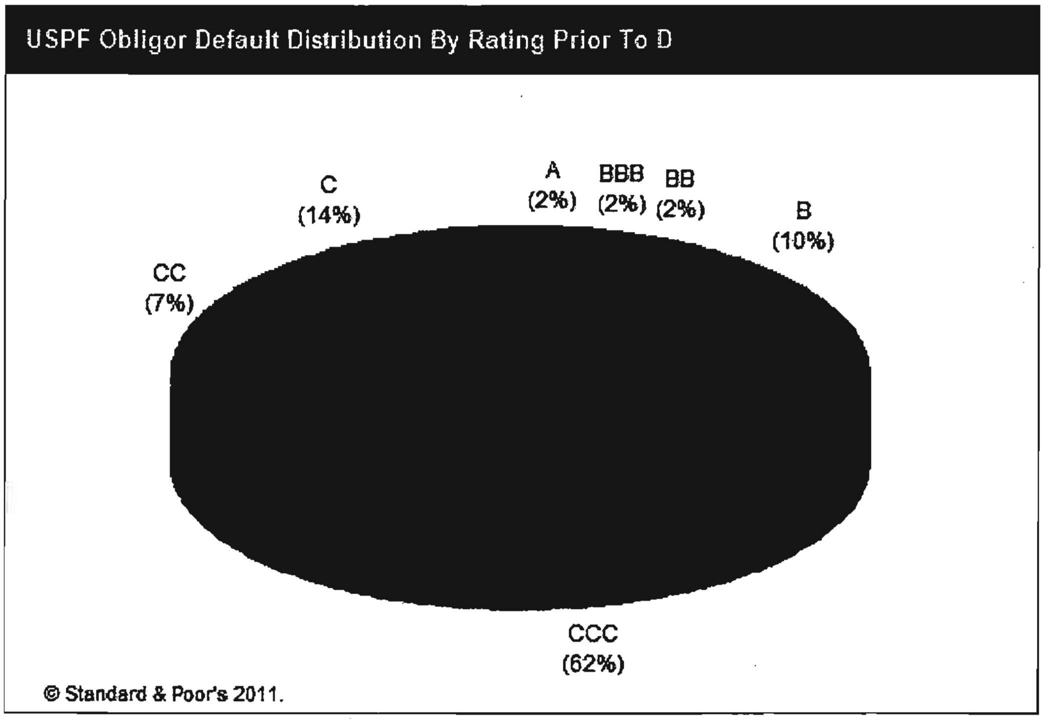
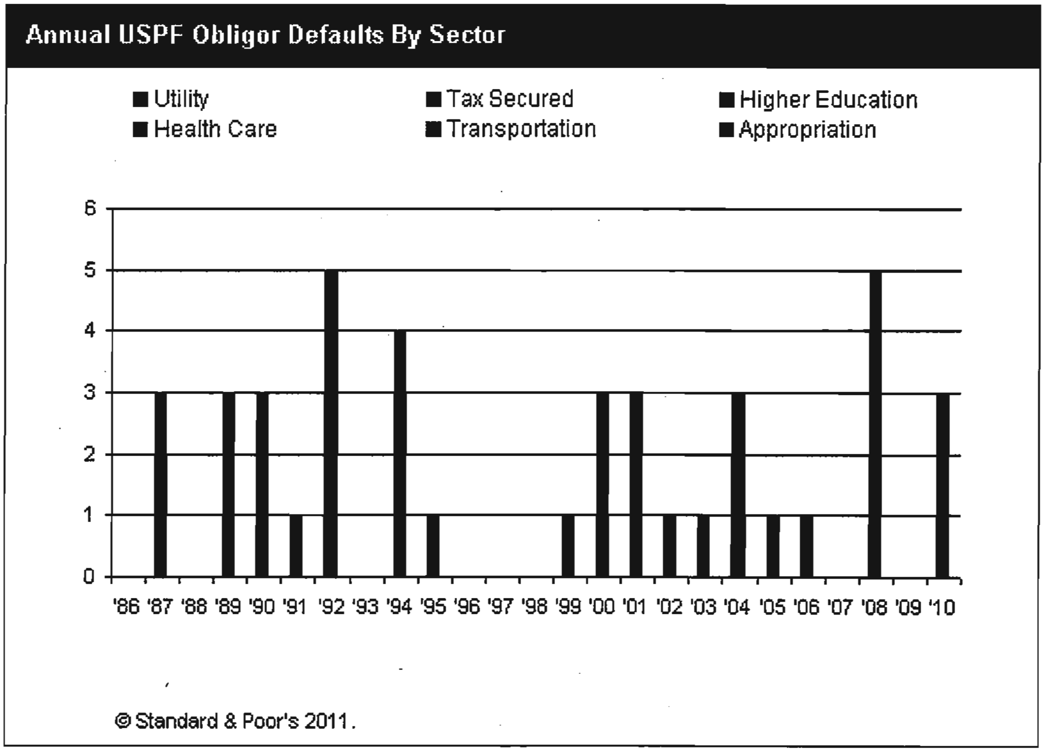


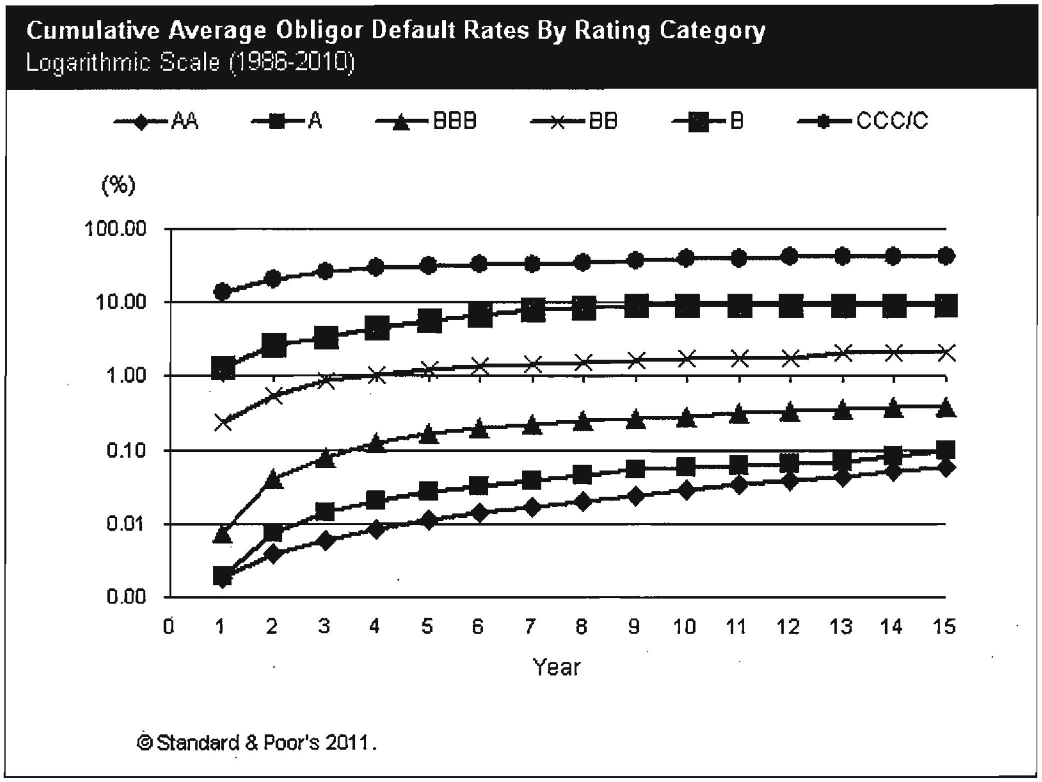
Chart 4



Default Rates

Chart 5 and tables 12 and 13 show that, generally speaking, cumulative average default rates have occurred at relative levels commensurate with the rating category. Default rates increased over time, particularly for lower-rated credits. Tables 14 and 15 show a less-precise relationship when one examines default rates by rating modifier. This is not surprising as the limited number of defaults and the limited number of credits in some rating levels allows average default rates to be more affected by a single event. Examining default rates broken down by rating category and by year further demonstrates the danger of reading too much into the average default rates (tables 16 through 21). Because no USPF defaults have occurred at the 'AAA' level, default rates are shown only for the 'AA' category and below. For the housing data, default rates are shown across all rating categories. What we consider significant default volatility is evident as one examines smaller portions of the data set. At many rating levels, the standard deviation of the default rates raises questions about the value of the average statistic for assessing trends.

Chart 5



Relative Rating Performance

In addition to examining the absolute performance, we examine their relative performance. One technique we use to measure relative performance is the Gini coefficient. The Gini coefficient is a summary statistic of the Lorenz curve. Used with ratings, it is one indication of the appropriateness of the rating distribution's rank ordering. We believe that Lorenz curves and Gini coefficients are useful when compared with other Lorenz curves' Gini coefficients. For more detail regarding the derivation and construction of Lorenz curves and Gini coefficients, see Appendix II. In Charts 6 through 13, we plot the Lorenz curve for U.S. public finance from 1986 through 2010 against the Standard & Poor's private-sector Lorenz curve for 1981 through 2010. The curves show that rank ordering for U.S. public finance ratings is better than private sector ratings mainly due to the high proportion of the U.S. public finance default population being located in the lower rating categories while also having the lower categories make up only a small proportion of the issuer population. On a one-year horizon U.S. public finance has 85% of its default population in speculative grade while only having 1.16% of total issuers in speculative grade, the private sector has 95% of its default population in speculative grade but it also has 35% of its issuers in speculative grade. The U.S. public finance Gini coefficients for the one-, three-, five-, and seven-year horizons are 0.90, 0.87, 0.81, and 0.78, respectively. The U.S. housing Gini coefficients for the one, three-, five-, seven-year horizons are 0.94, 0.67, 0.61, and 0.54, respectively. The Gini coefficients for Standard & Poor's private-sector ratings for the one-, three-, five-, and 10-year horizons are 0.82, 0.74, 0.72, and 0.69, respectively.

Appendix I

Tables 22 through 25 provide default and transition data for the most recent one-, three-, and 10- year periods corresponding to the static pools as of Jan. 1, 2010, 2008, and 2001, respectively. Also provided (tables 26 and 27) are default and transition statistics for ratings outstanding as of Jan. 1, 2010 since their initial assignment. For ratings in place before 1986, the rating as of Jan. 1, 1986 was used as the initial rating.

Chart 6

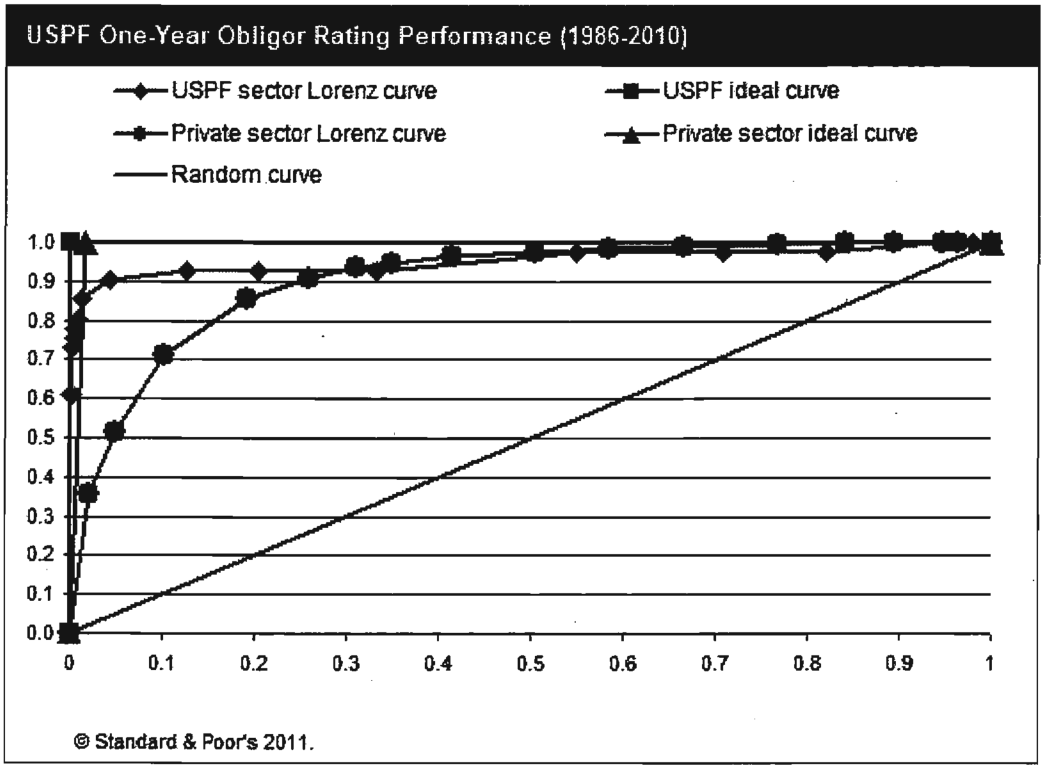


Chart 7

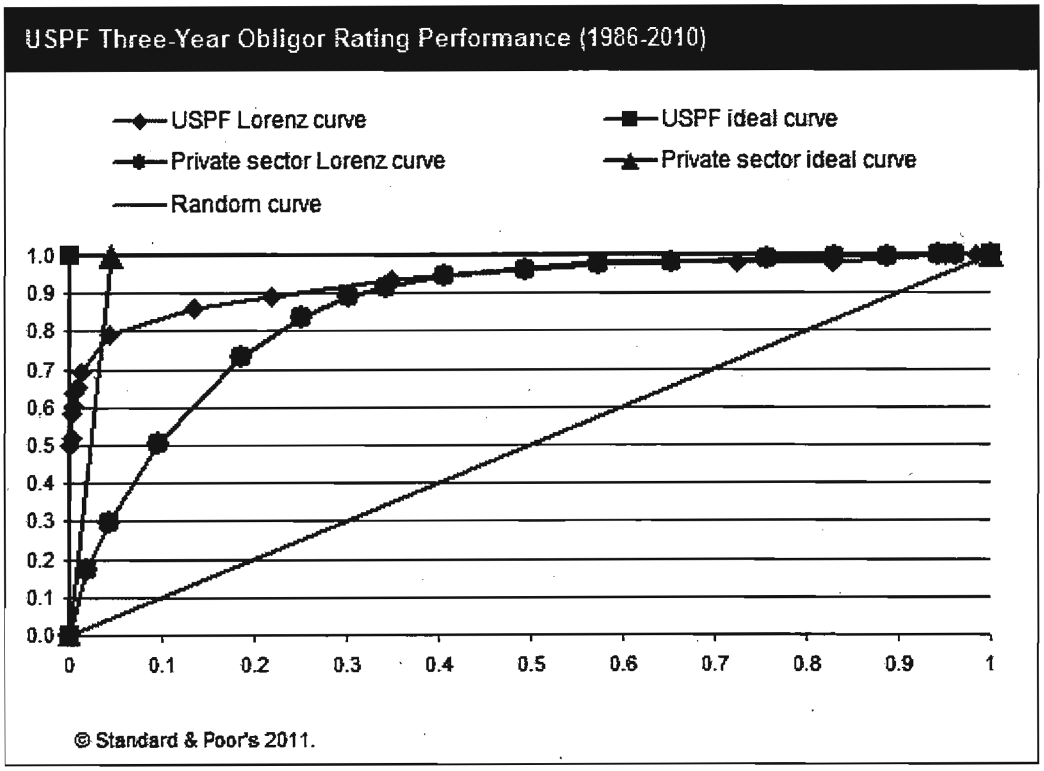

USPF Three-Year Obligor Rating Performance (1986-2010)
USPF Lorenz curve
USPF ideal curve
Private sector Lorenz curve
Private sector ideal curve
Random curve
1.0
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
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Chart 8

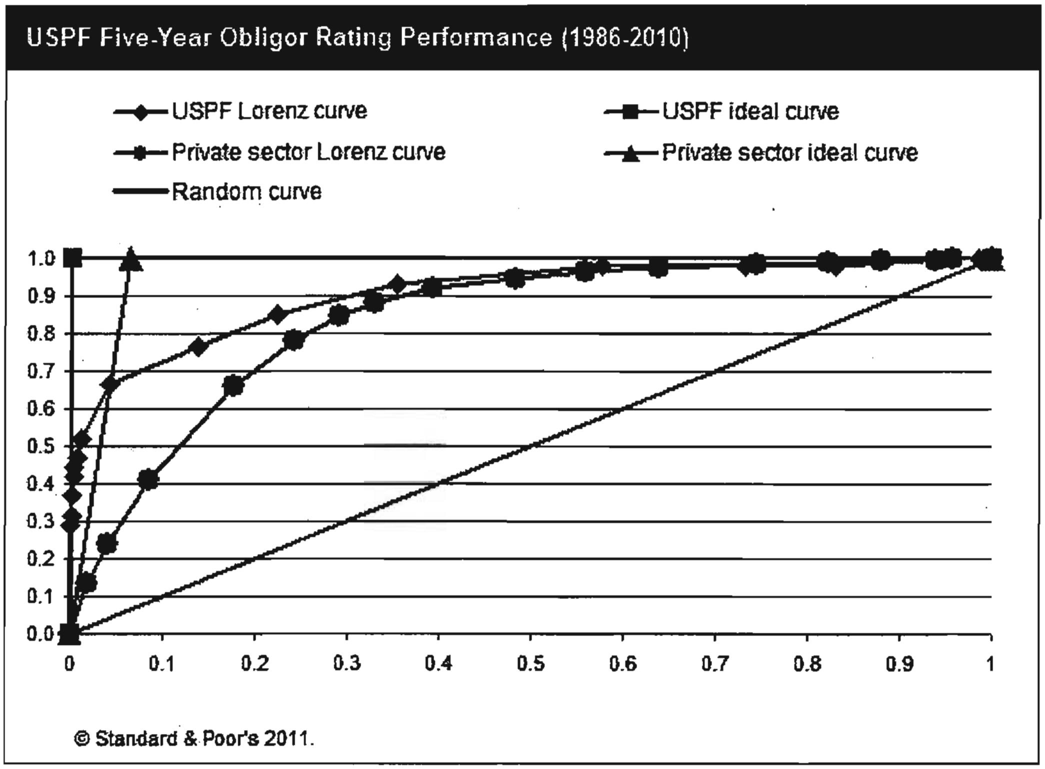
USPF Five-Year Obligor Rating Performance (1986-2010)
USPF Lorenz curve
USPF ideal curve
Private sector Lorenz curve
Private sector ideal curve
Random curve
1.0
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
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Chart 9

USPF Ten-Year Obligor Rating Performance (1986-2010)

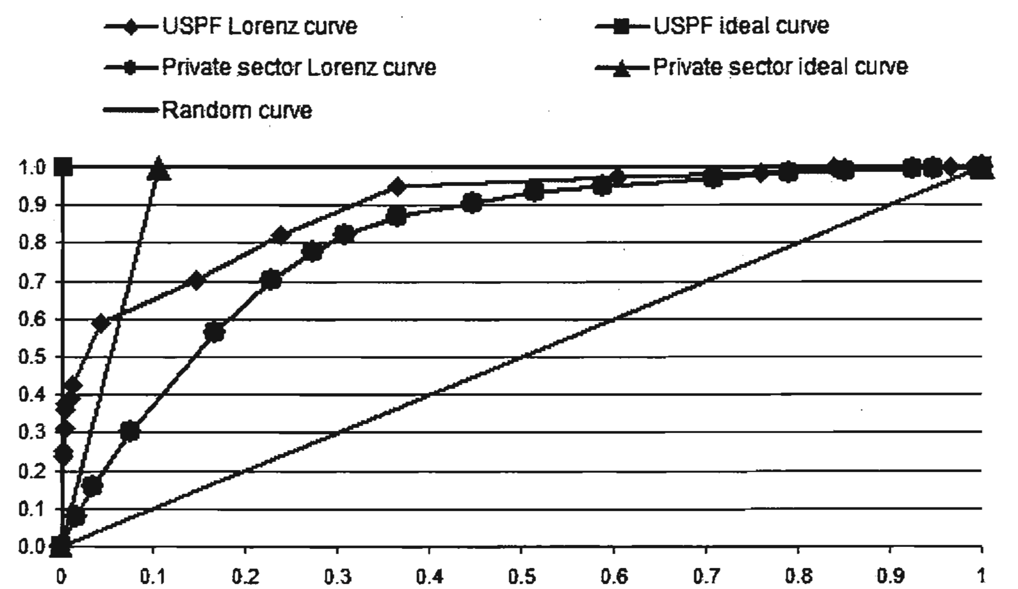


Chart 10

Housing One-Year Issue Rating Performance (1986-2010)

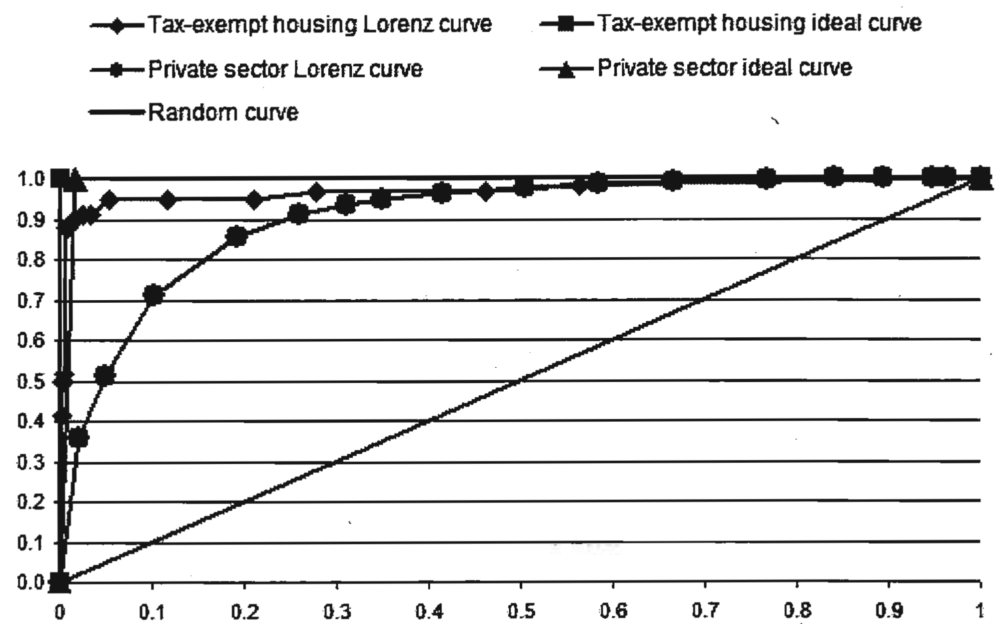


Chart 11

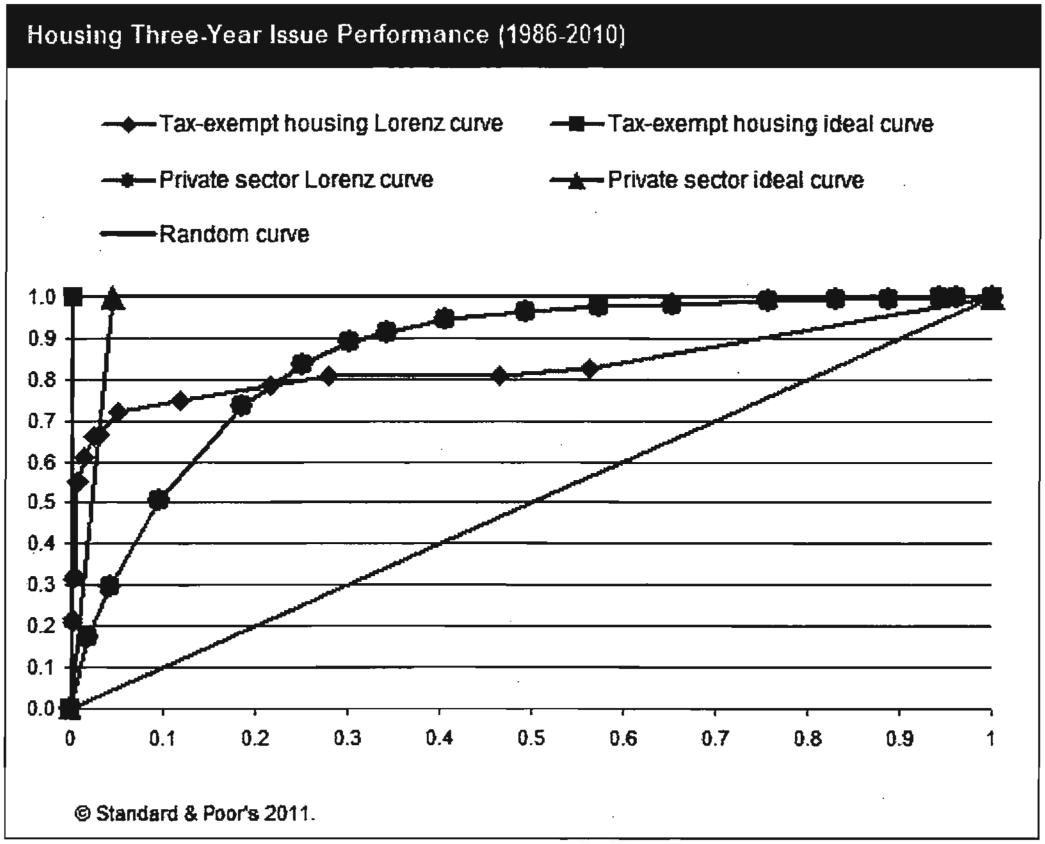

Housing Three-Year Issue Performance (1986-2010)
Tax-exempt housing Lorenz curve
Tax-exempt housing ideal curve
Private sector Lorenz curve
Private sector ideal curve
Random curve
1.0
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
© Standard & Poor's 2011.

Chart 12

Housing Five-Year Issue Rating Performance (1986-2010)

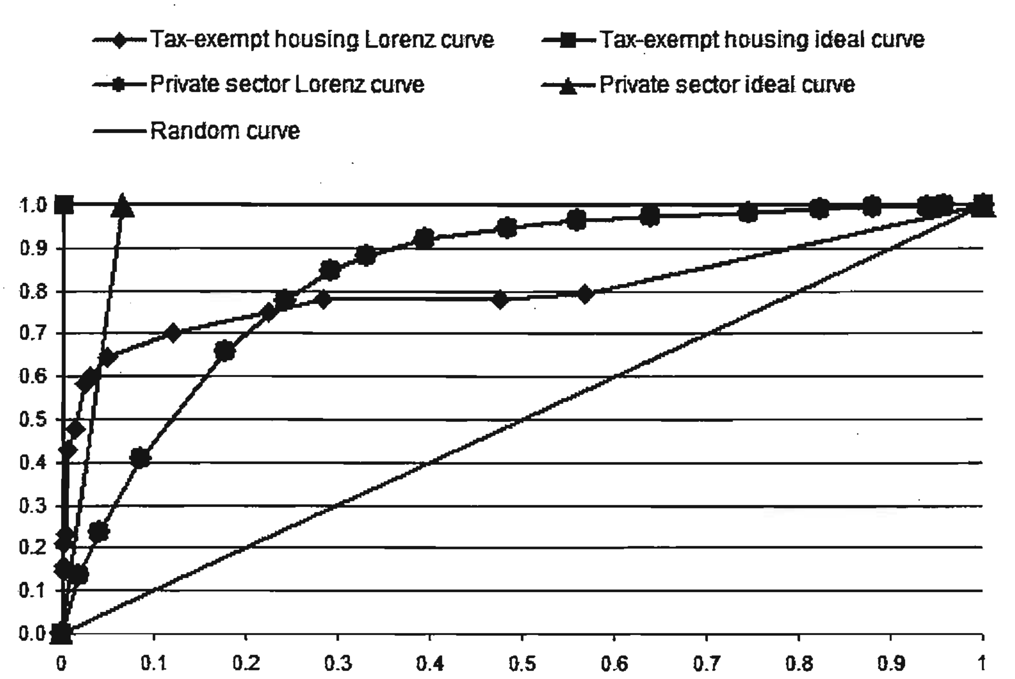
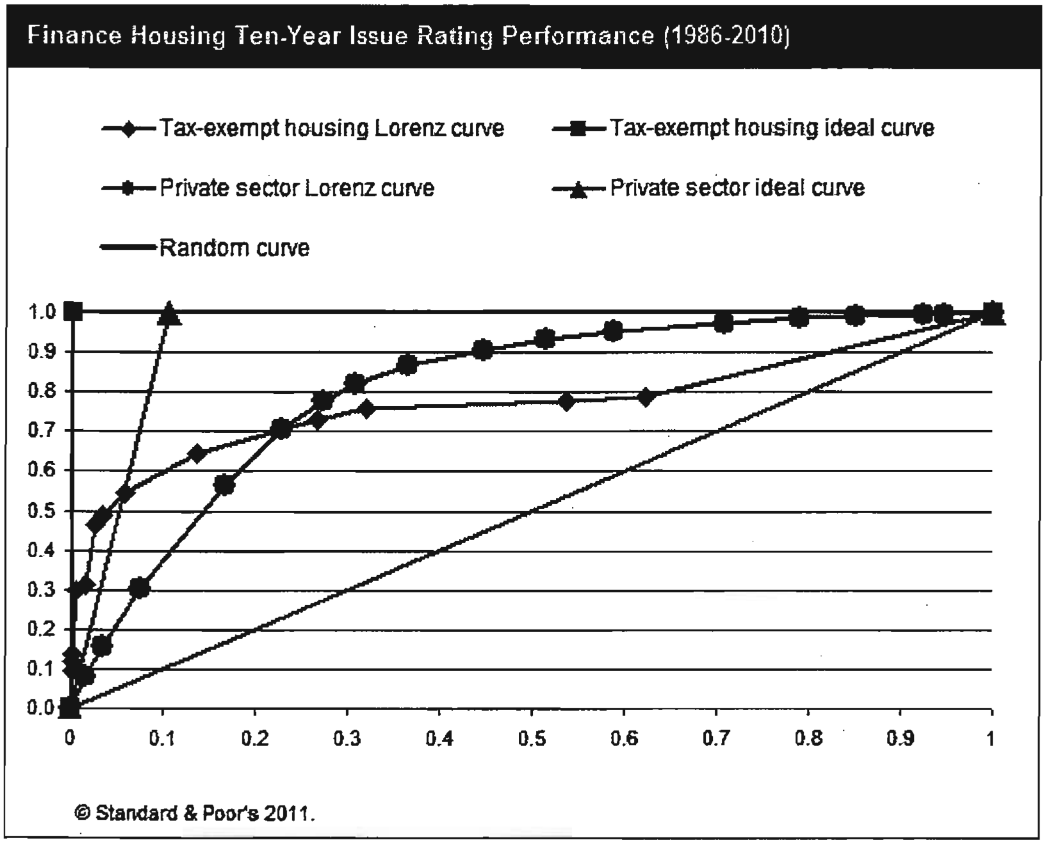


Chart 13



Appendix II: Methodology And Definitions

A Standard & Poor's rating primarily assesses the ability and willingness of an obligor to meet its financial commitments. Accordingly, a default is recorded upon the first occurrence of monetary payment default on the relevant obligation. Technical defaults, such as covenant violations, are not by themselves payment defaults. We generally lower issue ratings to 'D' following a payment default on the corresponding obligation. We include bonds that would have defaulted if not for bond insurance if those bonds bore a SPUR.

Our default study is based on a performance analysis of the unenhanced debt obligations (i.e., obligations not relying on external support provided by guaranties, outside support, or alternative revenue streams) of public finance issuers and includes bonds issued by a range of entities. We used long-term parity debt ratings throughout the study. These ratings reflect Standard & Poor's opinion of an obligor's overall capacity to pay its obligations (i.e., its fundamental creditworthiness). As such, our analysis focuses on the issuer's payment capacity and willingness to meet its financial commitment on an obligation according to its terms.

The data tracked the ratings of 5,062 parity debt obligations outstanding as of Jan. 1, 1986, increasing to 16,845 parity debt obligations outstanding as of Jan. 1, 2011. The data include general obligation, appropriation-backed, special tax, revenue, and higher education and health care bonds. Although the rating of an appropriation-backed bond is usually linked to that of the obligor, in certain cases the ratings of appropriation-backed bonds can move independently of those of the obligor. Accordingly, we include an obligor's GO rating in addition to its appropriation ratings in the study. One of the study's goals was to show the rating transitions and default history of the traditional public finance market: cities, towns, school districts, and hospitals, as well as the bonds issued by those entities. We excluded from the study bonds wrapped by a monoline insurer, unless the bonds bear an underlying, unenhanced rating by Standard & Poor's (a SPUR), in which case we included the SPUR. The study is based on individual issuances, rather than on dollar amounts, to avoid the risks of magnitude skewing results.

On a sector basis, we believe results are useful but must be evaluated with the size of the respective sectors in mind. From 1985 through 2010:

- Tax-secured credits increased to 9,594 from 2,267;
- Appropriation credits increased to 3,663 from 465;
- Utilities increased to 1,803 from 824;
- Transportation credits declined to 263 from 284;
- Higher education increased to 841 from 364;
- Health care declined to 681 from 858.

On an issue basis, and not an issuer basis, housing increased to 9,965 in 2010 from 4,329 in 1985.

Static pool methodology

The years covered by the study saw relatively few issuances default in their early years. Accordingly, default rates over a given period that are obtained by dividing the number of defaults by the number of issuances then outstanding will be distorted if the number of issuances increases over the period. To avoid this potentially misleading statistic, we conduct our default studies on the basis of groupings called "static pools." A static pool is formed on the first day of each year covered by the study and followed from that point on. All ratings included in the study are sorted into these pools. The pools are static in the sense that the denominator (entity ratings included in the pool) remains constant over time. This fact, however, must be understood in the context of a single study. Because errors, if any, will generally be corrected by new updates and because the criteria for inclusion or exclusion of ratings in the study may be subject to minor revisions in future studies, it is not possible to compare pools across studies. However, every new update revises results back to the same starting date (Jan. 1, 1986) to avoid continuity problems.

We follow all ratings year to year within each pool. This annual tracking involves the comparison of each parity rating on the first and last day of each calendar year. Multiple rating changes in any single year are not reflected -- only beginning- and end-of-year ratings are reflected. This occasionally results in what could be considered dramatic transitions. The NRs (obligations no longer rated by Standard & Poor's) in the study include issuances that have become monoline insured, as well as issuances that have been refunded, matured, or withdrawn.

For example, the 1986 static pool comprises all parity debt outstanding as of Jan. 1, 1986. The 1987 static pool was formed by adding new parity ratings first rated in 1986 to the still-outstanding ratings of the 1986 static pool and subtracting those ratings that defaulted or were set to NR. This same method was used to form static pools for 1988 through 2009. As an example, if a parity debt rating of 'BB' is assigned in mid-1986 and is lowered to 'B' in 1988 and followed by a default ('D') in 1993, this hypothetical rating would be included in the 1987 and 1988 pools as a 'BB', and in the 1989-1993 pools as a 'B'. All pools that include this obligation would capture its 1993 default.

Default rates

We calculated annual default rates for each static pool, first in units and later as percentages with respect to the number of issuers in each rating category. We then combined these percentages to obtain cumulative default rates for the 24 years covered by the study.

We estimated cumulative default rates that average the experience of all static pools. This was accomplished by calculating marginal default rates, conditional on survival (survivors being nondefaulters) for each possible time horizon and for each static pool; weight averaging the conditional marginal default rates; and accumulating the average conditional marginal default rates. Conditional default rates are calculated by dividing the number of issuers in a static pool that default at a specific time horizon by the number of issuers that survived (did not default) to that point in time. Weights are based on the number of issuers in each static pool. Cumulative default rates are one minus the product of the proportion of survivors (nondefaulters).

For instance, as shown in Table 17 the weighted average first-year default rate for entities rated in the 'B' category for all 25 pools was 1.26%, meaning that an average of 98.74% made payments in accordance with their terms for the first year. Similarly, the second- and third-year conditional marginal averages were 1.34% for the first 24 pools (98.66% of those issuers that did not default in the first year did not default in the second year) and 0.73% for the first 23 pools (99.27% of those entities that did not default by the second year did not default in the third year either), respectively. Multiplying 98.74% by 98.66% results in a 97.42% non-default rate to the end of the second year, or a two-year cumulative average default rate of 2.58%. Multiplying 97.42% by 99.27% results in a 96.71% non-default rate to the end of the third year, or a three-year 3.29% cumulative average default rate.

Transition analysis

To compute one-year rating transition ratios by rating category, we compared each entity's rating at the beginning of a particular year with its rating at the end of the same year. Multiple rating changes within one year are not reflected. We counted a parity obligation rated for more than one year as many times as the number of years it was rated. For instance, an issuer continually rated during 1986 through 1992 would appear in six consecutive one-year transition matrices. All 1986 static pool members still rated on Dec. 31, 2009 had 24 one-year transitions, while parity ratings first assigned in 2008 had only one.

Each one-year transition matrix displays all rating movements between letter categories from the beginning of the year to year-end. For each rating listed in the matrix's left-most column, there are nine ratios listed in the columns, corresponding to ratings from 'AAA' to 'D', plus an entry for NR. For instance, according to the average one-year transition rates for USPF (see table 3), which average all one-year transitions:

- 89.72% of debt rated in the 'A' category at the beginning of a given year remained in the same category at year end;
- 3.12%, on average, were upgraded to the 'AA' category;
- 0.87% were on average lowered to the 'BBB' category; and
- 0.03% were downgraded to the 'BB' category, and so on.

Further transition information for each of the USPF and housing static pools is presented in tables 32 and 33.

Gini coefficient calculation

The Gini coefficient, developed by Corrado Gini, is a summary statistic of the Lorenz curve, which shows visually the accuracy of ratings' rank ordering. The Lorenz curve was developed by Max O. Lorenz as a graphical representation of the proportionality of a distribution. The Lorenz curve is built by plotting the cumulative proportion of issuers by rating category (from lowest to highest) with the cumulative proportion of defaulters by rating category. For example, if 'CCC' issues represented 1% of the total issues (X axis) and 20% of the defaulters (Y axis), that would be the first point on the curve.

To determine relative performance represented by the Lorenz curve, we compare it with the random curve and the ideal curve. If Standard & Poor's rating rank orderings only randomly approximated default risk, the Lorenz curve would fall along the diagonal and its Gini coefficient would be zero. If ratings were perfectly rank-ordered so that all defaults occurred only among the lowest-rated entities or issues, and all entities or issues with the lowest rating defaulted, the curve would be the ideal curve and the Gini coefficient would be one. The Gini coefficient is a ratio of two areas illustrated below, and is derived by dividing area B by the total area A+B. In other words, the Gini coefficient captures the extent to which actual ratings accuracy diverges from the random scenario and approaches the ideal.

The Gini coefficient can be calculated for different lengths of time, for example one year or three years, and for a single period, such as the year ended 2010, or by aggregating a series of one-year periods. To calculate the one-year Gini for 2010, we identify the issuer or issue ratings at the beginning of the year and determine which did and did not default during the year. Then, we calculate the proportion of issuers/issues at each rating level and the proportion of defaulters at each rating, based on their ratings at the beginning of the period. The aggregate Gini for 1986-2010 combines data for each of the 24 one-year periods. The same issuer or issue may be counted multiple times in the aggregate Gini coefficient.

Chart 14

Sample Lorenz Curve

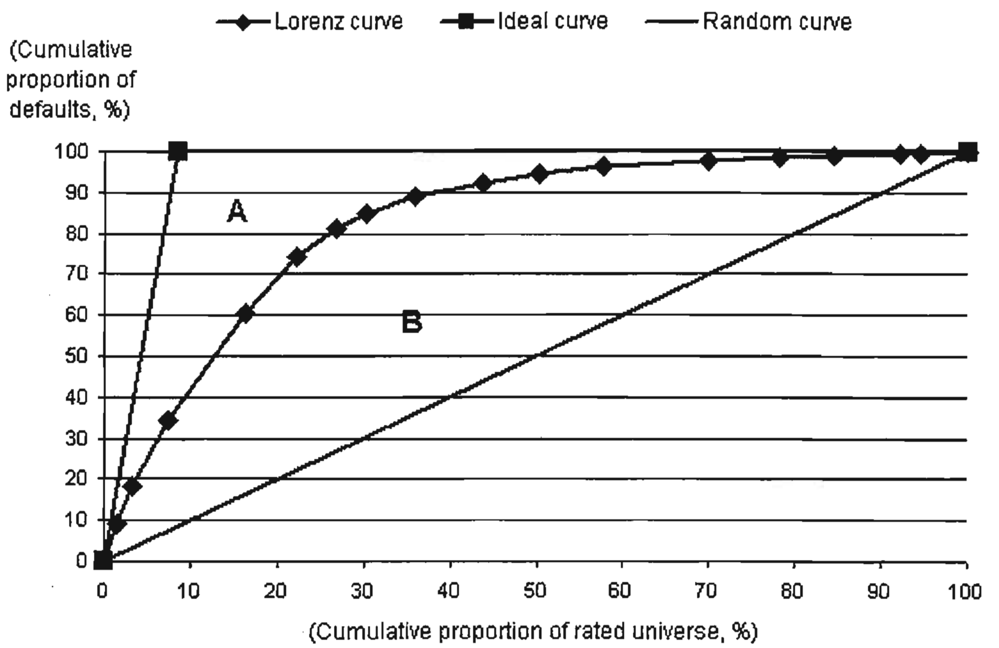


Table 1

2010 Transition Rates By Category (%)

From/To	AAA	AA	A	BBB	BB	B	CCC/C	D	NR
USPF									
AAA	95.69	0.80	0.16	0.00	0.00	0.00	0.00	0.00	3.35
AA	0.87	90.13	1.15	0.02	0.00	0.02	0.00	0.00	7.81
A	0.00	5.94	86.97	1.06	0.09	0.00	0.01	0.00	5.92
BBB	0.00	0.28	19.12	72.83	0.99	0.28	0.28	0.00	6.21
BB	0.00	0.00	0.81	8.06	79.03	0.81	2.42	0.81	8.06
B	0.00	0.00	0.00	4.76	0.00	80.95	4.76	0.00	9.52
CCC/C	0.00	0.00	0.00	0.00	0.00	0.00	62.50	25.00	12.50
Utility									
AAA	94.35	0.81	0.81	0.00	0.00	0.00	0.00	0.00	4.03
AA	1.04	95.97	0.00	0.00	0.00	0.00	0.00	0.00	2.99
A	0.00	6.32	89.70	0.41	0.00	0.00	0.00	0.00	3.57
BBB	0.00	0.00	31.76	62.35	0.00	0.00	0.00	0.00	5.88
BB	0.00	0.00	0.00	25.00	50.00	0.00	0.00	25.00	0.00
B	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00

Table 1

2010 Transition Rates By Category (%) (cont.)									
CCC/C	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
Higher Education									
AAA	97.73	2.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AA	0.00	95.58	0.44	0.00	0.00	0.00	0.00	0.00	3.98
A	0.00	1.83	93.99	0.00	0.00	0.00	0.00	0.00	4.18
BBB	0.00	0.00	0.71	92.86	0.71	0.71	0.00	0.00	5.00
BB	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00
B	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CCC/C	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tax Secured									
AAA	97.58	0.72	0.00	0.00	0.00	0.00	0.00	0.00	1.69
AA	1.42	95.48	0.85	0.04	0.00	0.00	0.00	0.00	2.21
A	0.00	7.78	89.05	0.58	0.16	0.00	0.02	0.00	2.42
BBB	0.00	0.60	30.62	62.44	0.90	0.45	0.45	0.00	4.52
BB	0.00	0.00	0.00	14.29	85.71	0.00	0.00	0.00	0.00
B	0.00	0.00	0.00	10.00	0.00	80.00	10.00	0.00	0.00
CCC/C	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00
Health Care									
AAA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AA	0.00	94.44	2.22	0.00	0.00	0.00	0.00	0.00	3.33
A	0.00	1.69	93.58	1.35	0.00	0.00	0.00	0.00	3.38
BBB	0.00	0.00	3.21	87.95	2.01	0.00	0.40	0.00	6.43
BB	0.00	0.00	0.00	6.67	76.67	1.67	3.33	0.00	11.67
B	0.00	0.00	0.00	0.00	0.00	83.33	0.00	0.00	16.67
CCC/C	0.00	0.00	0.00	0.00	0.00	0.00	66.67	33.33	0.00
Transportation									
AAA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
AA	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
A	0.00	0.71	96.43	0.71	0.00	0.00	0.00	0.00	2.14
BBB	0.00	0.00	1.67	90.00	0.00	0.00	0.00	0.00	8.33
BB	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00
B	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CCC/C	0.00	0.00	0.00	0.00	0.00	0.00	50.00	50.00	0.00
Appropriation									
AAA	83.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	16.28
AA	0.11	78.32	2.13	0.00	0.00	0.06	0.00	0.00	19.38
A	0.00	2.91	75.97	2.98	0.00	0.00	0.00	0.00	18.13
BBB	0.00	0.00	14.09	73.64	0.91	0.00	0.00	0.00	11.36
BB	0.00	0.00	2.86	11.43	74.29	0.00	2.86	0.00	8.57
B	0.00	0.00	0.00	0.00	0.00	66.67	0.00	0.00	33.33
CCC/C	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 1

2010 Transition Rates By Category (%) (cont.)

Housing Issues									
AAA	96.23	1.80	0.38	0.09	0.85	0.19	0.12	0.00	0.33
AA	0.03	96.02	3.85	0.00	0.00	0.00	0.00	0.00	0.10
A	0.23	0.15	97.87	0.30	0.76	0.00	0.08	0.00	0.61
BBB	0.00	0.00	2.07	92.07	5.86	0.00	0.00	0.00	0.00
BB	0.00	0.00	0.00	0.00	90.91	9.09	0.00	0.00	0.00
B	0.00	0.00	0.00	0.00	0.00	95.24	4.76	0.00	0.00
CCC/C	0.00	7.14	0.00	0.00	0.00	0.00	92.86	0.00	0.00

Table 2

2010 Upgrades and Downgrades

	Ratings	Upgrades	Downgrades
Total USPF*	15267	1688	351
Utility	1614	160	15
Tax Secured	8253	1241	139
Higher Education	808	40	7
Health Care	704	44	40
Transportation	258	6	9
Appropriation	3630	197	141
Housing issues	9798	164	352

* Does not include housing

Table 3

USPF Average Obligor Transition Rates, 1986-2010 (%)

Rating	AAA	AA	A	BBB	BB	B	CCC/C	D	NR
1 Year									
AAA	97.36	0.84	0.07	0.00	0.00	0.00	0.02	0.00	1.71
AA	0.87	92.64	1.25	0.03	0.00	0.01	0.00	0.00	5.21
A	0.02	3.12	89.72	0.87	0.03	0.02	0.01	0.00	6.22
BBB	0.00	0.09	5.15	86.69	0.70	0.13	0.06	0.01	7.18
BB	0.00	0.06	0.35	7.73	78.73	2.91	0.76	0.23	9.24
B	0.00	0.21	0.63	2.95	7.37	70.11	5.26	1.26	12.21
CCC/C	0.00	0.00	0.55	0.55	1.66	7.73	64.09	13.81	11.60
3 Year									
AAA	93.68	2.06	0.27	0.00	0.00	0.00	0.03	0.00	3.96
AA	2.62	79.90	2.69	0.22	0.00	0.01	0.00	0.01	14.56
A	0.07	7.65	71.78	2.01	0.09	0.05	0.02	0.01	18.33
BBB	0.00	0.72	11.11	64.94	1.58	0.34	0.13	0.08	21.11
BB	0.00	0.20	1.89	15.71	48.95	4.99	1.08	0.88	26.30
B	0.00	0.24	1.65	10.61	9.20	35.85	5.66	3.54	33.25
CCC/C	0.00	0.00	0.60	1.80	9.58	3.59	34.73	24.55	25.15
5 Year									
AAA	90.81	2.97	0.52	0.00	0.00	0.00	0.00	0.00	5.69

Table 3

USPF Average Obligor Transition Rates, 1986-2010 (%) (cont.)									
AA	3.91	68.81	3.54	0.18	0.00	0.01	0.00	0.01	23.52
A	0.11	9.79	56.54	2.66	0.15	0.06	0.03	0.03	30.62
BBB	0.01	1.06	13.02	47.87	1.90	0.48	0.16	0.16	35.34
BB	0.00	0.40	2.77	18.10	30.20	4.58	1.26	1.26	41.42
B	0.00	0.27	2.72	10.05	6.25	18.75	3.80	5.71	52.45
CCC/C	0.00	0.00	0.00	10.32	1.29	5.16	21.94	29.68	31.61
7 Year									
AAA	89.24	3.57	0.57	0.00	0.00	0.00	0.00	0.00	6.63
AA	4.93	59.03	3.67	0.20	0.00	0.01	0.00	0.01	32.14
A	0.16	10.80	43.03	2.71	0.17	0.06	0.04	0.04	43.00
BBB	0.02	1.40	13.09	33.79	1.83	0.50	0.14	0.24	49.01
BB	0.00	0.64	3.68	17.40	17.03	3.87	1.29	1.57	54.51
B	0.00	0.32	1.92	5.45	4.49	9.94	1.92	7.37	68.59
CCC/C	0.00	0.00	0.00	10.27	0.00	4.79	15.07	32.88	36.99
10 Year									
AAA	87.69	4.67	0.54	0.00	0.00	0.00	0.00	0.00	7.10
AA	6.50	46.66	3.22	0.22	0.00	0.02	0.00	0.01	43.37
A	0.27	10.80	26.86	2.32	0.19	0.05	0.05	0.06	59.40
BBB	0.03	1.90	11.14	18.39	1.29	0.38	0.15	0.32	66.40
BB	0.00	0.68	5.08	10.16	6.43	2.48	1.24	1.35	72.57
B	0.00	0.39	2.75	1.96	1.57	2.75	0.39	9.02	81.18
CCC/C	0.00	0.00	0.00	8.80	0.00	1.60	8.00	36.00	45.60
15 Year									
AAA	85.22	7.13	1.57	0.17	0.00	0.00	0.00	0.00	5.91
AA	8.54	34.28	3.05	0.20	0.00	0.01	0.00	0.02	53.89
A	0.42	10.23	14.64	1.39	0.16	0.07	0.05	0.11	72.94
BBB	0.01	1.96	8.56	7.05	0.61	0.17	0.05	0.41	81.17
BB	0.00	1.26	3.61	5.18	1.10	0.78	0.00	1.57	86.50
B	0.00	0.00	1.09	1.09	0.00	0.00	0.00	9.78	88.04
CCC/C	0.00	0.00	1.16	3.49	0.00	0.00	0.00	39.53	55.81
20 Year									
AAA	78.22	12.54	3.30	0.00	0.00	0.00	0.00	0.00	5.94
AA	9.63	28.50	3.46	0.25	0.00	0.00	0.00	0.04	58.11
A	0.71	10.73	10.52	1.27	0.14	0.06	0.01	0.22	76.33
BBB	0.01	2.71	7.68	3.68	0.28	0.10	0.01	0.60	84.92
BB	0.00	0.30	3.27	1.19	0.60	0.00	0.00	2.08	92.56
B	0.00	0.00	0.00	3.06	0.00	0.00	0.00	11.22	85.71
CCC/C	0.00	0.00	0.00	0.00	0.00	0.00	0.00	40.82	59.18

Table 4A

Average One-Year Obligor Transition Rates By Modifier, 1986-2010 (%)

Rating	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-
AAA	97.36	0.62	0.19	0.02	0.02	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AA+	4.52	88.51	1.62	0.28	0.04	0.03	0.00	0.00	0.12	0.00	0.00	0.00	0.00
AA	0.45	3.49	88.63	1.48	0.30	0.10	0.03	0.00	0.01	0.00	0.00	0.00	0.00
AA-	0.14	0.67	6.02	85.64	1.82	0.67	0.03	0.00	0.00	0.00	0.00	0.00	0.00
A+	0.05	0.13	1.24	5.67	85.59	1.58	0.35	0.03	0.04	0.02	0.00	0.01	0.00
A	0.00	0.03	0.31	1.15	4.74	84.52	1.55	0.50	0.12	0.13	0.00	0.02	0.00
A-	0.00	0.02	0.08	0.89	2.13	6.39	82.10	1.31	0.50	0.22	0.01	0.06	0.01
BBB+	0.00	0.01	0.01	0.11	1.05	2.15	5.37	81.72	1.88	0.45	0.06	0.09	0.02
BBB	0.00	0.01	0.02	0.05	0.34	1.19	1.53	3.92	83.52	1.41	0.22	0.22	0.06
BBB-	0.00	0.02	0.00	0.02	0.00	0.17	1.86	1.45	4.82	81.32	1.41	1.01	0.19
BB+	0.00	0.00	0.15	0.00	0.00	0.00	0.31	0.62	2.17	6.04	73.84	4.33	2.01
BB	0.00	0.00	0.00	0.00	0.00	0.12	0.35	0.58	2.53	5.29	3.11	72.73	2.19
BB-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.49	0.97	2.43	4.37	70.39
B+	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.98	0.00	0.98	0.98
B	0.00	0.00	0.00	0.38	0.38	0.38	0.00	0.75	3.02	1.13	1.13	7.92	1.89
B-	0.00	0.00	0.00	0.00	0.00	0.93	0.00	0.00	0.00	0.00	0.00	1.85	1.85
CCC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.01	0.00
CCC-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
C	0.00	0.00	0.00	0.00	7.69	0.00	0.00	0.00	0.00	7.69	0.00	0.00	0.00

Table 4B

Average One-Year Obligor Transition Rates By Modifier, 1986-2010 (%)

Rating	B+	B	B-	CCC	CCC-	CC	C	D	NR
AAA	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	1.71
AA+	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.89
AA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.50
AA-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.99
A+	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	5.27
A	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	6.90
A-	0.00	0.03	0.00	0.01	0.00	0.00	0.00	0.00	6.24
BBB+	0.00	0.03	0.02	0.06	0.00	0.01	0.00	0.00	6.98
BBB	0.02	0.05	0.03	0.02	0.00	0.01	0.01	0.01	7.37
BBB-	0.03	0.27	0.09	0.13	0.02	0.00	0.00	0.03	7.17
BB+	0.93	0.62	0.46	0.31	0.00	0.00	0.00	0.31	7.89
BB	0.81	1.61	0.35	0.81	0.00	0.12	0.12	0.12	9.21
BB-	0.97	3.40	1.94	0.97	0.00	0.00	0.00	0.49	13.59
B+	66.67	3.92	3.92	2.94	0.00	0.00	1.96	0.98	16.67
B	2.64	60.38	3.02	3.40	0.38	0.00	1.13	1.89	10.19
B-	0.00	2.78	73.15	5.56	0.00	0.93	0.00	0.00	12.96
CCC	1.34	4.70	0.67	63.76	0.67	2.01	0.00	12.08	12.75
CCC-	0.00	0.00	0.00	0.00	40.00	0.00	0.00	40.00	20.00

Table 4B

Average One-Year Obligor Transition Rates By Modifier, 1986-2010 (%) (cont.)									
CC	28.57	0.00	0.00	14.29	0.00	28.57	7.14	21.43	0.00
C	0.00	0.00	0.00	0.00	0.00	0.00	61.54	15.38	7.69

Table 5

Housing Average Issue Transition Rates, 1986-2010 (%)

Rating	AAA	AA	A	BBB	BB	B	CCC/C	D	NR
1 Year									
AAA	94.03	0.99	0.19	0.02	0.09	0.01	0.01	0.00	4.65
AA	1.20	92.75	1.65	0.11	0.02	0.00	0.01	0.00	4.25
A	0.87	4.07	87.71	1.19	0.28	0.05	0.03	0.01	5.79
BBB	0.28	0.18	3.99	84.10	3.25	0.46	0.46	0.05	7.24
BB	0.15	0.31	1.99	5.67	65.18	9.36	3.99	3.37	9.97
B	1.60	0.40	0.80	0.00	3.20	70.00	11.20	2.00	10.80
CCC/C	2.08	0.42	0.83	1.25	1.25	0.00	66.25	12.08	15.83
3 Year									
AAA	82.60	1.96	0.48	0.04	0.15	0.01	0.04	0.05	14.66
AA	3.88	79.01	3.70	0.42	0.05	0.01	0.02	0.01	12.88
A	2.22	11.30	65.34	2.55	0.73	0.18	0.09	0.08	17.52
BBB	0.65	0.42	10.17	57.95	4.19	1.61	0.98	0.59	23.43
BB	0.87	1.04	4.51	10.23	31.20	9.88	8.15	7.11	27.04
B	4.33	0.96	2.40	0.96	3.85	43.27	6.25	8.65	29.33
CCC/C	4.72	0.00	1.89	1.89	2.36	0.00	35.85	19.34	33.96
5 Year									
AAA	71.40	2.07	0.92	0.07	0.15	0.01	0.04	0.10	25.24
AA	6.78	66.19	4.16	0.49	0.06	0.00	0.02	0.03	22.28
A	3.32	16.51	47.55	2.36	0.95	0.39	0.20	0.16	28.56
BBB	1.05	0.35	11.25	38.17	2.45	1.68	1.61	1.51	41.92
BB	2.15	0.98	5.87	8.41	16.83	7.05	4.50	10.76	43.44
B	6.75	1.23	3.68	0.00	3.07	26.38	4.29	9.82	44.79
CCC/C	5.41	0.00	0.00	1.62	2.70	0.00	24.86	22.16	43.24
7 Year									
AAA	61.15	2.09	1.19	0.09	0.15	0.01	0.04	0.12	35.16
AA	9.16	57.55	3.05	0.37	0.02	0.01	0.02	0.03	29.78
A	4.34	18.92	35.90	1.90	0.80	0.41	0.25	0.27	37.21
BBB	1.45	0.37	11.30	27.74	1.23	1.27	1.30	2.24	53.09
BB	2.67	0.45	6.24	6.24	12.03	3.56	2.45	12.47	53.90
B	8.46	0.00	4.62	0.00	0.00	20.00	3.08	9.23	54.62
CCC/C	6.21	0.00	0.00	0.00	2.48	0.00	21.12	19.88	50.31
10 Year									
AAA	46.48	2.13	0.77	0.07	0.15	0.01	0.04	0.16	50.20
AA	12.14	45.78	2.14	0.15	0.01	0.01	0.00	0.05	39.71

Table 5

Housing Average Issue Transition Rates, 1986-2010 (%) (cont.)

A	5.91	21.58	23.31	1.09	0.47	0.37	0.13	0.30	46.84
BBB	1.79	0.25	10.82	18.65	0.54	0.71	0.83	1.96	64.45
BB	3.28	0.27	4.64	4.92	7.92	2.46	1.37	12.02	63.11
B	11.22	0.00	5.10	0.00	0.00	14.29	2.04	6.12	61.22
CCC/C	8.06	0.00	0.00	0.00	0.81	0.00	19.35	18.55	53.23
15 Year									
AAA	28.37	1.69	0.54	0.08	0.03	0.00	0.02	0.31	68.95
AA	14.53	29.99	1.33	0.13	0.00	0.01	0.00	0.04	53.96
A	9.41	20.95	12.10	0.52	0.15	0.17	0.06	0.24	56.40
BBB	1.83	0.00	8.20	10.09	0.32	0.43	0.54	0.49	78.10
BB	3.86	0.00	2.89	4.50	4.18	0.64	2.25	9.65	72.03
B	13.92	0.00	6.33	0.00	0.00	6.33	1.27	7.59	64.56
CCC/C	11.36	0.00	0.00	0.00	0.00	0.00	10.23	18.18	60.23
20 Year									
AAA	15.00	2.06	0.71	0.08	0.00	0.00	0.01	0.68	81.46
AA	14.04	17.82	1.37	0.15	0.00	0.01	0.01	0.08	66.52
A	12.69	18.05	6.43	0.50	0.11	0.04	0.09	0.35	61.75
BBB	1.92	0.00	8.08	3.94	0.30	0.51	0.61	0.51	84.14
BB	6.21	0.00	3.39	5.08	2.82	1.13	2.82	16.38	62.15
B	14.29	0.00	0.00	0.00	0.00	0.00	0.00	7.14	78.57
CCC/C	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.00	95.00

Table 6A

Housing Average One-Year Issue Transition Rates By Modifier, 1986-2010 (%)

Rating	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+
AAA	94.03	0.43	0.47	0.09	0.02	0.12	0.05	0.00	0.02	0.00	0.04
AA+	1.72	93.18	1.19	0.74	0.04	0.09	0.06	0.00	0.01	0.00	0.00
AA	1.25	2.64	88.41	1.25	0.69	0.30	0.32	0.01	0.06	0.08	0.03
AA-	0.30	0.15	5.46	84.80	0.61	3.95	0.20	0.04	0.04	0.08	0.01
A+	0.58	1.29	2.51	2.43	87.78	0.28	0.20	0.20	0.01	0.12	0.07
A	1.35	0.05	0.49	1.64	2.24	84.65	0.63	0.14	0.53	0.82	0.09
A-	0.68	0.00	0.09	0.15	0.68	2.18	83.00	0.34	3.13	0.77	0.09
BBB+	0.16	0.00	0.00	0.00	0.25	2.14	3.46	82.72	1.07	0.41	1.32
BBB	0.33	0.00	0.13	0.07	0.99	1.78	0.66	2.50	78.63	1.45	0.39
BBB-	0.33	0.00	0.33	0.00	0.42	1.33	1.08	1.25	3.00	81.67	0.50
BB+	0.00	0.00	0.00	0.00	0.76	0.76	0.00	0.76	1.53	0.76	74.81
BB	0.21	0.42	0.00	0.00	0.42	0.63	1.26	0.84	2.11	3.58	0.21
BB-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.35	0.00	0.00
B+	11.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B	1.30	0.00	0.43	0.00	0.00	0.43	0.43	0.00	0.00	0.00	0.00
B-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CCC+	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CCC	2.89	0.00	0.00	0.58	0.00	1.16	0.00	0.58	0.58	0.00	0.00

Table 6A

Housing Average One-Year Issue Transition Rates By Modifier, 1986-2010 (%) (cont.)

CCC-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.04	0.00	2.04
C	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 6B

Housing Average One-Year Issue Transition Rates By Modifier, 1986-2010 (%)

Rating	BB	BB-	B+	B	B-	CCC+	CCC	CCC-	CC	C	D	NR
AAA	0.05	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.00	0.00	4.65
AA+	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	2.98
AA	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.00	0.00	4.94
AA-	0.02	0.00	0.00	0.01	0.00	0.00	0.02	0.00	0.00	0.00	0.01	4.30
A+	0.01	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	4.51
A	0.32	0.00	0.01	0.10	0.00	0.00	0.02	0.00	0.01	0.01	0.00	6.92
A-	0.64	0.00	0.00	0.06	0.06	0.00	0.03	0.00	0.03	0.00	0.06	8.01
BBB+	0.82	0.08	0.00	0.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.16
BBB	4.14	0.46	0.00	0.72	0.00	0.00	0.20	0.07	0.26	0.00	0.07	7.17
BBB-	1.08	0.50	0.00	0.17	0.00	0.00	0.75	0.00	0.08	0.00	0.08	7.42
BB+	4.58	1.53	0.76	2.29	0.00	0.00	3.05	0.00	2.29	0.00	0.00	6.11
BB	60.63	0.21	0.42	10.32	0.21	0.00	2.11	0.00	1.05	0.21	4.42	10.74
BB-	0.00	63.04	0.00	8.70	2.17	0.00	6.52	0.00	0.00	0.00	2.17	13.04
B+	0.00	0.00	55.56	11.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	22.22
B	3.04	0.43	0.00	70.00	1.30	0.00	9.13	0.00	0.87	0.87	2.17	9.57
B-	0.00	0.00	0.00	0.00	45.45	0.00	27.27	0.00	0.00	0.00	0.00	27.27
CCC+	0.00	0.00	0.00	0.00	0.00	75.00	0.00	0.00	25.00	0.00	0.00	0.00
CCC	1.16	0.00	0.00	0.00	0.00	0.58	63.58	0.58	2.89	1.73	9.83	13.87
CCC-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	33.33	0.00	33.33	0.00	33.33
CC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	57.14	0.00	14.29	24.49
C	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	45.45	45.45	9.09

Table 7

Average One-Year Transition Rates By Sector, 1986-2010 (%)

Rating	AAA	AA	A	BBB	BB	B	CCC/C	D	NR
Utility									
AAA	96.81	0.50	0.17	0.00	0.00	0.00	0.00	0.00	2.52
AA	1.67	93.67	1.15	0.02	0.00	0.00	0.00	0.00	3.50
A	0.08	3.61	89.76	0.56	0.05	0.02	0.04	0.01	5.88
BBB	0.00	0.02	4.74	86.13	0.48	0.02	0.00	0.02	8.59
BB	0.00	0.00	1.05	11.05	76.84	0.53	1.05	0.53	8.95
B	0.00	0.00	0.00	2.78	5.56	72.22	2.78	0.00	16.67
CCC/C	0.00	0.00	0.00	0.00	0.00	10.00	80.00	7.50	2.50
Higher Education									
AAA	98.14	0.82	0.00	0.00	0.00	0.00	0.00	0.00	1.03

Table 7

Average One-Year Transition Rates By Sector, 1986-2010 (%) (cont.)

AA	0.57	93.74	1.29	0.08	0.00	0.00	0.00	0.00	4.31
A	0.00	1.51	91.94	1.14	0.01	0.00	0.00	0.00	5.40
BBB	0.00	0.07	2.90	90.36	0.67	0.07	0.04	0.00	5.90
BB	0.00	0.00	0.00	2.83	91.51	0.00	0.00	0.94	4.72
B	0.00	0.00	0.00	0.00	0.00	0.00	0.00	50.00	50.00
CCC/C	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
Tax-Secured									
AAA	98.16	0.83	0.07	0.00	0.00	0.00	0.00	0.00	0.94
AA	1.20	94.41	0.60	0.02	0.00	0.00	0.00	0.00	3.76
A	0.01	3.15	91.33	0.35	0.02	0.02	0.01	0.00	5.11
BBB	0.00	0.12	6.42	87.31	0.25	0.12	0.05	0.01	5.72
BB	0.00	0.00	0.62	14.81	74.38	1.85	0.62	0.00	7.72
B	0.00	0.92	2.75	6.42	13.76	63.30	3.67	1.83	7.34
CCC/C	0.00	0.00	4.17	4.17	8.33	12.50	58.33	0.00	12.50
Health Care									
AAA	80.00	20.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AA	0.05	91.36	2.99	0.00	0.00	0.00	0.00	0.00	5.61
A	0.00	0.81	87.66	3.08	0.13	0.06	0.01	0.00	8.26
BBB	0.00	0.05	1.40	88.22	2.53	0.30	0.11	0.02	7.38
BB	0.00	0.12	0.12	3.75	79.42	4.96	0.97	0.24	10.41
B	0.00	0.00	0.00	0.76	4.18	73.76	6.84	1.14	13.31
CCC/C	0.00	0.00	0.00	0.00	1.03	3.09	64.95	16.49	14.43
Transportation									
AAA	78.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.43
AA	0.00	92.61	1.00	0.00	0.00	0.00	0.00	0.00	6.39
A	0.00	1.12	89.67	0.91	0.03	0.00	0.00	0.00	8.26
BBB	0.00	0.06	1.72	86.17	0.63	0.17	0.23	0.00	11.02
BB	0.00	0.00	0.00	9.09	75.76	2.02	0.00	0.00	13.13
B	0.00	0.00	0.00	0.00	11.11	66.67	11.11	0.00	11.11
CCC/C	0.00	0.00	0.00	0.00	0.00	11.11	44.44	44.44	0.00
Appropriation									
AAA	90.53	1.40	0.00	0.00	0.00	0.00	0.35	0.00	7.72
AA	0.22	89.22	2.13	0.04	0.00	0.01	0.00	0.00	8.38
A	0.01	4.47	86.11	1.28	0.02	0.00	0.00	0.00	8.10
BBB	0.00	0.10	7.68	82.60	0.27	0.06	0.07	0.00	9.22
BB	0.00	0.00	0.57	11.93	79.55	0.00	0.57	0.00	7.39
B	0.00	0.00	0.00	8.51	10.64	68.09	0.00	0.00	12.77
CCC/C	0.00	0.00	0.00	0.00	0.00	30.00	30.00	20.00	20.00
Housing									
AAA	94.03	0.99	0.19	0.02	0.09	0.01	0.01	0.00	4.65
AA	1.20	92.75	1.65	0.11	0.02	0.00	0.01	0.00	4.25

Table 7

Average One-Year Transition Rates By Sector, 1986-2010 (%) (cont.)

A	0.87	4.07	87.71	1.19	0.28	0.05	0.03	0.01	5.79
BBB	0.28	0.18	3.99	84.10	3.25	0.46	0.46	0.05	7.24
BB	0.15	0.31	1.99	5.67	65.18	9.36	3.99	3.37	9.97
B	1.60	0.40	0.80	0.00	3.20	70.00	11.20	2.00	10.80
CCC/C	2.08	0.42	0.83	1.25	1.25	0.00	66.25	12.08	15.83

Table 8

USPF Annual Obligor Default Summary

	Defaults			Default Rate (%)		
Year	Total	Investment grade	Speculative grade	Overall	Investment grade	Speculative grade
1986	0	0	0	0.00	0.00	0.00
1987	3	1	2	0.06	0.02	2.47
1988	0	0	0	0.00	0.00	0.00
1989	3	0	3	0.06	0.00	3.70
1990	3	0	3	0.05	0.00	4.00
1991	1	0	1	0.02	0.00	1.10
1992	5	0	5	0.08	0.00	5.26
1993	0	0	0	0.00	0.00	0.00
1994*	4	1	3	0.04	0.01	3.41
1995	1	0	1	0.01	0.00	1.19
1996	0	0	0	0.00	0.00	0.00
1997	0	0	0	0.00	0.00	0.00
1998	0	0	0	0.00	0.00	0.00
1999	1	0	1	0.01	0.00	1.28
2000	3	0	3	0.04	0.00	4.48
2001	3	1	2	0.05	0.01	2.94
2002	1	0	1	0.01	0.00	1.33
2003	1	1	0	0.01	0.01	0.00
2004	3	0	3	0.03	0.00	2.63
2005	1	0	1	0.01	0.00	0.95
2006	1	0	1	0.01	0.00	0.76
2007	0	0	0	0.00	0.00	0.00
2008	5	3	2	0.03	0.03	1.36
2009	0.0	0.0	0.0	0.00	0.00	0.00
2010	3.0	0.0	3.0	0.02	0.00	1.96
Mean	1.7	0.3	1.4	0.02	0.00	1.55
Median	1.0	0.0	1.0	0.01	0.00	1.19
Std Dev	1.7	0.7	1.4	0.02	0.01	1.63
Minimum	0.0	0.0	0.0	0.00	0.00	0.00
Maximum	5.0	3.0	5.0	0.08	0.03	5.26

* Orange County, Calif. defaulted the same year its rating was assigned

Table 9

USPF Housing Annual Issue Default Summary

	Defaults			Default Rate (%)		
Year	**Total**	**Investment grade**	**Speculative grade**	**Overall**	**Investment grade**	**Speculative grade**
1986	0	0	0	0.00	0.00	0.00
1987	1	1	0	0.02	0.02	0.00
1988	1	1	0	0.02	0.02	0.00
1989	0	0	0	0.00	0.00	0.00
1990	0	0	0	0.00	0.00	0.00
1991	21	0	21	0.41	0.00	22.83
1992	1	0	1	0.02	0.00	1.23
1993	4	0	4	0.08	0.00	6.25
1994	1	0	1	0.02	0.00	2.13
1995	1	0	1	0.02	0.00	2.86
1996	1	0	1	0.02	0.00	3.85
1997	0	0	0	0.00	0.00	0.00
1998	2	0	2	0.03	0.00	11.76
1999	1	0	1	0.02	0.00	6.67
2000	0	0	0	0.00	0.00	0.00
2001	1	0	1	0.02	0.00	2.70
2002	5	2	3	0.07	0.03	8.33
2003	3	0	3	0.04	0.00	5.88
2004	4	1	3	0.06	0.01	4.62
2005	6	0	6	0.09	0.00	10.71
2006	3	1	2	0.04	0.01	3.17
2007	3	1	2	0.03	0.01	2.82
2008	1	0	1	0.01	0.00	1.49
2009	3.0	0.0	3.0	0.03	0.00	4.55
2010	0.0	0.0	0.0	0.00	0.00	0.00
Mean	2.52	0.28	2.24	0.04	0.00	4.07
Median	1.00	0.00	1.00	0.02	0.00	2.82
Std Dev	4.20	0.54	4.20	0.08	0.01	5.19
Minimum	0.00	0.00	0.00	0.00	0.00	0.00
Maximum	21.00	2.00	21.00	0.41	0.03	22.83

Table 10

USPF Defaulted Obligors, 1986-2010

				Rating	
Obligor	**State**	**Category**	**Default Date**	**Next to Last**	**First**
Lassen Community College Dist	CA	Appropriation	04/06/1987	CCC	BBB-
Devils Lake	ND	Utility Rev	09/16/1987	B	BBB-
New Jersey Economic Dev Auth	NJ	Trans Rev	12/03/1987	CC	BBB
St. Josephs Hospital of Alton	IL	Health Care Rev	05/24/1989	CCC-	A
Central Med Center Hospital	MO	Health Care Rev	06/07/1989	CCC-	BBB-

Table 10

USPF Defaulted Obligors, 1986-2010 (cont.)

Metro Hospital	PA	Health Care Rev	12/19/1989	CCC	A-
Choate-Symmes Health	MA	Health Care Rev	01/08/1990	CCC	A-
Colorado Ute Electric Assoc	CO	Utility Rev	07/06/1990	CCC	A-
Northwest Geneneral Hospital	MI	Health Care Rev	10/04/1990	C	BBB
Hyde Park Community Hospital, Ill. Cent Comnty Hospital	IL	Health Care Rev	12/17/1991	CCC	BBB
Sacred Heart Med Center of Chester	PA	Health Care Rev	01/08/1992	CCC	A-
Hialeah Hospital Inc.	FL	Health Care Rev	02/10/1992	CCC	BBB
Jackson Park Hospital Foundation	IL	Health Care Rev	03/04/1992	CCC	A
Jacksonville General Hospital & Med Center	FL	Health Care Rev	04/02/1992	CCC	BBB
James C. Guiffre Med Center	PA	Health Care Rev	07/02/1992	CCC	BBB
New Magma Irrigation & Drainage Dist	AZ	Tax secured	06/02/1994	C	BBB+
Parkview Hospital	OH	Health Care Rev	10/13/1994	C	A-
Central Arizona Irrigation & Drainage Dist	AZ	Tax secured	12/02/1994	C	BBB
Orange County	CA	Tax secured	12/08/1994	CCC	AA-
Michigan Health Care Corp.	MI	Health Care Rev	09/20/1995	CCC	BB
Logan General Hospital	WV	Health Care Rev	02/03/1999	CCC	BBB
Graduate Health System Obligated Group	PA	Health Care Rev	01/04/2000	CCC	A
South Fulton Med Center	GA	Health Care Rev	04/27/2000	CCC	BBB+
Bradford College	MA	Higher Ed Rev	11/02/2000	CCC	BBB-
Granada Hills Community Hospital	CA	Health Care Rev	05/14/2001	CCC	BBB-
Crouse Health Hospital	NY	Health Care Rev	07/03/2001	CCC	BBB
Spokane Downtown Foundation	WA	Trans Rev	08/09/2001	CCC	BBB-
Oregon Coast Aquarium	OR	Higher Ed Rev	10/07/2002	CCC	BBB-
Illinois	IL	Appropriation	02/04/2003	A	A-
Mercy Hospital and Med Center	IL	Health Care Rev	01/05/2004	CCC	A
St. Paul Housing & Redev Auth	MN	Utility Rev	12/02/2004	CCC	A
St. Paul Port Auth	MN	Utility Rev	12/02/2004	CCC	A
Kerr County	TX	Appropriation	03/14/2005	CC	A-
Massachusetts Port Auth	MA	Trans Rev	01/04/2006	CCC-	BBB+
Jefferson County	AL	Utility Rev	03/06/2008	B	A+
North Oakland Med Center	MI	Health Care Rev	03/31/2008	B	BBB
Jefferson County	AL	Tax Secured	09/24/2008	B	AA-
Pascack Valley Hospital	NJ	Health Care Rev	09/30/2008	CC	A
Presidio County	TX	Tax secured	12/11/2008	BBB-	BBB-
Connector 2000 Association	SC	Trans Rev	01/11/2010	C	BBB-
Valley Health System	CA	Health Care Rev	06/04/2010	C	BBB-
Xenia Rural Water District	IA	Utility Rev	07/08/2010	BB	BBB

Table 11

USPF Housing Defaulted Issues, 1986-2010

				Rating	
Obligor	**State**	**Series**	**Default Date**	**Next to Last**	**First**
Pines of Yellow Creek	WY	1983A	12/2/1987	CC	AAA

Table 11

USPF Housing Defaulted Issues, 1986-2010 (cont.)					
St. Louis Land Clear Redev Auth.	MO	1984	3/18/1988	AA+	AA+
Adams Co	CO	1986A	5/2/1991	CC	AAA
El Paso Hsg Fin Corp.	TX	1986A	5/2/1991	CC	AAA
El Paso Hsg Fin Corp.	TX	1986A	5/2/1991	CC	NR
Nebraska Invest Fin Auth.	NE	1986A	5/2/1991	CC	AAA
Nebraska Invest Fin Auth.	NE	1986B	5/2/1991	BB	AAA
Midland Co Hsg Fin Corp.	TX	1982A	6/4/1991	CC	A+
Tuscon Indus Dev Auth.	AZ		6/6/1991	CCC	AAA
Simi Valley	CA	1989A	8/6/1991	CC	AAA
Simi Valley	CA	1989A	8/6/1991	CC	AAA
Southeast Texas Hsg Fin Corporation	TX	1986A	9/3/1991	CC	AAA
St. Paul Hsg & Redev Auth.	MN	1989B	9/3/1991	CCC	AAA
St. Paul Hsg & Redev Auth.	MN	1989B	9/3/1991	CCC	AAA
St. Paul Hsg & Redev Auth.	MN	1989A	9/3/1991	CCC	AAA
St. Paul Hsg & Redev Auth.	MN	1989B	9/3/1991	CCC	AAA
Memphis Health Education & Hsg Facilities Board	TN	1986A	9/17/1991	CC	AAA
Memphis Health Education & Hsg Facilities Board	TN	1986A	9/17/1991	CC	A
Northern California Home Mortgage Fin Auth.	CA	1982A	10/1/1991	CC	AA-
Louisiana Agri Fin Auth.	LA	1986A	10/2/1991	CC	AAA
Louisiana Agri Fin Auth.	LA	A	10/2/1991	CC	AAA
Louisiana Agri Fin Auth.	LA	A	10/2/1991	CC	AAA
Louisiana Agri Fin Auth.	LA	1986A	10/2/1991	CC	AAA
El Paso Co	CO	1982B	3/16/1992	B	A+
Jefferson Co	CO	1982A	3/2/1993	CCC	A+
Aurora	CO	1983A	9/2/1993	CCC	A
Aurora	CO	1983A	9/2/1993	CCC	A
Jefferson Co	CO	1982A	12/31/1993	CCC	A+
El Paso Co	CO	1982A	9/21/1994	CCC	AA
Louisiana Hsg Fin Agency	LA	1986A	3/30/1995	CC	A
Los Angleles Hsg Auth.	CA	1992A	6/3/1996	CCC	A
Windsor Hsg Found	MN	1996A	1/28/1998	NR	A
Windsor Hsg Found	MN	1996B	1/28/1998	NR	BBB
Louisville & Jefferson Co Metro Govt	KY	1995	11/14/1998	CC	A-
Radcliff Hsg Auth.	KY	1995	11/14/1998	CC	A-
Boulder Co	CO	1982A	11/1/1999	CC	A
Blackwater Hsg Corp.	FL	1995A	9/6/2001	CC	BBB
Emerald Coast Hsg Corp.	FL	1995A	1/8/2002	CCC	BBB
Patten Towers L.P. II	Tn	1995A	8/1/2002	CC	A-
Patten Towers L.P. II	Tn	1995B	8/1/2002	C	BBB
Indianapolis	IN	1996A	11/11/2002	CCC	A
Indianapolis	IN	1996C	11/11/2002	CCC-	BBB
American Opportunity Found Dallas Fort Worth Afford Hsg Corp.	TX	1996D	1/2/2003	CCC	BB-
Austin Hsg Fin Corp.	TX	1997A	1/8/2003	CCC	A

Table 11

USPF Housing Defaulted Issues, 1986-2010 (cont.)					
Austin Hsg Fin Corp.	TX	1997C	1/8/2003	CC	BBB
Mercy Hsg	AZ	1997A	8/19/2004	B	A
Mercy Hsg	AZ	1997B	8/19/2004	CCC	BBB
Texas State Afford Hsg Corp.	TX	2001B	10/8/2004	CC	BBB-
Texas State Afford Hsg Corp.	TX	2001C	10/8/2004	C	BB
Harris Co Hsg Fin Corp.	TX	1999C	4/11/2005	CCC	BBB
Harris Co Hsg Fin Corp.	TX	1999D	4/11/2005	CCC	BB
Raleigh Hsg Auth.	NC	1999A	6/10/2005	CC	A-
American Opportunity for Hsg	TX	2002B	9/22/2005	C	BBB-
American Opportunity for Hsg	TX	2002C	9/22/2005	C	BB
De Kalb Co Hsg Auth.	GA	1996C	10/20/2005	C	BBB
Shelby Co Health Education & Hsg Facilities Board	TN	1997A	1/13/2006	CCC	A
Liberty Hsg Dev Corp.	NY	1996A	3/20/2006	AA-	AAA
American Hsg Found	TX	2002B	3/28/2006	C	BBB-
St. Louis Indus Dev Auth.	MO	1997	4/3/2007	C	BBB+
St. Cloud Hsg & Redev Auth.	MN	1999A	5/29/2007	B	BBB
Little Rock Family Hsg LLC	AR	2004B	10/11/2007	BB	A-
South Texas Afford Hsg Corp.	TX	2002C	9/9/2008	C	BB
American Opportunity for Hsg	TX	2002A	3/6/2009	C	A-
South Texas Afford Hsg Corp.	TX	2002B	3/12/2009	C	BBB-
Harris Co Hsg Fin Corp.	TX	1999A	3/3/2009	CCC	A

Table 12

USPF Cumulative Average Obligor Default Rates, 1986-2010 (%)

Rating	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10	Y11	Y12	Y13	Y14	Y15
AAA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AA	0.00	0.00	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.03	0.03	0.04	0.04	0.05	0.06
A	0.00	0.01	0.01	0.02	0.03	0.03	0.04	0.05	0.05	0.06	0.06	0.06	0.07	0.08	0.10
BBB	0.01	0.04	0.08	0.12	0.16	0.19	0.23	0.24	0.26	0.29	0.31	0.33	0.35	0.37	0.39
BB	0.23	0.55	0.88	1.03	1.19	1.36	1.45	1.55	1.66	1.77	1.77	1.77	2.04	2.04	2.04
B	1.26	2.59	3.29	4.56	5.65	6.84	8.11	8.46	8.84	8.84	8.84	8.84	8.84	8.84	8.84
CCC/C	13.81	20.13	25.46	29.15	31.05	32.36	33.72	35.11	36.54	38.09	39.67	41.45	41.45	41.45	41.45
Invest Grade	0.00	0.01	0.02	0.04	0.05	0.06	0.07	0.08	0.09	0.10	0.11	0.12	0.12	0.14	0.15
Spec Grade	1.47	2.46	3.28	3.96	4.46	4.95	5.40	5.68	5.98	6.22	6.39	6.56	6.75	6.75	6.75
All Rated	0.02	0.04	0.06	0.08	0.10	0.12	0.13	0.15	0.16	0.17	0.18	0.19	0.20	0.21	0.23

Table 13

Housing Cumulative Average Issue Default Rates, 1986-2010 (%)

Rating	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10	Y11	Y12	Y13	Y14	Y15
AAA	0.00	0.03	0.05	0.07	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
AA	0.00	0.01	0.01	0.02	0.02	0.03	0.03	0.04	0.04	0.05	0.05	0.05	0.05	0.05	0.05
A	0.01	0.04	0.08	0.11	0.16	0.21	0.26	0.28	0.29	0.30	0.30	0.31	0.31	0.31	0.31
BBB	0.05	0.30	0.57	0.89	1.35	1.78	2.04	2.20	2.32	2.36	2.36	2.36	2.36	2.36	2.36

Table 13

Housing Cumulative Average Issue Default Rates, 1986-2010 (%) (cont.)

BB	3.37	4.69	6.61	8.09	9.29	10.14	10.59	10.59	10.86	11.14	11.14	11.14	11.14	11.14	11.14
B	2.00	5.50	7.92	9.01	9.01	9.01	9.01	9.83	9.83	9.83	9.83	9.83	9.83	9.83	9.83
CCC/C	12.08	16.55	18.92	20.94	22.03	22.60	23.19	23.19	23.19	23.19	23.19	23.19	23.19	23.19	23.19
Invest Grade	0.00	0.03	0.05	0.08	0.11	0.13	0.15	0.16	0.17	0.17	0.17	0.17	0.18	0.18	0.18
Spec Grade	4.90	7.36	9.48	11.00	11.94	12.58	12.99	13.13	13.29	13.46	13.46	13.46	13.46	13.46	13.46
All Rated	0.04	0.08	0.12	0.16	0.19	0.22	0.24	0.25	0.26	0.27	0.27	0.27	0.27	0.27	0.27

Table 14

USPF Cumulative Average Obligor Default Rates By Rating Modifier, 1986-2010 (%)

Rating	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10	Y11	Y12	Y13	Y14	Y15
AAA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AA+	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AA	0.00	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
AA-	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.08	0.09	0.11	0.14
A+	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02
A	0.00	0.01	0.01	0.02	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.04	0.04
A-	0.00	0.01	0.03	0.04	0.06	0.07	0.09	0.11	0.13	0.15	0.17	0.18	0.20	0.25	0.30
BBB+	0.00	0.01	0.03	0.06	0.09	0.13	0.16	0.17	0.18	0.18	0.18	0.19	0.20	0.20	0.20
BBB	0.01	0.04	0.07	0.09	0.12	0.14	0.16	0.16	0.16	0.17	0.19	0.20	0.22	0.25	0.26
BBB-	0.03	0.15	0.24	0.35	0.46	0.53	0.60	0.71	0.83	0.96	1.07	1.19	1.23	1.28	1.34
BB+	0.31	0.65	1.02	1.22	1.44	1.69	1.96	1.96	1.96	1.96	1.96	1.96	1.96	1.96	1.96
BB	0.12	0.12	0.37	0.51	0.66	0.82	0.82	1.00	1.18	1.38	1.38	1.38	1.85	1.85	1.85
BB-	0.49	2.10	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70
B+	0.98	2.00	3.10	7.77	10.37	13.26	16.42	18.32	20.79	20.79	20.79	20.79	20.79	20.79	20.79
B	1.89	3.06	3.47	3.47	3.94	4.45	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
B-	0.00	2.00	3.10	4.31	5.61	7.04	8.54	8.54	8.54	8.54	8.54	8.54	8.54	8.54	8.54
CCC/C	13.81	20.13	25.46	29.15	31.05	32.36	33.72	35.11	36.54	38.09	39.67	41.45	41.45	41.45	41.45
Invest Grade	0.00	0.01	0.02	0.04	0.05	0.06	0.07	0.08	0.09	0.10	0.11	0.12	0.12	0.14	0.15
Spec Grade	0.46	0.99	1.41	1.81	2.18	2.58	2.93	3.09	3.25	3.34	3.34	3.34	3.55	3.55	3.55
All Rated	0.01	0.02	0.04	0.06	0.07	0.09	0.10	0.11	0.12	0.13	0.14	0.15	0.16	0.17	0.19

Table 15

Housing Cumulative Average Issue Default Rates By Rating Modifier, 1986-2010 (%)

Rating	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10	Y11	Y12	Y13	Y14	Y15
AAA	0.00	0.03	0.05	0.07	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
AA+	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
AA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02
AA-	0.01	0.02	0.04	0.07	0.10	0.13	0.14	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16
A+	0.00	0.02	0.04	0.07	0.09	0.12	0.15	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16
A	0.00	0.02	0.05	0.11	0.17	0.22	0.26	0.30	0.33	0.34	0.36	0.37	0.39	0.39	0.39
A-	0.06	0.16	0.31	0.35	0.44	0.66	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
BBB+	0.00	0.00	0.10	0.21	0.44	0.69	0.94	1.20	1.33	1.47	1.47	1.47	1.47	1.47	1.47
BBB	0.07	0.35	0.66	1.24	2.14	2.88	3.27	3.47	3.68	3.68	3.68	3.68	3.68	3.68	3.68

Table 15

Housing Cumulative Average Issue Default Rates By Rating Modifier, 1986-2010 (%) (cont.)															
BBB-	0.08	0.53	0.91	1.12	1.23	1.46	1.58	1.58	1.58	1.58	1.58	1.58	1.58	1.58	1.58
BB+	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
BB	4.42	6.17	8.47	9.93	10.97	11.81	12.11	12.11	12.46	12.82	12.82	12.82	12.82	12.82	12.82
BB-	2.17	2.17	4.56	9.58	14.90	17.74	20.68	20.68	20.68	20.68	20.68	20.68	20.68	20.68	20.68
B+	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B	2.17	5.50	7.60	8.18	8.18	8.18	8.18	9.07	9.07	9.07	9.07	9.07	9.07	9.07	9.07
B-	0.00	11.11	23.81	39.05	39.05	39.05	39.05	39.05	n/a	n/a	n/a	n/a	n/a	n/a	n/a
CCC/C	12.08	16.55	18.92	20.94	22.03	22.60	23.19	23.19	23.19	23.19	23.19	23.19	23.19	23.19	23.19
Invest Grade	0.00	0.03	0.05	0.08	0.11	0.13	0.15	0.16	0.17	0.17	0.17	0.17	0.18	0.18	0.18
Spec Grade	2.99	4.91	6.96	8.34	9.24	9.90	10.25	10.44	10.65	10.86	10.86	10.86	10.86	10.86	10.86
All Rated	0.02	0.06	0.09	0.12	0.16	0.19	0.21	0.22	0.23	0.23	0.23	0.23	0.24	0.24	0.24

n/a-not applicable.

Table 16

USPF Static Pool Default Rates, 1986-2010 (%)																
Rating	**Issuers**	**Y1**	**Y2**	**Y3**	**Y4**	**Y5**	**Y6**	**Y7**	**Y8**	**Y9**	**Y10**	**Y11**	**Y12**	Y13	Y14	Y15
1986	5049	0.00	0.06	0.06	0.12	0.18	0.20	0.30	0.30	0.34	0.36	0.36	0.36	0.36	0.38	0.40
1987	5210	0.06	0.06	0.12	0.17	0.19	0.29	0.29	0.33	0.35	0.35	0.35	0.35	0.36	0.38	0.38
1988	5184	0.00	0.06	0.12	0.14	0.21	0.21	0.25	0.27	0.27	0.27	0.27	0.29	0.31	0.31	0.31
1989	5327	0.06	0.11	0.13	0.21	0.21	0.24	0.26	0.26	0.26	0.26	0.28	0.30	0.30	0.30	0.30
1990	5622	0.05	0.07	0.16	0.16	0.21	0.23	0.23	0.23	0.23	0.25	0.27	0.27	0.27	0.27	0.32
1991	5979	0.02	0.10	0.10	0.15	0.17	0.17	0.17	0.17	0.18	0.20	0.20	0.20	0.20	0.25	0.25
1992	6421	0.08	0.08	0.12	0.14	0.14	0.14	0.14	0.16	0.17	0.17	0.17	0.17	0.22	0.22	0.22
1993	6743	0.00	0.04	0.06	0.06	0.06	0.06	0.07	0.09	0.09	0.09	0.09	0.13	0.13	0.13	0.13
1994	6797	0.04	0.06	0.06	0.06	0.06	0.07	0.10	0.10	0.10	0.10	0.15	0.15	0.15	0.15	0.19
1995	6612	0.02	0.02	0.02	0.02	0.03	0.06	0.06	0.06	0.06	0.11	0.11	0.11	0.11	0.15	0.15
1996	6645	0.00	0.00	0.00	0.02	0.05	0.05	0.05	0.06	0.11	0.11	0.11	0.11	0.15	0.15	0.17
1997	6923	0.00	0.00	0.01	0.04	0.06	0.06	0.07	0.12	0.12	0.12	0.12	0.16	0.16	0.17	
1998	7690	0.00	0.01	0.04	0.07	0.07	0.08	0.12	0.12	0.12	0.12	0.16	0.16	0.17		
1999	8591	0.01	0.05	0.08	0.09	0.10	0.14	0.14	0.14	0.14	0.17	0.17	0.20			
2000	7053	0.04	0.09	0.10	0.11	0.16	0.16	0.16	0.16	0.21	0.21	0.24				
2001	7674	0.04	0.05	0.07	0.10	0.10	0.10	0.10	0.16	0.16	0.18					
2002	8429	0.01	0.02	0.06	0.06	0.07	0.07	0.12	0.12	0.14						
2003	9146	0.01	0.04	0.05	0.07	0.07	0.12	0.12	0.14							
2004	10001	0.03	0.04	0.05	0.05	0.10	0.10	0.12								
2005	10435	0.01	0.02	0.02	0.07	0.07	0.09									
2006	10903	0.01	0.01	0.06	0.06	0.07										
2007	11609	0.00	0.04	0.04	0.07											
2008	12298	0.04	0.04	0.07												
2009	13267	0.00	0.02													
2010	15267	0.02														
Marginal Avg		0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Cumulative Avg		0.02	0.04	0.06	0.08	0.10	0.12	0.13	0.15	0.16	0.17	0.18	0.19	0.20	0.21	0.23

Table 16

USPF Static Pool Default Rates, 1986-2010 (%) (cont.)															
Std Dev	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.09	0.09
Median	0.01	0.04	0.06	0.07	0.10	0.11	0.12	0.15	0.16	0.18	0.17	0.18	0.20	0.23	0.25
Min	0.00	0.00	0.00	0.02	0.03	0.05	0.05	0.06	0.06	0.09	0.09	0.11	0.11	0.13	0.13
Max	0.08	0.11	0.16	0.21	0.21	0.29	0.30	0.33	0.35	0.36	0.36	0.36	0.36	0.38	0.40

Table 17

USPF Static Pool Cumulative Obligor Default Rates By Rating Category, 1986-2010 (%)

	Issuers	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10	Y11	Y12	Y13	Y14	Y15
Rating: AA																
1986	972	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1987	1038	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1988	1064	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1989	1141	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1990	1230	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1991	1345	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1992	1395	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1993	1486	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1994	1507	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07
1995	1506	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.07
1996	1603	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.06	0.06
1997	1714	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.06	0.06	
1998	1867	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.05	0.05		
1999	2053	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.05	0.05			
2000	1744	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.06	0.06				
2001	2122	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.05	0.05					
2002	2540	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.04	0.04						
2003	2751	0.00	0.00	0.00	0.00	0.00	0.04	0.04	0.04							
2004	3009	0.00	0.00	0.00	0.00	0.03	0.03	0.03								
2005	3080	0.00	0.00	0.00	0.03	0.03	0.03									
2006	3302	0.00	0.00	0.03	0.03	0.03										
2007	3507	0.00	0.03	0.03	0.03											
2008	3733	0.03	0.03	0.03												
2009	4442	0.00	0.00													
2010	5633	0.00														
Marg Avg		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01
Cum Avg		0.00	0.00	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.03	0.03	0.04	0.04	0.05	0.06
Std Dev		0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.03
Median		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Min		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Max		0.03	0.03	0.03	0.03	0.03	0.04	0.04	0.05	0.06	0.06	0.06	0.06	0.06	0.07	0.07
Rating: A																
1986	2962	0.00	0.00	0.00	0.00	0.07	0.07	0.10	0.10	0.14	0.14	0.14	0.14	0.14	0.14	0.17

Table 17

USPF Static Pool Cumulative Obligor Default Rates By Rating Category, 1986-2010 (%) (cont.)

1987	2991	0.00	0.00	0.00	0.07	0.07	0.10	0.10	0.13	0.13	0.13	0.13	0.13	0.13	0.17	0.17
1988	2926	0.00	0.00	0.07	0.07	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.14	0.14	0.14
1989	2940	0.00	0.07	0.07	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.14	0.14	0.14	0.14
1990	3079	0.00	0.00	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.06	0.06	0.06	0.06	0.16
1991	3187	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.13	0.13
1992	3421	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.06	0.06	0.06
1993	3523	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.06	0.06	0.06	0.06
1994	3521	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.06
1995	3350	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.06	0.06
1996	3262	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.06	0.06	0.06	0.06	0.06	0.06	0.06
1997	3385	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.06	0.06	0.06	0.06	0.06	0.06	0.06	
1998	3801	0.00	0.00	0.00	0.00	0.00	0.03	0.05	0.05	0.05	0.05	0.05	0.05	0.05		
1999	4272	0.00	0.00	0.00	0.00	0.02	0.05	0.05	0.05	0.05	0.05	0.05	0.05			
2000	3539	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03	0.06	0.06	0.06				
2001	3721	0.00	0.00	0.03	0.03	0.03	0.03	0.03	0.05	0.05	0.05					
2002	3990	0.00	0.03	0.03	0.03	0.03	0.03	0.05	0.05	0.05						
2003	4360	0.02	0.02	0.05	0.05	0.05	0.07	0.07	0.07							
2004	4739	0.00	0.02	0.02	0.02	0.04	0.04	0.04								
2005	5164	0.00	0.00	0.00	0.02	0.02	0.02									
2006	5360	0.00	0.00	0.02	0.02	0.02										
2007	5707	0.00	0.02	0.02	0.02											
2008	6004	0.02	0.02	0.02												
2009	6341	0.00	0.00													
2010	7437	0.00														
Marg Avg		0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.01	0.01
Cum Avg		0.00	0.01	0.01	0.02	0.03	0.03	0.04	0.05	0.05	0.06	0.06	0.06	0.07	0.08	0.10
Std Dev		0.01	0.02	0.02	0.03	0.03	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.05
Median		0.00	0.00	0.00	0.02	0.02	0.03	0.03	0.05	0.05	0.05	0.06	0.06	0.06	0.06	0.13
Min		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.06
Max		0.02	0.07	0.07	0.10	0.10	0.10	0.10	0.13	0.14	0.14	0.14	0.14	0.14	0.17	0.17
Rating: BBB																
1986	991	0.00	0.30	0.30	0.50	0.50	0.61	0.91	0.91	1.01	1.01	1.01	1.01	1.01	1.11	1.11
1987	1051	0.10	0.10	0.29	0.29	0.38	0.67	0.67	0.76	0.76	0.76	0.76	0.76	0.86	0.86	0.86
1988	1066	0.00	0.09	0.09	0.19	0.38	0.38	0.56	0.56	0.56	0.56	0.56	0.66	0.66	0.66	0.66
1989	1115	0.00	0.00	0.00	0.00	0.00	0.18	0.18	0.18	0.18	0.18	0.27	0.27	0.27	0.27	0.27
1990	1186	0.00	0.00	0.08	0.08	0.34	0.34	0.34	0.34	0.34	0.42	0.42	0.42	0.42	0.42	0.42
1991	1301	0.00	0.08	0.08	0.31	0.31	0.31	0.31	0.31	0.38	0.38	0.38	0.38	0.38	0.38	0.38
1992	1460	0.00	0.00	0.21	0.21	0.21	0.21	0.21	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27
1993	1598	0.00	0.06	0.06	0.06	0.06	0.06	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13
1994	1627	0.00	0.00	0.00	0.00	0.00	0.06	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.25
1995	1617	0.00	0.00	0.00	0.00	0.06	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.25	0.25
1996	1646	0.00	0.00	0.00	0.06	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.30	0.30	0.36

Table 17

USPF Static Pool Cumulative Obligor Default Rates By Rating Category, 1986-2010 (%) (cont.)																
1997	1678	0.00	0.00	0.06	0.18	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.36	0.36	0.42	
1998	1863	0.00	0.00	0.05	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.27	0.27	0.32		
1999	2079	0.00	0.10	0.19	0.24	0.24	0.24	0.24	0.24	0.24	0.34	0.34	0.43			
2000	1581	0.00	0.13	0.13	0.13	0.19	0.19	0.19	0.19	0.32	0.32	0.44				
2001	1615	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.19	0.19	0.31					
2002	1623	0.00	0.00	0.00	0.00	0.06	0.06	0.12	0.12	0.18						
2003	1730	0.00	0.00	0.00	0.06	0.06	0.12	0.12	0.17							
2004	1904	0.00	0.00	0.05	0.05	0.11	0.11	0.11								
2005	1828	0.00	0.05	0.05	0.11	0.11	0.11									
2006	1839	0.00	0.00	0.05	0.05	0.05										
2007	1921	0.00	0.05	0.05	0.10											
2008	2027	0.05	0.05	0.10												
2009	1807	0.00	0.06													
2010	1417	0.00														
Marg Avg		0.01	0.03	0.04	0.04	0.04	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.01
Cum Avg		0.01	0.04	0.08	0.12	0.16	0.19	0.23	0.24	0.26	0.29	0.31	0.33	0.35	0.37	0.39
Std Dev		0.02	0.07	0.08	0.12	0.14	0.16	0.21	0.22	0.23	0.23	0.23	0.24	0.26	0.28	0.29
Median		0.00	0.02	0.06	0.09	0.16	0.18	0.19	0.19	0.24	0.29	0.27	0.32	0.32	0.34	0.36
Min		0.00	0.00	0.00	0.00	0.00	0.06	0.06	0.12	0.13	0.13	0.13	0.13	0.13	0.13	0.13
Max		0.10	0.30	0.30	0.50	0.50	0.67	0.91	0.91	1.01	1.01	1.01	1.01	1.01	1.11	1.11
Rating: BB																
1986	55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.82	1.82	1.82	1.82	1.82	1.82
1987	54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1988	55	0.00	1.82	1.82	1.82	1.82	1.82	1.82	1.82	1.82	1.82	1.82	1.82	1.82	1.82	1.82
1989	54	3.70	3.70	3.70	5.56	5.56	5.56	5.56	5.56	5.56	5.56	5.56	5.56	5.56	5.56	5.56
1990	53	0.00	0.00	1.89	1.89	1.89	1.89	1.89	1.89	1.89	1.89	1.89	1.89	1.89	1.89	1.89
1991	65	0.00	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54
1992	66	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.03	3.03	3.03
1993	56	0.00	1.79	1.79	1.79	1.79	1.79	1.79	1.79	1.79	1.79	1.79	1.79	1.79	1.79	1.79
1994	62	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1995	62	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1996	55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1997	52	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1998	47	0.00	0.00	2.13	2.13	2.13	2.13	2.13	2.13	2.13	2.13	2.13	2.13	2.13		
1999	55	0.00	0.00	1.82	1.82	1.82	1.82	1.82	1.82	1.82	1.82	1.82	1.82			
2000	46	0.00	0.00	2.17	2.17	2.17	2.17	2.17	2.17	2.17	2.17	2.17				
2001	49	0.00	2.04	2.04	2.04	2.04	2.04	2.04	2.04	2.04	2.04					
2002	54	1.85	1.85	1.85	1.85	1.85	1.85	3.70	3.70	5.56						
2003	63	0.00	0.00	0.00	0.00	0.00	3.17	3.17	4.76							
2004	83	0.00	0.00	0.00	0.00	2.41	2.41	2.41								
2005	82	0.00	0.00	0.00	1.22	1.22	1.22									
2006	97	0.00	0.00	1.03	1.03	1.03										

Table 17

USPF Static Pool Cumulative Obligor Default Rates By Rating Category, 1986-2010 (%) (cont.)																
2007	104	0.00	0.96	0.96	0.96											
2008	114	0.00	0.00	0.00												
2009	114	0.00	0.00													
2010	124	0.81														
Marg Avg		0.23	0.31	0.34	0.15	0.16	0.17	0.09	0.10	0.11	0.11	0.00	0.00	0.28	0.00	0.00
Cum Avg		0.23	0.55	0.88	1.03	1.19	1.36	1.45	1.55	1.66	1.77	1.77	1.77	2.04	2.04	2.04
Std Dev		0.80	0.98	1.06	1.29	1.32	1.37	1.49	1.65	1.72	1.40	1.44	1.47	1.54	1.59	1.60
Median		0.00	0.00	0.96	1.13	1.54	1.80	1.82	1.80	1.79	1.80	1.79	1.66	1.79	1.66	1.79
Min		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Max		3.70	3.70	3.70	5.56	5.56	5.56	5.56	5.56	5.56	5.56	5.56	5.56	5.56	5.56	5.56
Rating: B																
1986	16	0.00	0.00	0.00	0.00	0.00	0.00	6.25	6.25	6.25	6.25	6.25	6.25	6.25	6.25	6.25
1987	20	0.00	0.00	0.00	0.00	0.00	5.00	5.00	5.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
1988	17	0.00	0.00	0.00	0.00	5.88	5.88	5.88	11.76	11.76	11.76	11.76	11.76	11.76	11.76	11.76
1989	17	0.00	0.00	5.88	5.88	5.88	5.88	11.76	11.76	11.76	11.76	11.76	11.76	11.76	11.76	11.76
1990	13	0.00	7.69	7.69	7.69	7.69	15.38	15.38	15.38	15.38	15.38	15.38	15.38	15.38	15.38	15.38
1991	15	0.00	6.67	6.67	6.67	13.33	13.33	13.33	13.33	13.33	13.33	13.33	13.33	13.33	13.33	13.33
1992	14	0.00	0.00	0.00	7.14	7.14	7.14	7.14	7.14	7.14	7.14	7.14	7.14	7.14	7.14	7.14
1993	22	0.00	4.55	9.09	9.09	9.09	9.09	9.09	9.09	9.09	9.09	9.09	9.09	9.09	9.09	9.09
1994	19	10.53	15.79	15.79	15.79	15.79	15.79	15.79	15.79	15.79	15.79	15.79	15.79	15.79	15.79	15.79
1995	16	6.25	6.25	6.25	6.25	6.25	6.25	6.25	6.25	6.25	6.25	6.25	6.25	6.25	6.25	6.25
1996	15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1997	16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1998	17	0.00	5.88	5.88	5.88	5.88	5.88	5.88	5.88	5.88	5.88	5.88	5.88	5.88		
1999	14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
2000	10	20.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00				
2001	14	0.00	0.00	0.00	7.14	7.14	7.14	7.14	7.14	7.14	7.14					
2002	12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
2003	18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00							
2004	27	0.00	0.00	0.00	0.00	0.00	0.00	7.41								
2005	22.00	0.00	0.00	0.00	4.55	4.55	13.64									
2006	34.00	0.00	0.00	2.94	2.94	8.82										
2007	28.00	0.00	0.00	0.00	7.14											
2008	28.00	3.57	3.57	3.57												
2009	30.00	0.00	0.00													
2010	21.00	0.00														
Marg Avg		1.26	1.34	0.73	1.31	1.14	1.27	1.37	0.38	0.41	0.00	0.00	0.00	0.00	0.00	0.00
Cum Avg		1.26	2.59	3.29	4.56	5.65	6.84	8.11	8.46	8.84	8.84	8.84	8.84	8.84	8.84	8.84
Std Dev		4.46	6.74	6.86	6.78	7.03	7.47	7.21	7.45	7.35	7.23	7.44	5.21	4.89	5.02	4.43
Median		0.00	0.00	0.00	5.21	5.88	5.88	6.25	6.70	7.14	8.12	9.09	8.12	9.09	9.55	10.00
Min		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Max		20.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	15.79	15.79	15.79	15.79

Table 17

USPF Static Pool Cumulative Obligor Default Rates By Rating Category, 1986-2010 (%) (cont.)

Rating: CCC/C																
1986	4	0.00	0.00	0.00	25.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00
1987	7	28.57	28.57	42.86	57.14	57.14	57.14	57.14	57.14	57.14	57.14	57.14	57.14	57.14	57.14	57.14
1988	8	0.00	12.50	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00
1989	10	10.00	20.00	20.00	40.00	40.00	40.00	40.00	40.00	40.00	40.00	40.00	40.00	40.00	40.00	40.00
1990	9	33.33	33.33	55.56	55.56	55.56	55.56	55.56	55.56	55.56	55.56	55.56	55.56	55.56	55.56	55.56
1991	11	9.09	27.27	27.27	27.27	27.27	27.27	27.27	27.27	27.27	27.27	27.27	27.27	27.27	27.27	27.27
1992	15	33.33	33.33	33.33	33.33	33.33	33.33	33.33	33.33	33.33	33.33	33.33	33.33	33.33	33.33	33.33
1993	5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	40.00	40.00	40.00	40.00
1994	7	14.29	14.29	14.29	14.29	14.29	14.29	14.29	14.29	14.29	14.29	42.86	42.86	42.86	42.86	42.86
1995	6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	33.33	33.33	33.33	33.33	33.33	33.33
1996	4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00
1997	7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	28.57	28.57	28.57	28.57	28.57	28.57	28.57	
1998	6	0.00	0.00	0.00	0.00	0.00	0.00	33.33	33.33	33.33	33.33	33.33	33.33	33.33		
1999	9	11.11	22.22	22.22	22.22	22.22	44.44	44.44	44.44	44.44	44.44	44.44	44.44			
2000	11	9.09	9.09	9.09	9.09	27.27	27.27	27.27	27.27	27.27	27.27	27.27				
2001	6	33.33	33.33	33.33	66.67	66.67	66.67	66.67	66.67	66.67	66.67					
2002	10	0.00	0.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00						
2003	5	0.00	60.00	60.00	60.00	60.00	60.00	60.00	60.00							
2004	6	50.00	50.00	50.00	50.00	50.00	50.00	50.00								
2005	4	25.00	25.00	25.00	25.00	25.00	25.00									
2006	5	20.00	20.00	20.00	20.00	20.00										
2007	4	0.00	25.00	25.00	25.00											
2008	8	12.50	12.50	37.50												
2009	6	0.00	33.33													
2010	8	25.00														
Marg Avg		13.81	7.33	6.67	4.96	2.68	1.90	2.00	2.11	2.20	2.44	2.56	2.94	0.00	0.00	0.00
Cum Avg		13.81	20.13	25.46	29.15	31.05	32.36	33.72	35.11	36.54	38.09	39.67	41.45	41.45	41.45	41.45
Std Dev		14.27	16.38	18.08	20.61	21.25	21.87	21.21	20.00	18.22	16.51	14.14	10.05	10.36	10.61	10.45
Median		9.09	20.00	25.00	25.00	27.27	28.64	33.33	31.67	33.33	33.33	33.33	40.00	40.00	40.00	40.00
Min		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	25.00	25.00	25.00	25.00
Max		50.00	60.00	60.00	66.67	66.67	66.67	66.67	66.67	66.67	66.67	57.14	57.14	57.14	57.14	57.14

Table 18

USPF Obligor Default Rates By Rating Modifier

Year	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-	CCC/C
1986	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	n/a	0.00	n/a	0.00
1987	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.08	0.00	0.00	0.00	0.00	0.00	n/a	28.57
1988	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	n/a	0.00
1989	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.14	0.00	25.00	0.00	0.00	0.00	10.00
1990	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	33.33
1991	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.09

Table 18

USPF Obligor Default Rates By Rating Modifier (cont.)

1992	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	33.33
1993	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1994	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.29	0.00	14.29
1995	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.11	0.00	0.00
1996	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1997	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1998	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1999	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.11
2000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	50.00	20.00	0.00	9.09
2001	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	33.33
2002	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.00	0.00	0.00	0.00	0.00	0.00	0.00
2003	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2004	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	50.00
2005	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	25.00
2006	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.00
2007	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2008	0.00	0.00	0.08	0.00	0.00	0.04	0.00	0.00	0.00	0.24	0.00	0.00	0.00	0.00	6.67	0.00	12.50
2009	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2010	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	25.00

n/a-not applicable.

Table 19

Housing Static Pool Default Rates, 1986-2010 (%)

Rating	Issuers	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10	Y11	Y12	Y13	Y14	Y15
1986	4329	0.00	0.02	0.05	0.05	0.05	0.09	0.12	0.21	0.23	0.23	0.23	0.23	0.23	0.23	0.23
1987	4573	0.02	0.04	0.04	0.04	0.33	0.35	0.44	0.46	0.46	0.46	0.46	0.46	0.48	0.48	0.48
1988	4792	0.02	0.02	0.02	0.29	0.31	0.40	0.42	0.42	0.42	0.42	0.42	0.44	0.44	0.44	0.44
1989	5163	0.00	0.00	0.25	0.27	0.35	0.37	0.37	0.37	0.37	0.37	0.39	0.39	0.39	0.39	0.39
1990	4848	0.00	0.39	0.41	0.50	0.52	0.52	0.52	0.52	0.52	0.54	0.54	0.54	0.54	0.54	0.54
1991	5167	0.39	0.41	0.48	0.50	0.52	0.52	0.52	0.52	0.54	0.54	0.54	0.54	0.54	0.54	0.54
1992	5128	0.02	0.10	0.12	0.12	0.12	0.12	0.12	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14
1993	5120	0.00	0.00	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
1994	4921	0.00	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
1995	5078	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
1996	5291	0.00	0.00	0.04	0.04	0.04	0.06	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
1997	5646	0.00	0.07	0.07	0.07	0.09	0.18	0.19	0.19	0.21	0.23	0.23	0.23	0.23	0.23	
1998	5853	0.00	0.00	0.00	0.02	0.10	0.15	0.19	0.21	0.24	0.26	0.26	0.26	0.26		
1999	5974	0.00	0.00	0.02	0.10	0.15	0.18	0.20	0.23	0.27	0.27	0.27	0.27			
2000	6275	0.00	0.02	0.10	0.14	0.18	0.24	0.27	0.30	0.30	0.32	0.32				
2001	6666	0.00	0.06	0.11	0.14	0.20	0.23	0.26	0.26	0.27	0.27					
2002	6975	0.06	0.10	0.16	0.22	0.24	0.27	0.27	0.29	0.29						
2003	7227	0.00	0.06	0.12	0.17	0.19	0.21	0.25	0.25							
2004	7208	0.03	0.08	0.12	0.15	0.17	0.21	0.21								

Table 19

Housing Static Pool Default Rates, 1986-2010 (%) (cont.)

2005	7095	0.01	0.04	0.08	0.10	0.13	0.13									
2006	6845	0.01	0.06	0.07	0.09	0.09										
2007	9123	0.03	0.03	0.04	0.04											
2008	9705	0.00	0.01	0.01												
2009	9686	0.00	0.00													
2010	9784	0.00														
Marg Avg		0.02	0.04	0.04	0.03	0.03	0.03	0.02	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Cum Avg		0.02	0.06	0.09	0.12	0.16	0.19	0.21	0.22	0.23	0.23	0.23	0.23	0.24	0.24	0.24
Std Dev		0.08	0.11	0.12	0.14	0.15	0.15	0.15	0.15	0.16	0.17	0.17	0.18	0.19	0.20	0.21
Median		0.00	0.03	0.07	0.10	0.15	0.20	0.21	0.24	0.27	0.26	0.26	0.24	0.23	0.23	0.23
Min		0.00	0.00	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Max		0.39	0.41	0.48	0.50	0.52	0.52	0.52	0.52	0.54	0.54	0.54	0.54	0.54	0.54	0.54

Table 20

Housing Static Pool Cumulative Default Rates By Rating Category, 1986-2010 (%)

	Issuers	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10	Y11	Y12	Y13	Y14	Y15
Rating: AAA																
1986	1097	0.00	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
1987	1156	0.09	0.09	0.09	0.09	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
1988	1209	0.00	0.00	0.00	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
1989	1337	0.00	0.00	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
1990	1287	0.00	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32
1991	1528	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1992	1599	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1993	1731	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1994	1620	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1995	1866	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1996	2124	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1997	2456	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1998	2921	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
1999	3123	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
2000	3358	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
2001	3617	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00					
2002	3937	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
2003	4082	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00							
2004	4026	0.00	0.00	0.00	0.00	0.00	0.00	0.00								
2005	4128	0.00	0.00	0.00	0.00	0.00	0.00									
2006	3769	0.00	0.00	0.00	0.00	0.00										
2007	4388	0.00	0.00	0.00	0.00											
2008	4400	0.00	0.00	0.00												
2009	4269	0.00	0.00													
2010	4223	0.00														

Table 20

Housing Static Pool Cumulative Default Rates By Rating Category, 1986-2010 (%) (cont.)

Marg Avg		0.00	0.03	0.02	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cum Avg		0.00	0.03	0.05	0.07	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
Std Dev		0.02	0.26	0.31	0.36	0.41	0.42	0.42	0.43	0.44	0.45	0.46	0.47	0.48	0.49	0.50
Median		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Min		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Max		0.09	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32
Rating: AA																
1986	1858	0.00	0.00	0.05	0.05	0.05	0.11	0.11	0.11	0.16	0.16	0.16	0.16	0.16	0.16	0.16
1987	1907	0.00	0.05	0.05	0.05	0.10	0.10	0.10	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16
1988	1966	0.05	0.05	0.05	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
1989	1997	0.00	0.00	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
1990	1859	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1991	1920	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1992	1649	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1993	1678	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1994	1699	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1995	1702	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1996	1850	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1997	1971	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.05	0.05	0.05	0.05	
1998	1863	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.05	0.05	0.05	0.05		
1999	1900	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.05	0.05	0.05	0.05			
2000	2112	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.05	0.05	0.05	0.05				
2001	2195	0.00	0.00	0.00	0.00	0.00	0.05	0.05	0.05	0.05	0.05					
2002	2228	0.00	0.00	0.00	0.00	0.04	0.04	0.04	0.04	0.04						
2003	2295	0.00	0.00	0.00	0.04	0.04	0.04	0.04	0.04							
2004	2215	0.00	0.00	0.05	0.05	0.05	0.05	0.05								
2005	2091	0.00	0.05	0.05	0.05	0.05	0.05									
2006	2358	0.04	0.04	0.04	0.04	0.04										
2007	3416	0.00	0.00	0.00	0.00											
2008	3728	0.00	0.00	0.00												
2009	3767	0.00	0.00													
2010	3894	0.00														
Marg Avg		0.00	0.00	0.01	0.00	0.00	0.01	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Cum Avg		0.00	0.01	0.01	0.02	0.02	0.03	0.03	0.04	0.04	0.05	0.05	0.05	0.05	0.05	0.05
Std Dev		0.01	0.02	0.02	0.03	0.03	0.04	0.04	0.05	0.05	0.05	0.05	0.06	0.06	0.06	0.06
Median		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.04	0.05	0.05	0.03	0.00	0.00	0.00
Min		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Max		0.05	0.05	0.05	0.10	0.10	0.11	0.11	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16
Rating: A																
1986	1272	0.00	0.00	0.00	0.00	0.00	0.08	0.16	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47
1987	1374	0.00	0.00	0.00	0.00	0.07	0.15	0.44	0.44	0.44	0.44	0.44	0.44	0.51	0.51	0.51
1988	1493	0.00	0.00	0.00	0.07	0.13	0.40	0.47	0.47	0.47	0.47	0.47	0.54	0.54	0.54	0.54

Table 20

Housing Static Pool Cumulative Default Rates By Rating Category, 1986-2010 (%) (cont.)

1989	1552	0.00	0.00	0.06	0.06	0.19	0.19	0.19	0.19	0.19	0.19	0.26	0.26	0.26	0.26	0.26
1990	1444	0.00	0.07	0.07	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21
1991	1421	0.00	0.00	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14
1992	1603	0.00	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
1993	1471	0.00	0.00	0.00	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
1994	1391	0.00	0.00	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
1995	1331	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1996	1175	0.00	0.00	0.17	0.17	0.17	0.17	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26
1997	1088	0.00	0.09	0.09	0.09	0.09	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	
1998	957	0.00	0.00	0.00	0.00	0.21	0.31	0.42	0.42	0.52	0.52	0.52	0.52	0.52		
1999	839	0.00	0.00	0.00	0.24	0.36	0.48	0.48	0.60	0.60	0.60	0.60	0.60			
2000	676	0.00	0.00	0.15	0.30	0.44	0.59	0.74	0.74	0.74	0.89	0.89				
2001	716	0.00	0.14	0.28	0.42	0.56	0.70	0.70	0.70	0.84	0.84					
2002	691	0.14	0.29	0.43	0.43	0.58	0.58	0.58	0.58	0.58						
2003	720	0.00	0.14	0.14	0.28	0.28	0.28	0.42	0.42							
2004	821	0.00	0.00	0.00	0.00	0.00	0.12	0.12								
2005	745	0.00	0.00	0.13	0.13	0.13	0.13									
2006	583	0.00	0.17	0.17	0.17	0.17										
2007	1027	0.10	0.10	0.10	0.10											
2008	1248	0.00	0.00	0.00												
2009	1315	0.00	0.00													
2010	1312	0.00														
Marg Avg		0.01	0.03	0.04	0.04	0.04	0.06	0.05	0.02	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Cum Avg		0.01	0.04	0.08	0.11	0.16	0.21	0.26	0.28	0.29	0.30	0.30	0.31	0.31	0.31	0.31
Std Dev		0.03	0.08	0.10	0.13	0.16	0.19	0.21	0.22	0.24	0.26	0.23	0.19	0.18	0.17	0.18
Median		0.00	0.00	0.07	0.11	0.14	0.18	0.26	0.35	0.28	0.27	0.26	0.26	0.26	0.23	0.21
Min		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Max		0.14	0.29	0.43	0.43	0.58	0.70	0.74	0.74	0.84	0.89	0.89	0.60	0.54	0.54	0.54
Rating: BBB																
1986	101	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1987	128	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1988	100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1989	247	0.00	0.00	0.00	0.40	1.21	1.62	1.62	1.62	1.62	1.62	1.62	1.62	1.62	1.62	1.62
1990	201	0.00	0.00	0.00	0.00	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
1991	213	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1992	202	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1993	197	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1994	179	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1995	159	0.00	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63
1996	127	0.00	0.00	0.00	0.00	0.00	0.79	2.36	2.36	2.36	2.36	2.36	2.36	2.36	2.36	2.36
1997	118	0.00	0.85	0.85	0.85	1.69	4.24	4.24	4.24	5.08	5.08	5.08	5.08	5.08	5.08	
1998	103	0.00	0.00	0.00	0.97	3.88	4.85	5.83	6.80	6.80	7.77	7.77	7.77	7.77		

Table 20

Housing Static Pool Cumulative Default Rates By Rating Category, 1986-2010 (%) (cont.)

1999	103	0.00	0.00	0.00	2.91	3.88	4.85	5.83	5.83	7.77	7.77	7.77	7.77			
2000	114	0.00	0.00	1.75	2.63	3.51	5.26	5.26	7.02	7.02	7.02	7.02				
2001	110	0.00	1.82	2.73	3.64	5.45	5.45	7.27	7.27	7.27	7.27					
2002	91	1.10	2.20	4.40	5.49	5.49	7.69	7.69	8.79	8.79						
2003	94	0.00	2.13	3.19	4.26	6.38	6.38	7.45	7.45							
2004	95	1.05	2.11	4.21	5.26	5.26	6.32	6.32								
2005	88	0.00	1.14	2.27	2.27	2.27	2.27									
2006	83	0.00	0.00	0.00	0.00	0.00										
2007	234	0.00	0.00	0.00	0.00											
2008	276	0.00	0.00	0.00												
2009	283	0.00	0.00													
2010	290	0.00														
Marg Avg		0.05	0.25	0.27	0.33	0.46	0.44	0.27	0.16	0.12	0.04	0.00	0.00	0.00	0.00	0.00
Cum Avg		0.05	0.30	0.57	0.89	1.35	1.78	2.04	2.20	2.32	2.36	2.36	2.36	2.36	2.36	2.36
Std Dev		0.29	0.78	1.42	1.82	2.23	2.67	3.00	3.24	3.31	3.14	2.98	2.78	2.32	1.47	0.77
Median		0.00	0.00	0.00	0.20	0.63	1.20	1.62	1.12	0.63	0.56	0.50	0.25	0.00	0.00	0.00
Min		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Max		1.10	2.20	4.40	5.49	6.38	7.69	7.69	8.79	8.79	7.77	7.77	7.77	7.77	5.08	2.36
Rating: BB																
1986	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1987	3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1988	19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1989	23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1990	52	0.00	1.92	1.92	5.77	5.77	5.77	5.77	5.77	5.77	7.69	7.69	7.69	7.69	7.69	7.69
1991	79	25.32	25.32	27.85	29.11	30.38	30.38	30.38	30.38	31.65	31.65	31.65	31.65	31.65	31.65	31.65
1992	53	0.00	0.00	1.89	1.89	1.89	1.89	1.89	1.89	1.89	1.89	1.89	1.89	1.89	1.89	1.89
1993	31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1994	24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1995	16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1996	10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1997	11	0.00	18.18	18.18	18.18	18.18	18.18	27.27	27.27	27.27	27.27	27.27	27.27	27.27	27.27	
1998	6	0.00	0.00	0.00	0.00	0.00	16.67	16.67	16.67	16.67	16.67	16.67	16.67	16.67		
1999	7	0.00	0.00	14.29	14.29	28.57	28.57	28.57	28.57	28.57	28.57	28.57	28.57			
2000	12	0.00	8.33	25.00	33.33	33.33	41.67	41.67	41.67	41.67	41.67	41.67				
2001	19	0.00	5.26	10.53	10.53	15.79	15.79	15.79	15.79	15.79	15.79					
2002	17	5.88	5.88	11.76	23.53	23.53	23.53	23.53	23.53	23.53						
2003	25	0.00	4.00	12.00	12.00	12.00	16.00	20.00	20.00							
2004	41	2.44	4.88	4.88	7.32	9.76	12.20	12.20								
2005	29	0.00	0.00	3.45	3.45	10.34	10.34									
2006	33	0.00	3.03	3.03	6.06	6.06										
2007	34	0.00	0.00	0.00	0.00											
2008	32	0.00	0.00	0.00												

Table 20

Housing Static Pool Cumulative Default Rates By Rating Category, 1986-2010 (%) (cont.)																
2009	31	0.00	0.00													
2010	44	0.00														
Marg Avg		3.37	1.37	2.01	1.59	1.30	0.94	0.51	0.00	0.30	0.31	0.00	0.00	0.00	0.00	0.00
Cum Avg		3.37	4.69	6.61	8.09	9.29	10.14	10.59	10.59	10.86	11.14	11.14	11.14	11.14	11.14	11.14
Std Dev		5.04	6.16	8.32	9.99	11.09	12.23	13.08	13.44	13.78	13.82	14.21	11.89	10.84	10.87	9.09
Median		0.00	0.00	1.89	2.67	5.77	8.06	5.77	3.83	1.89	0.94	0.00	0.00	0.00	0.00	0.00
Min		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Max		25.32	25.32	27.85	33.33	33.33	41.67	41.67	41.67	41.67	41.67	41.67	31.65	31.65	31.65	31.65
Rating: B																
1986	0	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
1987	5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1988	5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1989	7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1990	5	0.00	0.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00
1991	6	0.00	16.67	16.67	16.67	16.67	16.67	16.67	16.67	16.67	16.67	16.67	16.67	16.67	16.67	16.67
1992	22	4.55	13.64	13.64	13.64	13.64	13.64	13.64	18.18	18.18	18.18	18.18	18.18	18.18	18.18	18.18
1993	12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1994	8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1995	4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1996	5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1997	2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1998	3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
1999	2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
2000	3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
2001	9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00					
2002	11	9.09	18.18	18.18	27.27	27.27	27.27	27.27	27.27	27.27						
2003	11	0.00	0.00	18.18	18.18	18.18	18.18	18.18	18.18							
2004	10	0.00	20.00	20.00	20.00	20.00	20.00	20.00								
2005	14	7.14	7.14	7.14	14.29	14.29	14.29									
2006	19	0.00	5.26	10.53	10.53	10.53										
2007	24	8.33	8.33	12.50	12.50											
2008	21	0.00	4.76	4.76												
2009	21	0.00	0.00													
2010	21	0.00														
Marg Avg		2.00	3.57	2.56	1.18	0.00	0.00	0.00	0.91	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cum Avg		2.00	5.50	7.92	9.01	9.01	9.01	9.01	9.83	9.83	9.83	9.83	9.83	9.83	9.83	9.83
Std Dev		2.80	6.53	7.85	8.98	9.12	9.32	9.41	9.36	9.12	7.34	7.53	7.73	7.95	8.17	8.41
Median		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Min		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Max		9.09	20.00	20.00	27.27	27.27	27.27	27.27	27.27	27.27	20.00	20.00	20.00	20.00	20.00	20.00
Rating: CCC/C																
1986	0	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

Table 20

Housing Static Pool Cumulative Default Rates By Rating Category, 1986-2010 (%) (cont.)																
1987	2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1988	3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1989	3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1990	5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1991	7	14.29	14.29	14.29	14.29	14.29	14.29	14.29	14.29	14.29	14.29	14.29	14.29	14.29	14.29	14.29
1992	6	0.00	0.00	0.00	16.67	16.67	16.67	16.67	16.67	16.67	16.67	16.67	16.67	16.67	16.67	16.67
1993	21	19.05	23.81	28.57	28.57	28.57	28.57	33.33	33.33	33.33	33.33	33.33	33.33	33.33	33.33	33.33
1994	15	6.67	13.33	13.33	13.33	13.33	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00
1995	15	6.67	6.67	6.67	6.67	13.33	13.33	13.33	13.33	13.33	13.33	13.33	13.33	13.33	13.33	13.33
1996	11	9.09	9.09	9.09	18.18	18.18	18.18	18.18	18.18	18.18	18.18	18.18	18.18	18.18	18.18	18.18
1997	8	0.00	0.00	12.50	12.50	12.50	12.50	12.50	12.50	12.50	12.50	12.50	12.50	12.50	12.50	
1998	8	25.00	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50		
1999	6	16.67	16.67	16.67	16.67	16.67	16.67	16.67	16.67	16.67	16.67	16.67	16.67			
2000	5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
2001	9	11.11	22.22	22.22	22.22	22.22	22.22	22.22	22.22	22.22	22.22					
2002	8	12.50	12.50	12.50	12.50	12.50	12.50	12.50	12.50	12.50						
2003	15	20.00	20.00	26.67	26.67	26.67	26.67	26.67	26.67							
2004	14	14.29	28.57	28.57	28.57	28.57	28.57	28.57								
2005	13	38.46	46.15	46.15	46.15	53.85	53.85									
2006	11	18.18	18.18	18.18	36.36	36.36										
2007	13	0.00	7.69	23.08	23.08											
2008	14	7.14	21.43	21.43												
2009	14	21.43	21.43													
2010	14	0.00														
Marg Avg		12.08	5.08	2.84	2.50	1.37	0.73	0.77	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cum Avg		12.08	16.55	18.92	20.94	22.03	22.60	23.19	23.19	23.19	23.19	23.19	23.19	23.19	23.19	23.19
Std Dev		10.07	12.55	12.83	13.25	14.24	13.92	11.54	11.39	11.30	11.67	11.84	11.70	12.16	10.27	10.77
Median		8.12	13.33	13.81	16.67	15.48	16.67	15.48	14.29	13.81	14.29	13.81	14.29	13.81	13.33	13.81
Min		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Max		38.46	46.15	46.15	46.15	53.85	53.85	37.50	37.50	37.50	37.50	37.50	37.50	37.50	33.33	33.33

N/A-not applicable

Table 21

Housing Issue One-Year Static Pool Default Rates By Rating Modifier (%)

Year	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-	CCC/C
1986	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	n/a	0.00	n/a	n/a	n/a	n/a	n/a
1987	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	n/a	0.00	n/a	n/a	0.00	n/a	0.00
1988	0.00	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	n/a	n/a	0.00	n/a	0.00
1989	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	n/a	n/a	0.00	n/a	0.00
1990	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	n/a	0.00
1991	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	29.85	0.00	0.00	0.00	n/a	14.29
1992	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.76	n/a	0.00

Table 21

Housing Issue One-Year Static Pool Default Rates By Rating Modifier (%) (cont.)

1993	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	n/a	19.05
1994	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	n/a	0.00	n/a	6.67
1995	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	n/a	0.00	n/a	6.67
1996	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	n/a	n/a	0.00	n/a	9.09
1997	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	n/a	0.00	n/a	0.00
1998	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	n/a	0.00	n/a	25.00
1999	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	n/a	0.00	n/a	16.67
2000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	n/a	0.00	n/a	0.00
2001	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	n/a	0.00	n/a	11.11
2002	0.00	0.00	0.00	0.00	0.00	0.00	1.92	0.00	2.22	0.00	0.00	9.09	n/a	n/a	10.00	0.00	12.50
2003	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	n/a	n/a	0.00	0.00	20.00
2004	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.55	0.00	0.00	100.00	n/a	0.00	n/a	14.29
2005	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.09	0.00	38.46
2006	0.00	0.00	0.00	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	18.18
2007	0.00	0.00	0.00	0.00	0.00	0.00	0.57	0.00	0.00	0.00	0.00	0.00	0.00	n/a	8.70	0.00	0.00
2008	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.14
2009	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.43
2010	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	n/a	0.00	0.00	0.00

n/a-not applicable.

Table 22

One-, Three-, and 10-Year USPF Obligor Default Rates By Rating Modifier (%)

Rating	1 Year (2010 Pool)	3 Years (2008 Pool)	10 Years (2001 Pool)	Initial Rating*
AAA	0.00	0.00	0.00	0.00
AA+	0.00	0.00	0.00	0.00
AA	0.00	0.08	0.00	0.00
AA-	0.00	0.00	0.11	0.06
A+	0.00	0.00	0.08	0.02
A	0.00	0.04	0.07	0.06
A-	0.00	0.00	0.00	0.18
BBB+	0.00	0.00	0.00	0.23
BBB	0.00	0.13	0.14	0.39
BBB-	0.00	0.24	1.32	0.98
BB+	0.00	0.00	5.88	0.00
BB	2.00	0.00	0.00	1.18
BB-	0.00	0.00	0.00	0.00
B+	0.00	0.00	16.67	0.00
B	0.00	6.67	0.00	4.00
B-	0.00	0.00	0.00	0.00
CCC	0.00	33.33	66.67	50.00
CCC-	0.00	0.00	0.00	0.00
CC	0.00	100.00	0.00	0.00
C	40.00	25.00	0.00	0.00

Table 22

One-, Three-, and 10-Year USPF Obligor Default Rates By Rating Modifier (%) (cont.)

* For ratings in place before 1986, the rating as of Jan. 1, 1986 was used as the initial rating

Table 23A

Obligor Rating Transition Rates By Rating Modifier (%)

One Year Ending 2010

Rating	Issuers	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+
AAA	627	95.69	0.32	0.32	0.16	0.16	0.00	0.00	0.00	0.00	0.00	0.00
AA+	1051	3.04	85.54	0.86	0.00	0.00	0.10	0.00	0.00	0.00	0.00	0.00
AA	2065	0.68	3.87	86.83	0.63	0.15	0.10	0.10	0.00	0.00	0.00	0.00
AA-	2517	0.12	0.95	4.77	84.98	2.03	0.16	0.08	0.04	0.00	0.00	0.00
A+	3129	0.00	0.16	2.24	6.52	83.89	1.69	0.32	0.03	0.10	0.00	0.00
A	2740	0.00	0.07	1.06	3.69	11.31	77.23	1.68	0.26	0.11	0.04	0.00
A-	1568	0.00	0.13	0.06	1.79	7.65	11.35	64.41	3.89	0.19	0.00	0.13
BBB+	583	0.00	0.00	0.00	0.51	5.15	8.23	14.41	63.81	2.06	1.03	0.17
BBB	500	0.00	0.00	0.00	0.20	2.00	9.20	8.60	8.80	62.60	1.00	0.00
BBB-	334	0.00	0.00	0.00	0.00	0.00	1.20	1.80	3.59	5.39	74.85	2.10
BB+	54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.85	1.85	9.26	68.52
BB	50	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	0.00	6.00	6.00
BB-	20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B+	4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B	9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.11	0.00	0.00
B-	8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CCC	2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CCC-	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CC	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
C	5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Three Years Ending 2010

Rating	Issuers	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+
AAA	384	90.89	0.78	0.26	0.26	0.26	0.26	0.00	0.00	0.00	0.00	0.00
AA+	543	21.92	55.06	1.66	0.37	0.18	0.18	0.00	0.00	0.00	0.00	0.00
AA	1321	6.21	26.04	52.38	1.14	0.38	0.00	0.23	0.00	0.00	0.00	0.00
AA-	1869	0.91	5.72	26.54	44.57	3.91	1.12	0.00	0.05	0.00	0.00	0.00
A+	1872	0.16	1.66	13.73	26.50	41.61	2.67	0.91	0.11	0.21	0.00	0.00
A	2412	0.00	0.17	3.94	13.76	28.15	37.27	1.95	2.32	0.21	0.12	0.00
A-	1720	0.06	0.12	0.70	6.98	24.01	23.49	32.67	2.09	0.70	0.00	0.12
BBB+	867	0.00	0.00	0.12	1.73	19.03	26.30	15.92	23.18	2.54	1.15	0.12
BBB	742	0.00	0.13	0.40	0.94	6.87	21.29	19.54	8.22	26.01	2.29	0.67
BBB-	418	0.00	0.00	0.00	0.00	0.00	2.15	10.29	14.83	10.29	42.82	2.63
BB+	50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.00	8.00	46.00
BB	48	0.00	0.00	0.00	0.00	0.00	4.17	4.17	4.17	2.08	6.25	8.33
BB-	16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.25	0.00
B+	5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B	15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.67	6.67	6.67
B-	8	0.00	0.00	0.00	0.00	0.00	12.50	0.00	0.00	0.00	0.00	0.00

Table 23A

Obligor Rating Transition Rates By Rating Modifier (%) (cont.)

CCC	3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CCC-	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CC	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
C	4	0.00	0.00	0.00	0.00	25.00	0.00	0.00	0.00	0.00	25.00	0.00
10 Years Ending 2010												
AAA	147	85.03	2.04	0.68	0.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AA+	245	42.45	21.22	5.71	1.63	0.41	0.00	0.00	0.00	0.00	0.00	0.00
AA	960	10.10	18.44	30.00	4.79	0.83	1.25	0.31	0.21	0.00	0.00	0.00
AA-	917	4.14	10.80	20.07	19.41	2.94	0.87	0.33	0.87	0.00	0.11	0.00
A+	1274	1.65	4.24	14.60	17.97	15.15	3.53	0.63	1.26	0.24	0.00	0.00
A	1444	0.42	1.66	9.00	13.37	15.86	12.53	2.70	1.45	0.62	0.35	0.00
A-	1003	0.40	1.00	3.99	8.67	16.85	12.26	10.27	2.39	1.69	1.10	0.10
BBB+	614	0.00	0.33	1.30	6.03	15.80	16.94	7.98	5.86	3.75	1.95	0.49
BBB	699	0.14	0.14	0.43	1.43	8.30	13.30	8.58	3.72	8.58	2.86	0.72
BBB-	302	0.00	0.00	0.33	0.00	2.32	4.64	4.64	3.97	7.28	10.93	3.97
BB+	17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.76	5.88
BB	25	0.00	0.00	0.00	8.00	0.00	0.00	12.00	4.00	4.00	0.00	4.00
BB-	7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.29	0.00	0.00
B+	6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B	4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B-	4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CCC	6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CCC-	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CC	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
C	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Rating Ending 2010												
AAA	262	83.59	2.29	1.15	0.38	0.00	0.76	0.00	0.00	0.00	0.00	0.00
AA+	884	12.67	51.13	1.58	0.57	0.45	0.34	0.11	0.11	0.00	0.00	0.00
AA	3066	6.10	10.44	36.66	2.25	0.95	0.72	0.29	0.10	0.00	0.03	0.00
AA-	3234	2.20	4.92	13.14	47.90	2.97	0.68	0.37	0.09	0.00	0.03	0.00
A+	5035	0.99	2.34	7.47	10.86	41.77	2.13	0.42	0.24	0.12	0.00	0.00
A	6764	0.31	0.92	3.56	6.87	11.49	26.08	1.39	1.01	0.33	0.16	0.03
A-	3955	0.25	0.63	2.12	5.56	13.20	12.67	21.77	1.64	0.63	0.35	0.13
BBB+	2136	0.19	0.42	1.22	3.89	10.07	12.31	7.07	12.03	1.26	1.26	0.09
BBB	2334	0.04	0.13	0.47	1.63	5.36	9.55	7.28	3.77	10.03	1.54	0.43
BBB-	1024	0.10	0.00	0.29	0.59	1.37	4.69	6.74	7.52	8.01	22.27	1.27
BB+	54	0.00	0.00	0.00	0.00	0.00	1.85	0.00	0.00	3.70	9.26	38.89
BB	85	0.00	0.00	0.00	1.18	0.00	0.00	3.53	0.00	2.35	1.18	4.71
BB-	10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B+	5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B	25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.00	0.00	0.00	0.00
B-	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 23A

Obligor Rating Transition Rates By Rating Modifier (%) (cont.)

CCC	4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CCC-	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CC	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
C	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

* For ratings in place before 1986, the rating as of Jan. 1, 1986 was used as the initial rating

Table 23B

Obligor Rating Transition Rates By Rating Modifier (%)

One Year Ending 2010

Rating	BB	BB-	B+	B	B-	CCC	CCC-	CC	C	D	NR
AAA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.35
AA+	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.47
AA	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	7.60
AA-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.87
A+	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.02
A	0.07	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	4.45
A-	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.27
BBB+	0.00	0.00	0.00	0.00	0.00	0.34	0.00	0.17	0.00	0.00	4.12
BBB	0.20	0.40	0.00	0.00	0.20	0.00	0.00	0.00	0.20	0.00	6.60
BBB-	0.60	0.30	0.30	0.60	0.00	0.00	0.00	0.00	0.00	0.00	9.28
BB+	11.11	1.85	0.00	0.00	0.00	1.85	0.00	0.00	0.00	0.00	3.70
BB	72.00	4.00	0.00	0.00	0.00	2.00	0.00	2.00	0.00	2.00	4.00
BB-	5.00	60.00	0.00	0.00	5.00	0.00	0.00	0.00	0.00	0.00	30.00
B+	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B	0.00	0.00	0.00	55.56	11.11	0.00	0.00	0.00	11.11	0.00	11.11
B-	0.00	0.00	0.00	0.00	87.50	0.00	0.00	0.00	0.00	0.00	12.50
CCC	0.00	0.00	0.00	0.00	0.00	50.00	0.00	0.00	0.00	0.00	50.00
CCC-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00
C	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	60.00	40.00	0.00

Three Years Ending 2010

Rating	BB	BB-	B+	B	B-	CCC	CCC-	CC	C	D	NR
AAA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.29
AA+	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.63
AA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08	13.55
AA-	0.00	0.00	0.00	0.00	0.11	0.00	0.00	0.00	0.00	0.00	17.07
A+	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.45
A	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.04	11.98
A-	0.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.72
BBB+	0.12	0.00	0.00	0.00	0.00	0.23	0.00	0.00	0.00	0.00	9.57
BBB	0.94	0.27	0.00	0.00	0.13	0.13	0.00	0.00	0.13	0.13	11.86
BBB-	2.87	0.96	0.24	0.96	0.00	0.00	0.00	0.00	0.00	0.24	11.72
BB+	10.00	2.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	24.00
BB	29.17	12.50	2.08	4.17	0.00	0.00	0.00	0.00	2.08	0.00	20.83

Table 23B

Obligor Rating Transition Rates By Rating Modifier (%) (cont.)											
BB-	0.00	31.25	0.00	0.00	6.25	6.25	0.00	0.00	0.00	0.00	50.00
B+	0.00	0.00	40.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	60.00
B	13.33	0.00	6.67	6.67	13.33	6.67	0.00	0.00	6.67	6.67	20.00
B-	0.00	0.00	0.00	0.00	50.00	0.00	0.00	12.50	0.00	0.00	25.00
CCC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	33.33	66.67
CCC-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00
C	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	25.00	25.00	0.00
10 Years Ending 2010											
AAA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.56
AA+	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	28.57
AA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	34.06
AA-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.11	40.35
A+	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.08	40.58
A	0.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.07	41.62
A-	0.10	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	41.08
BBB+	0.49	0.33	0.00	0.00	0.16	0.16	0.00	0.00	0.00	0.00	38.44
BBB	0.86	0.29	0.00	0.00	0.14	0.29	0.00	0.00	0.14	0.14	49.93
BBB-	2.32	1.66	0.33	0.33	0.66	0.66	0.00	0.00	0.00	1.32	54.64
BB+	5.88	0.00	5.88	5.88	0.00	0.00	0.00	5.88	0.00	5.88	52.94
BB	12.00	0.00	0.00	4.00	0.00	0.00	0.00	0.00	0.00	0.00	52.00
BB-	0.00	14.29	0.00	0.00	14.29	0.00	0.00	0.00	0.00	0.00	57.14
B+	0.00	16.67	16.67	0.00	0.00	0.00	0.00	0.00	0.00	16.67	50.00
B	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
B-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
CCC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	66.67	33.33
CCC-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
C	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Rating Ending 2010											
AAA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.83
AA+	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	33.03
AA	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	42.43
AA-	0.00	0.00	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.06	27.58
A+	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.02	33.58
A	0.04	0.03	0.00	0.00	0.00	0.01	0.00	0.00	0.03	0.06	47.68
A-	0.13	0.08	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.18	40.63
BBB+	0.28	0.09	0.00	0.00	0.05	0.05	0.00	0.05	0.00	0.23	49.44
BBB	0.51	0.26	0.13	0.09	0.13	0.09	0.00	0.00	0.04	0.39	58.14
BBB-	1.46	0.39	0.00	0.39	0.20	0.20	0.00	0.10	0.10	0.98	43.36
BB+	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	46.30
BB	9.41	0.00	0.00	1.18	0.00	0.00	0.00	1.18	0.00	1.18	74.12

Table 23B

Obligor Rating Transition Rates By Rating Modifier (%) (cont.)

BB-	0.00	0.00	0.00	0.00	10.00	0.00	0.00	0.00	0.00	0.00	90.00
B+	0.00	20.00	40.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	40.00
B	0.00	0.00	0.00	4.00	0.00	0.00	0.00	0.00	0.00	4.00	88.00
B-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
CCC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	50.00	50.00
CCC-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
C	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

* For ratings in place before 1986, the rating as of Jan. 1, 1986 was used as the initial rating

Table 24

One-, Three-, and 10-Year USPF Housing Issue Default Rates By Rating Modifier (%)

Rating	1 Year (2010 Pool)	3 Years (2008 Pool)	10 Years (2001 Pool)	Initial Rating*
AAA	0.00	0.00	0.00	0.26
AA+	0.00	0.00	0.00	0.08
AA	0.00	0.00	0.00	0.06
AA-	0.00	0.00	0.26	0.08
A+	0.00	0.00	0.00	0.22
A	0.00	0.00	1.36	0.73
A-	0.00	0.00	3.51	1.11
BBB+	0.00	0.00	4.08	0.52
BBB	0.00	0.00	12.77	5.13
BBB-	0.00	0.00	0.00	3.81
BB+	0.00	0.00	0.00	0.00
BB	0.00	0.00	18.18	35.00
BB-	0.00	0.00	100.00	20.00
B+	0.00	0.00	0.00	0.00
B	0.00	5.26	0.00	0.00
B-	0.00	0.00	0.00	0.00
CCC+	0.00	0.00	0.00	0.00
CCC	0.00	28.57	14.29	0.00
CCC-	0.00	0.00	0.00	0.00
CC	0.00	0.00	50.00	0.00
C	0.00	50	0	0

* For ratings in place before 1986, the rating as of Jan. 1, 1986 was used as the initial rating

Table 25A

Housing Issue Rating Transition Rates By Rating Modifier (%)

One Year Ending 2010

Rating	Issues	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+
AAA	4223	96.23	1.75	0.00	0.05	0.05	0.09	0.24	0.00	0.02	0.07	0.59
AA+	1392	0.00	99.86	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AA	1478	0.00	1.08	97.56	0.88	0.00	0.00	0.34	0.00	0.00	0.00	0.00

Table 25A

Housing Issue Rating Transition Rates By Rating Modifier (%) (cont.)											
AA-	1024	0.10	0.00	12.89	72.66	0.00	13.96	0.20	0.00	0.00	0.00	0.00
A+	564	0.00	0.00	0.00	0.35	96.81	0.18	0.00	0.18	0.00	0.00	1.24
A	474	0.00	0.00	0.00	0.00	0.42	98.10	0.42	0.00	0.21	0.00	0.42
A-	274	1.09	0.00	0.00	0.00	0.00	0.36	97.45	0.00	0.00	0.73	0.00
BBB+	105	0.00	0.00	0.00	0.00	0.00	2.86	0.00	85.71	0.00	0.00	10.48
BBB	107	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	96.26	0.00	0.93
BBB-	78	0.00	0.00	0.00	0.00	0.00	1.28	2.56	0.00	0.00	94.87	0.00
BB+	25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	92.00
BB	17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
BB-	2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B+	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B	19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B-	2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CCC+	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CCC	5	0.00	0.00	0.00	20.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CCC-	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CC	8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
C	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Three Years Ending 2010												
AAA	4400	88.18	4.25	0.11	0.82	0.05	0.11	0.45	0.00	0.09	0.07	0.95
AA+	1234	0.73	98.87	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AA	1534	0.91	1.43	90.68	2.02	0.33	0.07	2.35	0.00	0.00	0.07	0.07
AA-	960	0.10	0.00	13.96	70.00	0.63	13.44	0.10	0.00	0.00	0.10	0.00
A+	523	0.38	0.19	0.00	0.57	92.16	0.38	0.38	0.19	0.00	0.00	3.06
A	501	0.00	0.00	0.40	0.00	5.39	90.62	0.40	0.00	0.40	0.00	0.20
A-	224	0.00	0.00	0.00	0.00	0.00	0.45	97.77	0.00	0.00	0.45	0.00
BBB+	91	0.00	0.00	0.00	0.00	0.00	0.00	1.10	97.80	0.00	0.00	1.10
BBB	104	0.00	0.00	0.00	0.00	0.00	1.92	1.92	0.00	90.38	0.00	0.00
BBB-	81	0.00	0.00	0.00	0.00	0.00	3.70	0.00	1.23	0.00	90.12	1.23
BB+	8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	25.00	0.00	62.50
BB	22	0.00	9.09	0.00	0.00	0.00	4.55	0.00	0.00	0.00	0.00	0.00
BB-	2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B+	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B	19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B-	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CCC+	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CCC	7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CCC-	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CC	4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
C	2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10 Years Ending 2010												
AAA	3617	53.03	3.26	0.25	0.41	0.08	0.11	0.97	0.00	0.08	0.03	0.69

Table 25A

Housing Issue Rating Transition Rates By Rating Modifier (%) (cont.)											
AA+	662	14.05	68.58	0.60	0.30	0.00	0.15	0.00	0.00	0.00	0.00	0.00
AA	1149	8.09	16.19	53.87	1.13	0.09	0.00	0.61	0.00	0.00	0.00	0.00
AA-	384	2.34	1.04	6.77	38.02	1.82	16.41	0.00	0.00	0.00	0.00	0.26
A+	365	3.84	0.00	15.89	5.48	32.60	1.37	0.00	0.00	0.00	0.27	1.92
A	294	4.76	1.36	0.00	0.68	9.86	29.59	0.00	0.00	1.70	0.34	0.34
A-	57	1.75	0.00	0.00	0.00	1.75	0.00	38.60	0.00	1.75	0.00	1.75
BBB+	49	2.04	0.00	0.00	0.00	2.04	26.53	2.04	30.61	0.00	2.04	0.00
BBB	47	0.00	0.00	0.00	0.00	0.00	0.00	6.38	0.00	25.53	0.00	0.00
BBB-	14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.14	7.14	42.86	7.14
BB+	7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.29
BB	11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
BB-	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B+	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B	9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B-	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CCC+	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CCC	7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CCC-	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CC	2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
C	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Rating Ending 2010*												
AAA	7037	50.31	2.29	1.82	0.61	0.16	0.17	0.68	0.01	0.09	0.04	0.58
AA+	1234	6.56	60.62	0.16	1.54	0.41	0.89	0.00	0.00	0.00	0.00	0.00
AA	3355	7.72	14.55	33.03	1.07	0.39	0.42	0.60	0.06	0.12	0.03	0.06
AA-	1210	5.45	0.91	4.96	45.87	0.58	12.15	0.25	0.00	0.00	0.08	0.00
A+	1816	8.70	3.91	16.24	4.79	23.02	2.53	0.17	0.06	0.11	0.00	1.43
A	1363	5.65	2.79	1.47	2.05	7.56	27.51	0.29	0.22	0.59	0.44	0.37
A-	541	1.11	0.00	1.29	0.55	0.37	4.81	37.89	0.18	0.55	0.37	0.18
BBB+	194	0.52	0.00	0.00	0.52	0.52	7.73	2.06	43.30	1.03	0.52	0.00
BBB	195	0.51	0.00	0.00	0.00	2.05	1.54	2.56	0.00	41.03	0.00	0.00
BBB-	105	0.95	0.00	0.00	0.00	0.00	3.81	0.00	0.95	0.95	63.81	0.00
BB+	11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	72.73
BB	20	0.00	0.00	0.00	0.00	0.00	5.00	0.00	0.00	0.00	0.00	0.00
BB-	5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B+	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B	4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B-	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CCC+	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CCC	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CCC-	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CC	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
C	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 25A

Housing Issue Rating Transition Rates By Rating Modifier (%) (cont.)

* For ratings in place before 1986, the rating as of Jan. 1, 1986 was used as the initial rating

Table 25B

Housing Issue Rating Transition Rates By Rating Modifier (%)

Rating	BB	BB-	B+	B	B-	CCC+	CCC-	CCC-	CC	C	D	NR
One Year Ending 2010												
AAA	0.26	0.00	0.07	0.07	0.05	0.00	0.05	0.00	0.07	0.00	0.00	0.33
AA+	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14
AA-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20
A+	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.24
A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.21	0.00	0.21
A-	0.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
BBB+	0.00	0.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
BBB	2.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
BBB-	1.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
BB+	4.00	4.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
BB	76.47	0.00	0.00	23.53	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
BB-	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B+	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B-	0.00	0.00	0.00	0.00	50.00	0.00	50.00	0.00	0.00	0.00	0.00	0.00
CCC+	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CCC	0.00	0.00	0.00	0.00	0.00	0.00	80.00	0.00	0.00	0.00	0.00	0.00
CCC-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00
C	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00
Three Years Ending 2010												
AAA	0.25	0.00	0.07	0.05	0.05	0.00	0.07	0.00	0.23	0.00	0.00	4.20
AA+	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.41
AA	0.07	0.00	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.96
AA-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.67
A+	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.49
A	0.00	0.20	0.00	0.40	0.00	0.00	0.00	0.00	0.00	0.20	0.00	1.80
A-	0.89	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.45
BBB+	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
BBB	2.88	0.00	0.00	0.96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.92
BBB-	1.23	1.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.23
BB+	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.50
BB	45.45	0.00	0.00	18.18	0.00	0.00	4.55	0.00	4.55	0.00	0.00	13.64
BB-	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B+	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
B	0.00	0.00	0.00	78.95	0.00	0.00	0.00	0.00	0.00	0.00	5.26	15.79

Table 25B

Housing Issue Rating Transition Rates By Rating Modifier (%) (cont.)												
B-	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CCC+	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CCC	0.00	0.00	0.00	0.00	0.00	0.00	42.86	0.00	0.00	0.00	28.57	28.57
CCC-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00
CC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
C	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	50.00	50.00
10 Years Ending 2010												
AAA	0.14	0.00	0.06	0.00	0.00	0.00	0.03	0.00	0.25	0.00	0.00	40.61
AA+	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	16.31
AA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.02
AA-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.26	33.07
A+	0.00	0.00	0.00	0.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	38.36
A	0.68	0.00	0.00	1.70	0.00	0.00	0.34	0.00	0.00	0.00	1.36	47.28
A-	1.75	0.00	0.00	5.26	0.00	0.00	0.00	0.00	0.00	0.00	3.51	43.86
BBB+	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.08	30.61
BBB	4.26	0.00	0.00	4.26	0.00	0.00	0.00	0.00	0.00	0.00	12.77	46.81
BBB-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	35.71
BB+	0.00	0.00	0.00	28.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00	57.14
BB	9.09	0.00	0.00	9.09	9.09	0.00	0.00	0.00	0.00	0.00	18.18	54.55
BB-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00
B+	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B	0.00	0.00	0.00	22.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	77.78
B-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CCC+	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CCC	0.00	0.00	0.00	0.00	0.00	0.00	42.86	0.00	0.00	0.00	14.29	42.86
CCC-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	50.00	50.00
C	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Rating Ending 2010*												
AAA	0.17	0.00	0.04	0.04	0.03	0.00	0.04	0.00	0.13	0.00	0.26	42.53
AA+	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08	29.74
AA	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.03	0.00	0.06	41.85
AA-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08	29.67
A+	0.00	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.22	38.77
A	0.37	0.07	0.00	0.88	0.00	0.00	0.22	0.00	0.00	0.15	0.73	48.64
A-	0.74	0.00	0.00	1.11	0.00	0.00	0.18	0.00	0.00	0.00	1.11	49.54
BBB+	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.52	43.30
BBB	2.05	0.51	0.00	1.54	0.51	0.00	0.00	0.00	0.51	0.00	5.13	42.05
BBB-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.81	25.71
BB+	9.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	18.18
BB	25.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	35.00	35.00
BB-	0.00	60.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.00	20.00

Table 25B

Housing Issue Rating Transition Rates By Rating Modifier (%) (cont.)

B+	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B	0.00	0.00	0.00	25.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	75.00
B-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CCC+	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CCC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
CCC-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
C	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

* For ratings in place before 1986, the rating as of Jan. 1, 1986 was used as the initial rating

Table 26

USPF Obligor Static Pool One-Year Transition Matrices (%)

From/To	Issuers	AAA	AA	A	BBB	BB	B	CCC/C	D	NR
1986 Static Pool										
AAA	49	89.80	8.16	0.00	0.00	0.00	0.00	0.00	0.00	2.04
AA	972	0.31	93.00	1.03	0.10	0.00	0.00	0.00	0.00	5.56
A	2962	0.00	1.55	89.97	1.01	0.07	0.00	0.03	0.00	7.36
BBB	991	0.00	0.20	1.21	89.91	0.71	0.20	0.20	0.00	7.57
BB	55	0.00	0.00	0.00	9.09	80.00	5.45	0.00	0.00	5.45
B	16	0.00	0.00	0.00	6.25	0.00	87.50	0.00	0.00	6.25
CCC/C	4	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00
1987 Static Pool										
AAA	49	91.84	8.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AA	1038	0.29	91.71	1.16	0.00	0.00	0.00	0.00	0.00	6.84
A	2991	0.00	0.94	88.73	1.34	0.07	0.00	0.00	0.00	8.93
BBB	1051	0.00	0.10	2.28	88.77	0.95	0.29	0.10	0.10	7.42
BB	54	0.00	0.00	0.00	9.26	74.07	0.00	1.85	0.00	14.81
B	20	0.00	0.00	0.00	20.00	0.00	70.00	5.00	0.00	5.00
CCC/C	7	0.00	0.00	0.00	0.00	0.00	0.00	71.43	28.57	0.00
1988 Static Pool										
AAA	48	97.92	2.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AA	1064	0.09	95.21	1.50	0.00	0.00	0.00	0.00	0.00	3.20
A	2926	0.00	0.89	92.14	0.82	0.03	0.00	0.00	0.00	6.12
BBB	1066	0.00	0.28	1.59	91.09	0.28	0.19	0.09	0.00	6.47
BB	55	0.00	0.00	0.00	9.09	80.00	1.82	1.82	0.00	7.27
B	17	0.00	0.00	0.00	0.00	5.88	82.35	5.88	0.00	5.88
CCC/C	8	0.00	0.00	0.00	0.00	0.00	0.00	87.50	0.00	12.50
1989 Static Pool										
AAA	50	98.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AA	1141	0.09	95.27	0.26	0.88	0.00	0.00	0.00	0.00	3.51
A	2940	0.00	1.22	94.15	0.44	0.00	0.00	0.07	0.00	4.12
BBB	1115	0.00	0.00	1.79	93.72	0.54	0.00	0.00	0.00	3.95

Table 26

USPF Obligor Static Pool One-Year Transition Matrices (%) (cont.)										
BB	54	0.00	0.00	0.00	3.70	83.33	1.85	0.00	3.70	7.41
B	17	0.00	0.00	5.88	0.00	5.88	70.59	0.00	0.00	17.65
CCC/C	10	0.00	0.00	0.00	0.00	0.00	0.00	70.00	10.00	20.00
1990 Static Pool										
AAA	52	98.08	1.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AA	1230	0.16	95.28	2.36	0.00	0.00	0.00	0.00	0.00	2.20
A	3079	0.00	0.55	93.15	2.57	0.10	0.03	0.00	0.00	3.61
BBB	1186	0.00	0.17	0.84	92.07	0.93	0.17	0.51	0.00	5.31
BB	53	0.00	0.00	0.00	0.00	84.91	7.55	0.00	0.00	7.55
B	13	0.00	0.00	0.00	15.38	7.69	61.54	7.69	0.00	7.69
CCC/C	9	0.00	0.00	0.00	0.00	11.11	0.00	44.44	33.33	11.11
1991 Static Pool										
AAA	55	90.91	9.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AA	1345	0.00	91.08	6.10	0.00	0.00	0.00	0.00	0.00	2.83
A	3187	0.00	0.63	93.41	1.35	0.09	0.00	0.00	0.00	4.52
BBB	1301	0.00	0.00	1.15	93.31	0.23	0.08	0.23	0.00	5.00
BB	65	0.00	0.00	0.00	3.08	87.69	0.00	1.54	0.00	7.69
B	15	0.00	0.00	0.00	0.00	0.00	86.67	6.67	0.00	6.67
CCC/C	11	0.00	0.00	0.00	0.00	0.00	0.00	90.91	9.09	0.00
1992 Static Pool										
AAA	50	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AA	1395	0.14	93.55	1.72	0.00	0.00	0.00	0.00	0.00	4.59
A	3421	0.00	0.64	90.35	1.46	0.03	0.00	0.00	0.00	7.51
BBB	1460	0.00	0.00	1.03	91.92	0.62	0.14	0.00	0.00	6.30
BB	66	0.00	0.00	0.00	13.64	65.15	6.06	3.03	0.00	12.12
B	14	0.00	0.00	0.00	0.00	0.00	71.43	7.14	0.00	21.43
CCC/C	15	0.00	0.00	0.00	0.00	6.67	40.00	13.33	33.33	6.67
1993 Static Pool										
AAA	53	98.11	1.89	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AA	1486	0.07	91.25	0.74	0.00	0.00	0.00	0.00	0.00	7.94
A	3523	0.00	0.43	88.76	0.62	0.00	0.00	0.00	0.00	10.19
BBB	1598	0.00	0.00	2.13	86.55	0.63	0.06	0.06	0.00	10.58
BB	56	0.00	0.00	0.00	3.57	78.57	5.36	0.00	0.00	12.50
B	22	0.00	0.00	0.00	0.00	27.27	59.09	4.55	0.00	9.09
CCC/C	5	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00
1994 Static Pool										
AAA	54	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AA	1507	0.07	90.78	1.99	0.00	0.00	0.00	0.00	0.00	7.17
A	3521	0.00	0.97	87.13	0.97	0.00	0.00	0.00	0.00	10.93
BBB	1627	0.00	0.00	1.04	87.34	0.61	0.06	0.06	0.00	10.88
BB	62	0.00	0.00	0.00	1.61	79.03	3.23	0.00	0.00	16.13

Table 26

USPF Obligor Static Pool One-Year Transition Matrices (%) (cont.)										
B	19	0.00	0.00	0.00	0.00	5.26	63.16	0.00	10.53	21.05
CCC/C	7	0.00	0.00	0.00	0.00	0.00	14.29	71.43	14.29	0.00
1995 Static Pool										
AAA	55	96.36	3.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AA	1506	0.13	95.35	1.39	0.00	0.00	0.00	0.00	0.00	3.12
A	3350	0.00	1.01	87.40	1.79	0.00	0.03	0.00	0.00	9.76
BBB	1617	0.00	0.00	1.24	87.38	0.74	0.25	0.00	0.00	10.39
BB	62	0.00	1.61	0.00	24.19	62.90	0.00	0.00	0.00	11.29
B	16	0.00	0.00	0.00	6.25	12.50	62.50	0.00	6.25	12.50
CCC/C	6	0.00	0.00	0.00	0.00	0.00	0.00	66.67	0.00	33.33
1996 Static Pool										
AAA	60	98.33	0.00	1.67	0.00	0.00	0.00	0.00	0.00	0.00
AA	1603	0.62	94.82	1.31	0.00	0.00	0.00	0.00	0.00	3.24
A	3262	0.00	1.66	91.02	0.71	0.06	0.03	0.00	0.00	6.53
BBB	1646	0.00	0.06	1.88	90.10	0.43	0.00	0.06	0.00	7.47
BB	55	0.00	0.00	0.00	12.73	72.73	1.82	1.82	0.00	10.91
B	15	0.00	0.00	0.00	0.00	6.67	66.67	13.33	0.00	13.33
CCC/C	4	0.00	0.00	0.00	0.00	0.00	0.00	75.00	0.00	25.00
1997 Static Pool										
AAA	71	97.18	2.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AA	1714	0.82	96.38	0.47	0.00	0.00	0.00	0.00	0.00	2.33
A	3385	0.03	1.36	95.48	0.18	0.00	0.00	0.00	0.00	2.95
BBB	1678	0.00	0.00	1.61	95.17	0.18	0.12	0.00	0.00	2.92
BB	52	0.00	0.00	0.00	7.69	80.77	0.00	0.00	0.00	11.54
B	16	0.00	0.00	0.00	0.00	6.25	93.75	0.00	0.00	0.00
CCC/C	7	0.00	0.00	0.00	0.00	0.00	0.00	85.71	0.00	14.29
1998 Static Pool										
AAA	89	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AA	1867	0.80	95.72	0.21	0.00	0.00	0.00	0.00	0.00	3.27
A	3801	0.00	1.87	92.87	0.32	0.00	0.08	0.00	0.00	4.87
BBB	1863	0.00	0.05	1.07	91.30	0.48	0.00	0.05	0.00	7.03
BB	47	0.00	0.00	2.13	4.26	76.60	2.13	2.13	0.00	12.77
B	17	0.00	0.00	0.00	5.88	17.65	58.82	5.88	0.00	11.76
CCC/C	6	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00
1999 Static Pool										
AAA	109	97.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.75
AA	2053	0.44	74.57	0.49	0.00	0.00	0.00	0.00	0.00	24.50
A	4272	0.00	0.96	65.87	0.47	0.00	0.02	0.00	0.00	32.68
BBB	2079	0.00	0.00	6.93	62.53	0.63	0.10	0.00	0.00	29.82
BB	55	0.00	0.00	0.00	5.45	56.36	7.27	0.00	0.00	30.91
B	14	0.00	0.00	0.00	0.00	0.00	14.29	28.57	0.00	57.14

Table 26

USPF Obligor Static Pool One-Year Transition Matrices (%) (cont.)										
CCC/C	9	0.00	0.00	0.00	0.00	0.00	0.00	77.78	11.11	11.11
2000 Static Pool										
AAA	122	98.36	0.82	0.00	0.00	0.00	0.00	0.00	0.00	0.82
AA	1744	1.09	95.99	0.46	0.00	0.00	0.00	0.00	0.00	2.47
A	3539	0.03	6.22	90.45	0.34	0.00	0.00	0.00	0.00	2.97
BBB	1581	0.00	0.13	2.97	90.89	0.44	0.19	0.06	0.00	5.31
BB	46	0.00	0.00	4.35	2.17	84.78	4.35	0.00	0.00	4.35
B	10	0.00	0.00	10.00	0.00	0.00	50.00	10.00	20.00	10.00
CCC/C	11	0.00	0.00	0.00	0.00	9.09	18.18	36.36	9.09	27.27
2001 Static Pool										
AAA	147	98.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.36
AA	2122	1.32	92.46	2.69	0.00	0.00	0.00	0.00	0.00	3.53
A	3721	0.24	8.52	87.32	0.46	0.03	0.00	0.11	0.00	3.33
BBB	1615	0.00	0.06	8.30	87.55	0.68	0.06	0.00	0.06	3.28
BB	49	0.00	0.00	0.00	4.08	85.71	2.04	2.04	0.00	6.12
B	14	0.00	0.00	0.00	0.00	0.00	71.43	14.29	0.00	14.29
CCC/C	6	0.00	0.00	0.00	0.00	0.00	0.00	50.00	33.33	16.67
2002 Static Pool										
AAA	200	99.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
AA	2540	0.55	93.27	1.18	0.00	0.00	0.00	0.00	0.00	5.00
A	3990	0.00	2.26	92.16	1.10	0.00	0.00	0.00	0.00	4.49
BBB	1623	0.00	0.00	3.02	90.94	0.99	0.18	0.00	0.00	4.87
BB	54	0.00	0.00	1.85	9.26	83.33	1.85	0.00	1.85	1.85
B	12	0.00	0.00	0.00	0.00	0.00	83.33	0.00	0.00	16.67
CCC/C	10	0.00	0.00	0.00	0.00	0.00	40.00	50.00	0.00	10.00
2003 Static Pool										
AAA	219	98.17	0.91	0.00	0.00	0.00	0.00	0.00	0.00	0.91
AA	2751	0.33	93.53	1.42	0.00	0.00	0.00	0.00	0.00	4.73
A	4360	0.00	1.77	90.60	2.50	0.16	0.00	0.00	0.02	4.95
BBB	1730	0.00	0.06	3.24	89.60	1.21	0.17	0.06	0.00	5.66
BB	63	0.00	0.00	0.00	7.94	79.37	11.11	0.00	0.00	1.59
B	18	0.00	0.00	0.00	0.00	11.11	88.89	0.00	0.00	0.00
CCC/C	5	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00
2004 Static Pool										
AAA	233	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AA	3009	0.37	91.23	2.66	0.03	0.00	0.00	0.00	0.00	5.72
A	4739	0.00	1.50	92.68	0.57	0.02	0.00	0.02	0.00	5.21
BBB	1904	0.00	0.05	6.51	85.61	0.79	0.00	0.00	0.00	7.04
BB	83	0.00	0.00	1.20	13.25	74.70	2.41	0.00	0.00	8.43
B	27	0.00	0.00	0.00	3.70	3.70	66.67	0.00	0.00	25.93
CCC/C	6	0.00	0.00	0.00	0.00	0.00	16.67	33.33	50.00	0.00

Table 26

USPF Obligor Static Pool One-Year Transition Matrices (%) (cont.)

2005 Static Pool										
AAA	255	97.25	1.18	0.00	0.00	0.00	0.00	0.39	0.00	1.18
AA	3080	0.45	95.00	0.91	0.00	0.00	0.00	0.00	0.00	3.64
A	5164	0.00	3.35	92.12	0.74	0.04	0.14	0.00	0.00	3.62
BBB	1828	0.00	0.00	4.10	88.57	0.88	0.38	0.05	0.00	6.02
BB	82	0.00	0.00	0.00	9.76	84.15	2.44	0.00	0.00	3.66
B	22	0.00	0.00	0.00	0.00	9.09	81.82	0.00	0.00	9.09
CCC/C	4	0.00	0.00	0.00	0.00	0.00	0.00	75.00	25.00	0.00
2006 Static Pool										
AAA	266	96.24	0.38	0.00	0.00	0.00	0.00	0.00	0.00	3.38
AA	3302	1.88	93.97	0.61	0.03	0.00	0.00	0.00	0.00	3.51
A	5360	0.07	2.87	92.84	0.43	0.00	0.00	0.00	0.00	3.79
BBB	1839	0.00	0.00	4.62	90.65	0.71	0.00	0.00	0.00	4.02
BB	97	0.00	0.00	0.00	8.25	81.44	3.09	1.03	0.00	6.19
B	34	0.00	0.00	0.00	0.00	17.65	70.59	2.94	0.00	8.82
CCC/C	5	0.00	0.00	0.00	0.00	0.00	0.00	40.00	20.00	40.00
2007 Static Pool										
AAA	338	97.93	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.07
AA	3507	0.91	95.61	0.43	0.00	0.00	0.00	0.00	0.00	3.05
A	5707	0.00	2.35	94.27	0.44	0.00	0.04	0.02	0.00	2.89
BBB	1921	0.00	0.00	2.65	92.19	0.78	0.26	0.05	0.00	4.06
BB	104	0.00	0.00	0.00	9.62	79.81	1.92	0.00	0.00	8.65
B	28	0.00	0.00	0.00	3.57	14.29	67.86	7.14	0.00	7.14
CCC/C	4	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00
2008 Static Pool										
AAA	384	99.48	0.00	0.26	0.00	0.00	0.00	0.00	0.00	0.26
AA	3733	2.89	93.09	0.29	0.00	0.00	0.05	0.00	0.03	3.64
A	6004	0.03	8.71	88.54	0.42	0.00	0.03	0.00	0.02	2.25
BBB	2027	0.00	0.30	14.16	81.65	0.59	0.10	0.00	0.05	3.16
BB	114	0.00	0.00	0.00	4.39	85.09	1.75	0.88	0.00	7.89
B	28	0.00	0.00	3.57	0.00	3.57	78.57	3.57	3.57	7.14
CCC/C	8	0.00	0.00	12.50	12.50	0.00	0.00	50.00	12.50	12.50
2009 Static Pool										
AAA	527	96.02	0.38	0.00	0.00	0.00	0.00	0.00	0.00	3.61
AA	4442	1.67	92.59	1.44	0.00	0.00	0.00	0.00	0.00	4.30
A	6341	0.00	8.22	88.94	0.62	0.05	0.00	0.00	0.00	2.18
BBB	1807	0.00	0.55	25.01	70.01	1.38	0.00	0.00	0.00	3.04
BB	114	0.00	0.00	0.00	5.26	80.70	2.63	0.00	0.00	11.40
B	30	0.00	3.33	0.00	6.67	6.67	56.67	13.33	0.00	13.33
CCC/C	6	0.00	0.00	0.00	0.00	0.00	0.00	66.67	0.00	33.33

Table 26

USPF Obligor Static Pool One-Year Transition Matrices (%) (cont.)

2010 Static Pool										
AAA	627	95.69	0.80	0.16	0.00	0.00	0.00	0.00	0.00	3.35
AA	5633	0.87	90.13	1.15	0.02	0.00	0.02	0.00	0.00	7.81
A	7437	0.00	5.94	86.97	1.06	0.09	0.00	0.01	0.00	5.92
BBB	1417	0.00	0.28	19.12	72.83	0.99	0.28	0.28	0.00	6.21
BB	124	0.00	0.00	0.81	8.06	79.03	0.81	2.42	0.81	8.06
B	21	0.00	0.00	0.00	4.76	0.00	80.95	4.76	0.00	9.52
CCC/C	8	0.00	0.00	0.00	0.00	0.00	0.00	62.50	25.00	12.50

Table 27

Housing Issue Static Pool One-Year Transition Matrices (%)

From/To	Issues	AAA	AA	A	BBB	BB	B	CCC/C	D	NR
1986 Static Pool										
AAA	1097	95.08	2.10	0.18	0.09	0.00	0.00	0.00	0.00	2.55
AA	1858	0.16	97.20	1.08	0.16	0.05	0.00	0.05	0.00	1.29
A	1272	0.08	0.08	96.86	1.73	0.08	0.24	0.08	0.00	0.86
BBB	101	0.00	0.00	0.00	98.02	0.00	1.98	0.00	0.00	0.00
BB	1	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00
B	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CCC/C	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1987 Static Pool										
AAA	1156	92.82	4.76	1.56	0.00	0.00	0.00	0.00	0.09	0.78
AA	1907	0.26	97.01	2.15	0.05	0.05	0.00	0.00	0.00	0.47
A	1374	0.58	0.00	96.94	0.15	0.80	0.00	0.00	0.00	1.53
BBB	128	0.00	1.56	19.53	75.00	0.00	0.00	0.78	0.00	3.13
BB	3	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00
B	5	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00
CCC/C	2	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00
1988 Static Pool										
AAA	1209	96.77	0.58	0.83	0.00	0.17	0.00	0.00	0.00	1.65
AA	1966	0.25	95.32	0.76	1.53	0.00	0.05	0.00	0.05	2.03
A	1493	0.07	0.07	89.02	8.44	0.07	0.07	0.00	0.00	2.28
BBB	100	0.00	0.00	0.00	88.00	3.00	0.00	0.00	0.00	9.00
BB	19	0.00	0.00	0.00	0.00	89.47	0.00	10.53	0.00	0.00
B	5	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00
CCC/C	3	0.00	0.00	0.00	0.00	0.00	0.00	33.33	0.00	66.67
1989 Static Pool										
AAA	1337	84.59	0.07	0.00	0.00	0.00	0.00	0.00	0.00	15.33
AA	1997	0.55	88.23	0.85	0.15	0.05	0.00	0.00	0.00	10.17
A	1552	0.26	0.64	89.88	0.71	0.39	0.00	0.00	0.00	8.12
BBB	247	0.40	0.00	1.62	74.49	8.91	0.81	0.81	0.00	12.96

Table 27

Housing Issue Static Pool One-Year Transition Matrices (%) (cont.)										
BB	23	0.00	0.00	0.00	0.00	95.65	4.35	0.00	0.00	0.00
B	7	0.00	0.00	0.00	0.00	14.29	28.57	0.00	0.00	57.14
CCC/C	3	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00
1990 Static Pool										
AAA	1287	89.98	1.24	0.78	0.00	1.32	0.00	0.00	0.00	6.68
AA	1859	0.59	86.12	2.74	0.11	0.05	0.00	0.00	0.00	10.38
A	1444	0.21	5.82	87.40	2.49	0.21	0.00	0.00	0.00	3.88
BBB	201	1.00	0.00	2.99	84.08	3.48	0.00	0.00	0.00	8.46
BB	52	0.00	0.00	0.00	0.00	88.46	3.85	3.85	0.00	3.85
B	5	0.00	20.00	0.00	0.00	0.00	80.00	0.00	0.00	0.00
CCC/C	5	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00
1991 Static Pool										
AAA	1528	87.04	8.12	0.26	0.26	0.00	0.00	0.00	0.00	4.32
AA	1920	2.71	73.49	9.69	0.21	0.00	0.00	0.00	0.00	13.91
A	1421	0.28	0.14	86.98	0.91	0.00	0.00	0.00	0.00	11.68
BBB	213	0.00	0.00	1.41	77.93	9.39	1.88	0.00	0.00	9.39
BB	79	0.00	0.00	3.80	10.13	40.51	18.99	1.27	25.32	0.00
B	6	33.33	0.00	0.00	0.00	0.00	50.00	0.00	0.00	16.67
CCC/C	7	0.00	0.00	0.00	0.00	0.00	0.00	71.43	14.29	14.29
1992 Static Pool										
AAA	1599	94.12	0.44	0.19	0.00	0.00	0.00	0.00	0.00	5.25
AA	1649	0.36	85.26	2.12	0.06	0.00	0.00	0.12	0.00	12.07
A	1603	1.56	10.11	82.60	0.81	0.00	0.00	0.19	0.00	4.74
BBB	202	0.00	0.00	3.96	80.20	2.97	0.00	0.00	0.00	12.87
BB	53	0.00	0.00	3.77	18.87	41.51	1.89	9.43	0.00	24.53
B	22	0.00	0.00	0.00	0.00	13.64	50.00	31.82	4.55	0.00
CCC/C	6	0.00	0.00	0.00	16.67	0.00	0.00	66.67	0.00	16.67
1993 Static Pool										
AAA	1731	82.21	0.52	1.39	0.00	0.00	0.00	0.00	0.00	15.89
AA	1678	0.30	90.58	2.62	0.30	0.00	0.00	0.00	0.00	6.20
A	1471	0.95	5.17	83.75	1.09	0.00	0.00	0.00	0.00	9.04
BBB	197	2.03	2.03	10.15	74.11	1.02	0.00	0.00	0.00	10.66
BB	31	0.00	0.00	3.23	29.03	51.61	3.23	3.23	0.00	9.68
B	12	8.33	0.00	0.00	0.00	25.00	33.33	8.33	0.00	25.00
CCC/C	21	0.00	0.00	0.00	0.00	14.29	0.00	61.90	19.05	4.76
1994 Static Pool										
AAA	1620	93.27	0.12	0.49	0.00	0.00	0.00	0.00	0.00	6.11
AA	1699	0.53	86.46	8.12	0.06	0.00	0.00	0.00	0.00	4.83
A	1391	0.36	10.50	76.78	0.65	0.00	0.00	0.00	0.00	11.72
BBB	179	1.12	0.00	4.47	78.77	0.00	0.00	0.00	0.00	15.64
BB	24	0.00	0.00	0.00	8.33	66.67	0.00	8.33	0.00	16.67

Table 27

Housing Issue Static Pool One-Year Transition Matrices (%) (cont.)										
B	8	0.00	0.00	0.00	0.00	0.00	50.00	50.00	0.00	0.00
CCC/C	15	26.67	0.00	0.00	0.00	0.00	0.00	60.00	6.67	6.67
1995 Static Pool										
AAA	1866	93.35	0.38	0.38	0.00	0.00	0.00	0.00	0.00	5.89
AA	1702	0.35	91.01	0.65	0.00	0.00	0.00	0.00	0.00	7.99
A	1331	1.05	7.74	81.14	0.08	0.00	0.00	0.00	0.00	9.99
BBB	159	0.00	0.00	6.92	69.81	1.26	0.63	1.89	0.00	19.50
BB	16	0.00	0.00	0.00	25.00	50.00	0.00	0.00	0.00	25.00
B	4	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00
CCC/C	15	6.67	0.00	13.33	6.67	0.00	0.00	53.33	6.67	13.33
1996 Static Pool										
AAA	2124	95.95	0.00	0.14	0.00	0.00	0.00	0.00	0.00	3.91
AA	1850	3.46	93.19	0.05	0.05	0.00	0.00	0.00	0.00	3.24
A	1175	0.26	4.17	86.72	0.00	0.17	0.00	0.00	0.00	8.68
BBB	127	0.00	0.00	8.66	77.95	0.00	0.00	0.00	0.00	13.39
BB	10	0.00	0.00	0.00	10.00	60.00	0.00	10.00	0.00	20.00
B	5	0.00	0.00	20.00	0.00	20.00	40.00	0.00	0.00	20.00
CCC/C	11	0.00	0.00	0.00	0.00	0.00	0.00	63.64	9.09	27.27
1997 Static Pool										
AAA	2456	97.27	0.00	0.08	0.00	0.00	0.00	0.00	0.00	2.65
AA	1971	5.94	87.47	0.10	0.00	0.00	0.00	0.00	0.00	6.49
A	1088	3.22	4.50	82.08	0.00	0.00	0.00	0.00	0.00	10.20
BBB	118	0.00	0.00	7.63	83.90	0.00	0.00	0.00	0.00	8.47
BB	11	0.00	0.00	0.00	0.00	54.55	9.09	18.18	0.00	18.18
B	2	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00
CCC/C	8	0.00	0.00	0.00	0.00	0.00	0.00	75.00	0.00	25.00
1998 Static Pool										
AAA	2921	94.90	0.89	0.00	0.00	0.00	0.00	0.00	0.00	4.21
AA	1863	3.33	92.91	0.11	0.00	0.00	0.00	0.00	0.00	3.65
A	957	0.21	7.11	83.39	0.94	0.00	0.00	0.00	0.00	8.36
BBB	103	0.00	0.00	0.00	83.50	0.97	0.00	0.00	0.00	15.53
BB	6	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00
B	3	0.00	0.00	0.00	0.00	0.00	66.67	0.00	0.00	33.33
CCC/C	8	0.00	0.00	0.00	0.00	0.00	0.00	62.50	25.00	12.50
1999 Static Pool										
AAA	3123	96.22	0.22	0.00	0.00	0.00	0.00	0.00	0.00	3.55
AA	1900	0.63	96.00	0.16	0.00	0.00	0.00	0.00	0.00	3.21
A	839	0.36	18.36	72.59	1.55	0.00	0.12	0.00	0.00	7.03
BBB	103	0.97	0.00	0.00	92.23	4.85	0.00	0.00	0.00	1.94
BB	7	0.00	0.00	0.00	0.00	85.71	0.00	0.00	0.00	14.29
B	2	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00

Table 27

Housing Issue Static Pool One-Year Transition Matrices (%) (cont.)										
CCC/C	6	0.00	0.00	0.00	0.00	0.00	0.00	66.67	16.67	16.67
2000 Static Pool										
AAA	3358	95.98	0.27	0.09	0.00	0.00	0.00	0.00	0.00	3.66
AA	2112	1.09	96.45	0.19	0.00	0.00	0.00	0.00	0.00	2.27
A	676	0.15	1.04	95.12	0.44	0.44	0.59	0.00	0.00	2.22
BBB	114	0.00	0.00	0.88	90.35	4.39	2.63	1.75	0.00	0.00
BB	12	0.00	0.00	0.00	0.00	83.33	0.00	16.67	0.00	0.00
B	3	0.00	0.00	0.00	0.00	0.00	66.67	0.00	0.00	33.33
CCC/C	5	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00
2001 Static Pool										
AAA	3617	97.04	0.14	0.03	0.00	0.00	0.00	0.00	0.00	2.79
AA	2195	4.69	93.44	0.18	0.00	0.00	0.00	0.00	0.00	1.69
A	716	1.54	8.52	85.34	0.70	0.28	0.00	0.00	0.00	3.63
BBB	110	0.00	0.00	17.27	76.36	2.73	0.00	0.00	0.00	3.64
BB	19	0.00	0.00	0.00	0.00	57.89	31.58	0.00	0.00	10.53
B	9	0.00	0.00	0.00	0.00	0.00	44.44	22.22	0.00	33.33
CCC/C	9	0.00	0.00	0.00	0.00	0.00	0.00	66.67	11.11	22.22
2002 Static Pool										
AAA	3937	96.32	0.08	0.03	0.00	0.00	0.00	0.00	0.00	3.58
AA	2228	0.22	95.83	0.27	0.00	0.00	0.00	0.00	0.00	3.68
A	691	0.29	2.60	92.76	0.58	0.87	0.29	0.14	0.14	2.32
BBB	91	1.10	0.00	0.00	86.81	5.49	0.00	2.20	1.10	3.30
BB	17	0.00	0.00	0.00	0.00	70.59	17.65	5.88	5.88	0.00
B	11	0.00	0.00	0.00	0.00	0.00	54.55	36.36	9.09	0.00
CCC/C	8	0.00	0.00	0.00	0.00	0.00	0.00	87.50	12.50	0.00
2003 Static Pool										
AAA	4082	93.41	0.22	0.00	0.00	0.05	0.00	0.00	0.00	6.32
AA	2295	0.13	91.24	5.27	0.00	0.00	0.00	0.00	0.00	3.36
A	720	0.56	0.42	87.92	2.08	2.08	0.00	0.00	0.00	6.94
BBB	94	0.00	0.00	1.06	75.53	10.64	0.00	1.06	0.00	11.70
BB	25	0.00	0.00	0.00	0.00	52.00	20.00	4.00	0.00	24.00
B	11	0.00	0.00	0.00	0.00	0.00	45.45	27.27	0.00	27.27
CCC/C	15	0.00	0.00	0.00	0.00	0.00	0.00	53.33	20.00	26.67
2004 Static Pool										
AAA	4026	92.47	0.15	0.07	0.00	0.00	0.00	0.00	0.00	7.30
AA	2215	4.51	85.51	0.36	0.00	0.00	0.00	0.00	0.00	9.62
A	821	6.70	0.85	80.76	0.97	0.37	0.12	0.12	0.00	10.11
BBB	95	0.00	0.00	6.32	77.89	5.26	2.11	2.11	1.05	5.26
BB	41	2.44	0.00	14.63	0.00	48.78	9.76	4.88	2.44	17.07
B	10	0.00	0.00	10.00	0.00	0.00	70.00	10.00	0.00	10.00
CCC/C	14	0.00	0.00	0.00	0.00	0.00	0.00	50.00	14.29	35.71

Table 27

Housing Issue Static Pool One-Year Transition Matrices (%) (cont.)

2005 Static Pool										
AAA	4128	88.28	3.03	0.02	0.00	0.05	0.00	0.00	0.00	8.62
AA	2091	0.67	93.02	0.00	0.00	0.00	0.00	0.00	0.00	6.31
A	745	0.81	16.51	71.81	0.94	0.81	0.27	0.00	0.00	8.86
BBB	88	0.00	0.00	3.41	78.41	6.82	1.14	1.14	0.00	9.09
BB	29	0.00	0.00	0.00	0.00	65.52	17.24	6.90	0.00	10.34
B	14	0.00	0.00	0.00	0.00	0.00	78.57	7.14	7.14	7.14
CCC/C	13	0.00	0.00	0.00	0.00	0.00	0.00	53.85	38.46	7.69
2006 Static Pool										
AAA	3769	95.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.78
AA	2358	1.27	94.70	0.00	0.00	0.00	0.00	0.00	0.04	3.99
A	583	4.97	2.57	84.05	0.69	0.17	0.00	0.00	0.00	7.55
BBB	83	0.00	1.20	4.82	83.13	7.23	0.00	0.00	0.00	3.61
BB	33	0.00	0.00	0.00	3.03	51.52	27.27	3.03	0.00	15.15
B	19	5.26	0.00	0.00	0.00	0.00	78.95	15.79	0.00	0.00
CCC/C	11	0.00	0.00	0.00	0.00	0.00	0.00	81.82	18.18	0.00
2007 Static Pool										
AAA	4388	95.10	0.05	0.00	0.00	0.00	0.00	0.00	0.00	4.85
AA	3416	0.23	97.37	0.20	0.00	0.03	0.00	0.06	0.00	2.11
A	1027	0.10	0.49	95.03	0.00	0.10	0.10	0.19	0.10	3.89
BBB	234	0.00	0.00	2.56	91.88	0.00	0.00	0.43	0.00	5.13
BB	34	0.00	0.00	0.00	0.00	85.29	2.94	0.00	0.00	11.76
B	24	0.00	0.00	0.00	0.00	0.00	79.17	0.00	8.33	12.50
CCC/C	13	0.00	0.00	0.00	0.00	0.00	0.00	69.23	0.00	30.77
2008 Static Pool										
AAA	4400	95.91	0.89	0.27	0.07	0.00	0.00	0.00	0.00	2.86
AA	3728	0.16	97.99	1.18	0.16	0.00	0.00	0.00	0.00	0.51
A	1248	0.08	0.24	98.72	0.08	0.40	0.00	0.00	0.00	0.48
BBB	276	0.00	0.00	0.72	98.19	0.00	0.36	0.36	0.00	0.36
BB	32	0.00	0.00	3.13	3.13	81.25	3.13	3.13	0.00	6.25
B	21	0.00	0.00	0.00	0.00	0.00	90.48	4.76	0.00	4.76
CCC/C	14	0.00	0.00	0.00	0.00	0.00	0.00	78.57	7.14	14.29
2009 Static Pool										
AAA	4269	95.53	3.00	0.05	0.05	0.14	0.00	0.12	0.00	1.12
AA	3767	0.35	98.01	0.40	0.11	0.24	0.00	0.05	0.00	0.85
A	1315	0.76	0.15	96.88	1.14	0.23	0.00	0.00	0.00	0.84
BBB	283	0.00	0.00	1.41	94.35	1.06	0.71	0.71	0.00	1.77
BB	31	0.00	6.45	0.00	3.23	67.74	6.45	0.00	0.00	16.13
B	21	0.00	0.00	0.00	0.00	0.00	80.95	0.00	0.00	19.05
CCC/C	14	0.00	0.00	0.00	7.14	0.00	0.00	35.71	21.43	35.71

Table 27

Housing Issue Static Pool One-Year Transition Matrices (%) (cont.)

2010 Static Pool										
AAA	4223	96.23	1.80	0.38	0.09	0.85	0.19	0.12	0.00	0.33
AA	3894	0.03	96.02	3.85	0.00	0.00	0.00	0.00	0.00	0.10
A	1312	0.23	0.15	97.87	0.30	0.76	0.00	0.08	0.00	0.61
BBB	290	0.00	0.00	2.07	92.07	5.86	0.00	0.00	0.00	0.00
BB	44	0.00	0.00	0.00	0.00	90.91	9.09	0.00	0.00	0.00
B	21	0.00	0.00	0.00	0.00	0.00	95.24	4.76	0.00	0.00
CCC/C	14	0.00	7.14	0.00	0.00	0.00	0.00	92.86	0.00	0.00

Related Research

- Default, Transition, and Recovery: 2010 Annual Global Corporate Default Study And Rating Transitions, March 30, 2011
- Default, Transition, and Recovery: 2010 Annual U.S. Corporate Default Study And Rating Transitions, March 30, 2011
- Default, Transition, and Recovery: 2010 Annual European Corporate Default Study And Rating Transitions, March 30, 2011
- Default, Transition, and Recovery: 2010 Annual Asian Corporate Default Study And Rating Transitions, March 30, 2011
- Default, Transition, and Recovery: 2010 Default Synopses, March 30, 2011
- Default Study: Japanese Corporate Default And Rating Transitions Study 2010, March 29, 2011
- Default, Transition, and Recovery: International Local And Regional Governments Default And Transition Study, 2010 Update, March 28, 2011
- Global Structured Finance Default Study—1978-2010: Credit Trends Started To Improve In 2010, But U.S. RMBS Faces Challenges, March 28, 2011