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Mississippi; Appropriations; General Obligation; Moral Obligation; Non-School State Programs; School State Program

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Credit Profile

Mississippi GO

Long Term Rating

AA/Negative

Outlook Revised

Rationale

S&P Global Ratings revised its outlook on the State of Mississippi to negative from stable. At the same time, S&P Global Ratings affirmed its 'AA' rating on the state's general obligation (GO) debt outstanding, secured by Mississippi's full faith and credit; its 'AA-' rating on Mississippi's issues secured by state appropriations; and its 'A' ratings on various issues of the Mississippi Development Bank (MDB) based on the state's moral obligation pledge. S&P Global Ratings also affirmed its 'AA-' ratings on various issues of the Mississippi Development Bank Community and Junior College State Aid Intercept Program and the Mississippi State Aid Capital Improvement Bond Program based on the intercept and withholding provisions of these state enhancement programs.

The outlook change reflects our view of continued weakness in the state's revenue trends and relatively slow economic growth, and our expectation that Mississippi could continue to experience budget pressures as it manages through budget reductions and the incremental revenue loss from the scheduled implementation of recent tax changes. The negative outlook also reflects the declining trajectory of the state's pension-funded ratios, which are likely to require future increases to pension contributions in an already tight budget environment.

The 'AA' rating on Mississippi's GO debt reflects our view of the state's:

- Strong budgetary and governmental framework, with a statutory requirement to adopt and maintain a balanced budget throughout the fiscal year;
- Historically conservative and proactive fiscal management, including making timely budget adjustments to maintain fiscal balance through periods of revenue decline; and
- Working cash stabilization fund, which still represent a good 5.0% of budget, but could fall to 3.4% in fiscal 2017 if revenue shortfalls continue based on legislatively approved levels.

Credit factors that somewhat mitigate the preceding credit strengths include our opinion of the state's:

- Relatively limited economy, which trails many national median indicators and has a higher dependency on federal government spending compared with other states, stagnant population growth, above-average unemployment, some concentration in manufacturing, below-average wealth and income indicators, and one of the nation's highest poverty rates and lowest educational attainment levels; and
- Moderately high debt burden across several measures as well as a relatively low and declining average pension-funded ratio.

In fiscal 2017, the current budget has been revised four times to address revenue shortfalls and a forecasting error earlier in the year. To date, the majority of the budget adjustments have been recurring reductions in spending totaling a cumulative \$171 million, or about 3% of budget, and another \$80 million (or 1.4%) represented one-time solutions from Attorney General settlement funds primarily, as well as \$11 million pulled from the rainy-day fund to date. The governor has regular authority to draw up to \$50 million from the rainy-day fund in a fiscal year. The legislature provided the governor with additional authority to draw from the rainy-day fund for a total of \$89 million remaining that could be drawn through the end of fiscal 2017 and into the encumbrance period, if necessary. Assuming no additional funds are drawn, the state estimates it could end the year with \$280 million in the rainy-day fund, or a good 5% of budget. Assuming all authorized funds are pulled in fiscal 2017, and there are no further changes, the ending reserve would total \$191 million, or 3.4%. Mississippi also currently has almost \$100 million in the budget contingency fund from unspent British Petroleum (BP) settlement money received for economic damages. The legislature has debated the use of the settlement funds for future public projects related to the Gulf Coast, but did not reach agreement before the end of the regular session. While Gov. Phil Bryant has called a special session in June 2017 to complete the fiscal 2018 budget for the transportation and attorney general departments, the governor has yet to set the agenda for the special session and it is unclear whether the use of the BP settlement reserve will be included for discussion.

General fund tax collections through March 2017 lag prior-year collections by 2.1%, but are 2.3% above current estimates. Mississippi's estimating group lowered the fiscal 2017 revenue estimate by \$70 million in March and lowered the fiscal 2018 forecast by \$175 million to \$5.6 billion. The 2017 legislature passed most of a \$5.5 billion fiscal 2018 general budget in April, which comprises 99% of a level \$5.6 billion in revenue forecast for fiscal 2018. State law requires a budget that limits appropriations to 98% of the official revenue estimate as a way to create some buffer for revenue volatility; however, the legislature revised this requirement in fiscal 2018 to 99% of the official forecast. We believe this is an improvement from previous legislative practice of completely suspending this requirement in most budgets since the recession. However, we believe the 1% budget margin provides limited buffer for midyear adjustments given recent revenue shortfalls and potential for further revenue volatility due to implementation of recent tax changes. The budget maintained relatively flat kindergarten to grade 12 education spending despite a small decline; however, it imposed significant cuts for higher education. In response, University of Mississippi Medical Center has announced 195 expected layoffs and community colleges expect to raise tuition to offset the loss of state funding. The budget also maintains level Medicaid spending compared with last year, although the department required a deficit appropriation in the current year. We understand changes to the state's Federal Medical Assistance Percentage (FMAP) could mitigate reductions in state funding and health department officials don't expect significant losses to any one program. The governor has called a special session in June to finalize the transportation and attorney general department budgets. The budget does not accommodate additional transfers to the working cash fund and projects a zero capital expense reserve fund at the end of fiscal 2018. We understand the legislature passed \$65 million in bonding authorization for economic development, although it did not pass additional bonding authorization in the regular session.

The 2016 legislature passed the Budget Transparency and Simplification Act, which revises how Mississippi allocates charges to state agencies and redirects special revenue that was historically used for other designated purposes to the general fund. We understand the act aimed to fully offset the loss of special revenue to state agencies by eliminating

the costs of interfund charges to the general fund. Although state officials expected further legislative action in 2017 to make technical amendments to laws to free up certain special revenue for general purposes, the legislation did not pass during the regular session. However, a relatively minor \$9 million remains restricted and could be addressed in the special session. The 2016 legislature also assumed special funds would cover a portion of debt service payments in fiscal 2017, but which state officials estimated would require a \$14.4 million deficit appropriation. Roughly half of the deficit was covered through the December 2016 bond sale structure, with the remainder paid through a special fund loan repayment. If necessary, the state treasurer has the authority to use unencumbered funds, including the rainy-day fund, to pay debt service. The 2016 state legislature also passed the Taxpayer Pay Raise Act to phase in tax cuts totaling \$415 million over a period of 10 years. The act phases out franchise taxes, gradually eliminates an income tax bracket, and allows for deductions for federal self-employment taxes paid. Scheduled changes to taxes are phased in between fiscal years 2018 and 2027, which the state estimates could contribute to almost \$33 million less revenue in fiscal 2018, \$87 million less in fiscal 2019, and \$142 million less in fiscal 2020, ramping up to an annual \$415 million in lost revenue by fiscal 2027 assuming no other changes. The fiscal analysis also projects the tax changes are likely to reduce state employment levels for an overall negative net effect on employment across the state. In addition to the projected revenue loss, we believe the implementation of tax changes could affect the timing and volatility of state revenue collections.

The state's revenue softness persists although Mississippi's unemployment rate improved to 5% as of March 2017 and personal income growth was positive in 2016. The state economist postulates this disconnect could stem from changes in tax law that complicate revenue forecasting or previous cuts to the department of revenue could have weakened revenue collections. In addition, Mississippi residents who worked in neighboring oil producing states could be spending less in-state due to the recent oil price slump. Mississippi's economic profile has remained weak relative to that of the nation, reflected in stalled population growth and weak relative growth in employment and personal income. Slow population growth continues to restrict long-term robust economic growth in the state and as of December 2016, Mississippi's employment remained 2.3% below pre-recession levels. The state's personal income represents 72% of that of the national average, compared with 75% in 2012. As a result, Mississippi leads the nation in the federal aid it receives as a percent of its budget. Economic concentration exists in the manufacturing, government, and trade, transportation, and utilities sectors. Although much of the state is rural, its access to three major water routes--the Mississippi River, the Tennessee-Tombigbee rivers, and the Gulf of Mexico--has attracted commercial and industrial investment, particularly in offshore drilling and shipbuilding. Significant changes to NAFTA could cause disruption in trade activity given Mississippi's two largest export markets are Canada and Mexico. (see "The U.S. And NAFTA: It's Complicated", published May 1, 2017). We view Mississippi's debt and liability profile as below average due to a relatively low pension-funded ratio and moderately high debt burden as a percent of gross state product (GSP) and personal income. The state's three-year average pension-funded ratio of 60% is relatively low in our view. The tax-supported debt burden in fiscal 2016 represented 5% of personal income and GSP, which we consider moderately high.

Based on the analytical factors evaluated for Mississippi, on a scale where '1.0' is the strongest score and '4.0' is the weakest, we assigned a total or composite score of '2.1' to Mississippi under our State Ratings Methodology, which is a change from its previous indicative score of '2.0' and now reflects an indicative rating of 'AA-'. The change was due to our view of lagged pension funding responsiveness in light of a trend of declining funded ratios and the likelihood of

future budget pressures stemming from higher future pension costs. We have notched up to 'AA' as allowed by our state rating methodology due to the state's historical focus on a balanced approach to proactive budget adjustments with relatively less reliance on one-time measures, although we believe the state faces continued budget pressures which could pressure the rating.

Outlook

The negative outlook reflects our view of continued weakness in Mississippi's revenue trends and relatively slow economic growth, and our expectation that the state could continue to experience budget pressures as it manages through budget reductions and the incremental revenue loss from the scheduled implementation of recent tax changes. The outlook also reflects the declining trajectory of Mississippi's pension-funded ratios, which are likely to require future increases to pension contributions in an already tight budget environment. While we view the state's history of proactive fiscal management positively, including making budget adjustments to maintain fiscal balance through periods of revenue decline, we believe continued weakening of key state revenues and slow economic growth could pressure ongoing structural budgetary balance and reduce currently good reserve levels. We recognize Mississippi has taken a balanced approach to making recurring budget cuts and using nonrecurring transfers from the rainy-day fund; however, we believe that continued economic and revenue weakening could create future budget pressures. Should spending or revenue pressures result in significant reliance on the working-cash stabilization reserve or other nonrecurring measures, as well as continued deterioration in pension-funded ratios and Mississippi's commitment to funding pension contributions to meet its stated goals, we could lower the rating. Also, if financial flexibility is compromised due to the state's unwillingness to cut expenditures where and when needed or increased debt issuance occurs without a commensurate increase in liquidity, these could all lead us to lower the rating. If the state is able to manage through scheduled tax cuts while maintaining good reserve and liquidity levels and structural budgetary balance, we could revise the outlook to stable.

Financial Management

S&P Global Ratings deems Mississippi's financial management practices "strong" under its financial management assessment methodology, indicating our view that practices are strong, well-embedded, and likely sustainable.

Mississippi creates its multiyear budgeting and cash flow projections through the annual budget process, addressing both the current and subsequent budget year. Its formal investment management policy calls for regular, and at least monthly, reporting to elected officials, including the governor. Statutes provide guidelines for deposits to the formal working cash stabilization reserve and the state maintains a five-year capital improvement budget that it presents for consideration to the legislature annually. The constitution limits debt to 1.5x the sum of all revenues Mississippi collects in any one of the four preceding fiscal years, whichever is higher. Because the state has issued variable-rate debt and entered into swaps, enabling legislation limited its variable-rate debt to no more than 20% of its total GO debt and Mississippi has a comprehensive derivatives management policy that it reviews annually. The treasurer has published an annual debt affordability study since 2014, which reflects current debt ratios as well as projected annual debt service requirements and issuance.

In our opinion, Mississippi has historically followed strong budget management practices. We consider the executive branch and budget office to have broad powers to adjust appropriations. Should a revenue shortfall occur, the Department of Finance and Administration (DFA) can amend budgets to improve structural gaps and cut expenditures directly as needed. All state agencies receiving general or special funds are subject to funding reductions of up to 5%, but no agency receives a cut in excess of 5%, unless all have been reduced by this percent. As required by state statute, the state treasurer and the executive director of the DFA monitor the state general fund revenues and cash balances against monthly estimates in anticipation of adjustments that they might need to make. Although the state can use a portion of its rainy-day balance to address budget shortfalls, it cannot carry over deficits from the previous fiscal year. Thus, previous gap-closing solutions have included structural adjustments rather than relying solely on nonrecurring revenue or spending actions.

On a scale where '1.0' is the strongest score and '4.0' is the weakest, we have assigned a score of '1.0' to Mississippi's financial management framework.

Economy

Mississippi's population has historically grown at much lower rate than that of the nation, with year-over-year growth slowing to only 0.06% in 2014. In 2016, the state's population growth stalled and declined slightly by 0.2% to 2.989 million. IHS Global Insight Inc. continues to forecast slow annual population growth of 0.0% and 0.1%, respectively, in the next two years, which is likely to restrict long-term economic growth prospects. Given the state's age-to-population dependency ratio of 64.1, the dependent population is 5.6% higher than the national rate, reflecting a larger proportion of residents younger than 15 or older than 64 when compared with the working population.

Mississippi's unemployment rate improved to 5.8% in 2016 from its peak of 10.4% in 2010, but remains higher than national levels. The state's preliminary March 2017 unemployment rate of 5.0% compared less favorably with the 4.5% national rate for the same period. The employment base by sector is generally in line with that of the nation, but exhibits some concentration in manufacturing and government, which represent 12.5% and 21.4% of state employment, respectively, when compared with the 8.5% and 15.7% respective national averages. In addition, Mississippi's share of professional business services jobs at 9.4% is well below the national average of 13.9%. Although professional and business services jobs, primarily administrative and support positions, had posted good growth in the previous two years, the sector ended 2016 with a loss of 7.3% of its positions on a year-over-year basis.. IHS Global Insight forecasts job growth will rebound in the sector in the near term. In the manufacturing sector, automotive-related manufacturing remains a bright spot with future developments planned. Continental Tire plans to invest \$1.45 billion in a plant in Hinds County and could create 2,500 new jobs by 2028. The state has approved tax exemptions for the plant and expects to issue \$263 million of GO debt for incentive payments over five years. It also approved \$11 million of additional debt for incentives to a shipbuilding expansion that it expects will add 1,000 new jobs in Gulfport. Mississippi's largest manufacturing employer is shipbuilder Huntington Ingalls Industries (formerly known as Northrop Grumman Ship Systems), employing more than 11,000 people in Pascagoula and Gulfport. IHS Global Insight predicts near-term expansion in manufacturing will help pick up the state job growth rate at 1.1% per year in 2016 and 0.6% in 2017, to 1.1% in 2018 and 1.0% in 2019, but forecasts a slowing pace of job growth beyond

2019 due to declining long-term prospects for the manufacturing sector overall.

State wealth and income levels continue to rank the lowest among U.S. states and have deteriorated relative to national levels in the past two years. At \$35,936 per capita, 2016 personal income was 72% of the national average, down from 75% in 2013. Because of the below-average income levels, many Mississippi residents depend highly on federal and state social program spending. GSP per capita in 2015 was \$35,398, or 63% of the national GDP per capita compared with 66% in 2013. In seven of the previous 10 years, Mississippi has trailed the nation in the annual percent change in GSP versus national GDP and, although IHS Global Insight projects average annual GSP growth will be stronger than historical trends in the next few years, projected state growth doesn't exceed national projections.

We continue to believe Mississippi has many advantages in the long term to attract new economic development related to the trade and transportation industries compared with other states given its Gulf Coast location, related sea ports, and proximity to the Panama Canal. In the short term, however, recent price declines in petroleum/coal products contributed to a cumulative 15% drop in Mississippi's export merchandise value since 2013 to \$10.5 billion in 2016. The state offers many incentives and tax advantages to attract new businesses and to encourage existing businesses to expand within it. The cost of doing business is also lower than that in most other states, and Mississippi has one of the lowest corporate income taxes in the South. However, the state's educational attainment and wealth and income levels are among the lowest in the country. Just 83.5% of Mississippi residents over the age of 25 are high school graduates, compared with 87.1% for the national average. Although the state has prioritized workforce education needs through funding scholarship and literacy programs, its current lack of educational attainment is likely to remain a challenge to attracting professional services and high-tech industries, which generally offer higher-paying jobs that require more education.

We have assigned a score of '3.2' to Mississippi's economy, on a scale where '1.0' is the strongest score and '4.0' is the weakest.

Budget Performance

The Budget Reform Act of 1992 created the working-cash stabilization reserve account, which requires the state to deposit 100% of the unencumbered general fund cash balance into the account at the close of each fiscal year until the balance reaches \$40 million. Thereafter, Mississippi must deposit 50% of the unencumbered general fund ending cash balance into the account until it reaches 7.5% of general fund appropriations for the current fiscal year. As required by state law, the state does not consider the account surplus or available funds when adopting a balanced budget. In the event of a revenue shortfall, the governor is authorized to transfer permanently the amount in excess of \$40 million of the working-cash stabilization reserve account balance to the general fund to cover such deficits up to a maximum of \$50 million in any one fiscal year, although this limit was removed by the legislature for fiscal 2016. In addition to the working cash stabilization reserve account, the state directs a portion of the unencumbered balance to a capital expense reserve designated for capital needs and to reduce reliance on bonding. In the past, it has also directed small amounts in the budget contingency fund to cover nonrecurring expenses in the budget.

Mississippi historically recorded budgetary surpluses in periods of positive economic growth, which it has used to fund

reserves. In periods of economic decline, the state has addressed budget imbalances through a combination of structural solutions and the use of reserves within the limits of state statute. However, the 2016 legislature revised the flow of unappropriated general fund balance to divert funds to municipalities and the capital expense fund, rather than to replenish the rainy-day fund in the fiscal 2017 budget. The legislature planned this diversion as a one-time change; however, we believe a track record of draws and failure to replenish the rainy-day fund to the maximum levels could weaken the state's position in case of a prolonged downturn.

Five independently derived projections form the basis of the state's official consensus revenue forecast used in budget development. In October of each year, revenue estimating officials with the office of the state treasurer, legislative budget office, DFA, department of revenue, and the University Research Center present their consensus revenue projection to the Joint Legislative Budget Committee and the governor's budget office. The official state revenue forecast binds the budget, and state law is supposed to limit appropriations to 98% of the official revenue estimate as a way to create some buffer for revenue volatility. However, the legislature suspended this requirement in fiscal years 2015, 2016, 2017, and 2018 as it did for several budgets before fiscal 2013 and after the recession. For 2018, the legislature agreed to limit appropriations to 99% of the official revenue estimate. Revenue shortfalls in fiscal 2016 have thus led to renewed reliance on a portion of rainy-day fund balance to help address budget shortfalls. Officials report the current fiscal 2017 rainy-day fund balance is approximately \$280 million, or 5.5% of budget, compared with the 7.5% maximum level. However, there is currently authorization to transfer an additional \$88.9 million from the reserve fund if fiscal 2017 revenues underperform forecast.

We consider the state's tax revenue structure to be diverse, as sales tax receipts contributed about 36% of general fund revenues in fiscal 2016 while individual income tax revenues accounted for about 32%. A portion of Mississippi's sales taxes also flows to the education enhancement special fund to support education spending and the state uses annual tobacco settlement money through its health care expendable fund to help fund its Medicaid budget. State spending on Medicaid and education represent more than two-thirds of the total state support budget. State officials estimate minimal caseload growth and higher FMAP match rates help to minimize Medicaid cost growth in the budget. Expenditures are generally predictable, and, to maintain budget balance, the state has been willing to cut across all services and expenditures when revenue declines necessitate doing so. In our view, Mississippi has not historically demonstrated a record of raising revenues, but rather, it has used expenditure cuts to achieve balanced operations when necessary.

Mississippi has not historically issued short-term debt for cash flow purposes. To address the need for temporary cash, the general fund may borrow from special funds and the working-cash stabilization fund, but the state must repay any money borrowed by the end of the fiscal year. Statute requires the state treasurer and the executive director of the DFA to analyze the amount of cash in Mississippi's general fund and special funds at least monthly and at any other time deemed necessary. Although the state has the authority to do so, it has not issued short-term notes for temporary cash flow deficiencies. In our view, Mississippi's broad authority to cut expenditures in response to revenue shortfalls also supports its liquidity position.

Fiscal 2016 audited results on a GAAP basis:

The fiscal 2016 (June 30) general fund balance increased by \$156.7 million over the previous fiscal year bringing the ending unassigned general fund balance to \$547 million, or a moderate 3.3% of general fund expenditures (on a

generally accepted accounting principles basis). Total general fund revenues increased by \$147.7 million (0.9%) with sales and use collections increasing by \$51 million (1.5%) and corporate income and franchise collections falling by \$117.9 million (17.0%) due to weak corporate tax collections. In addition, court assessments increased by \$220.2 million (234%) due to the state's share of a settlement agreement between the Gulf States and BP where Mississippi was awarded \$750 million over an 18-year period in relation to the Deepwater Horizon oil spill incident. Total general fund expenditures decreased by \$15.2 million (0.9%) over the previous fiscal year despite a 1.6% increase in Health and social services over the prior year stemming mostly from Medicaid inflation. The Centers for Medicare and Medicaid Services estimated inflation at 4.1%; the state's FMAP rose after increasing medical expenditures.

We have assigned a score of '1.7' to Mississippi's budgetary performance, on a scale where '1.0' is the strongest score and '4.0' is the weakest.

Debt And Liability Profile

In our opinion, Mississippi's debt levels remain moderately high by most measures. Fiscal 2016 tax-supported debt outstanding—including GO, appropriation debt, and notes payable—totaled \$5.4 billion, or \$1,801 per capita, which we consider moderate, and 5% of personal income and GSP, which we consider moderately high. Mississippi's debt service burden as a percent of expenditures is also moderately high, in our view, with fiscal 2016 debt service accounting for 6.4% of total governmental fund expenditures (net of federal government revenues received). Debt amortization is average, in our opinion, with 59% of tax-supported debt principal repaid over 10 years. Notes payable include debt issued by the department of transportation for roads and bridges, but tax-supported debt ratios do not include MDB bonds backed by the state's moral obligation pledge that historically have been supported by the loan repayments from various issuers. Also included in the debt figure is \$160 million of variable-rate debt issued in 2012 as five-year floating rate bonds benchmarked to the LIBOR and Securities Industry and Financial Markets Association indices, which represent about 3% of total tax-supported debt outstanding. The series 2012 bonds mature in September 2017 and November 2017 when total principal is due, although officials expect to restructure the bonds and extend the maturity. We assess Mississippi's market risk profile as low and, as such, view remarketing risk as minimal. The state had also entered into six interest rate swap agreements in which it pays the counterparty fixed rate payments and receives variable-rate payments based on the respective indices. The counterparties on the swaps are Bank of New York-Mellon, Wells Fargo Bank, and Morgan Stanley Capital Services Inc. In our view, the swaps have low risk because termination risk is remote given the current ratings, there are requirements for the counterparties to post collateral below certain rating triggers, and the state has strong management practices with formal swap and debt management policies in place.

The MDB issues debt on behalf of various local governments in the state. Local revenue streams and the state's moral obligation pledge to replenish the debt service reserve in case of a deficiency secure the development bank debt.

Mississippi's unfunded pension liability primarily represents its proportionate share of the net pension liability in the Public Employees' Retirement System of Mississippi (MSPERS) as well as a relatively minor liability for its Mississippi Highway Safety Patrol Retirement System and Supplemental Legislative Retirement Plan single-employer retirement plans. We consider the state's overall three-year average pension-funded ratio across plans relatively low at 60%.

MSPERS announced a minimal 1.2% return on investments at the end of June 2016.

The system sets its pension contribution rates by board policy. Effective July 1, 2013, the MSPERS board of trustees implemented a revised funding policy with a goal to stabilize the employer contribution rate, which was set at 15.75% of gross salary, and a focus on a declining amortization period. The funding policy targets a funded level for MSPERS of at least 80%, as opposed to 100%, by 2042. However, according to the 2016 valuation report, assuming the 15.75% contribution rate as well as recent actuarial experience, the amortization period for full funding of the plan exceeds 36 years, up from 29 years in fiscal 2014, which we consider aggressive. According to the pension board's funding policy, if projections do not reflect at least a 75% funded ratio in 2042 for two consecutive years, or a funded ratio of at least 60% in 2042, the board is required to increase the employer contribution rates to target an 85% funded ratio by 2042. Projections released in December 2016 forecast a 62.6% ratio as of 2042 for the MSPERS system; therefore, no board action will be required unless projections in December 2017 similarly forecast a funded ratio below 75%. However, we note the board voted to delay increasing the Mississippi Highway Safety Patrol Retirement System (HSPRS) employer contribution rates until July 2018, responding to a projected ratio of only 51.6% in 2042 for that system. Furthermore, we understand board policy does not dictate legislative action and the legislature has ultimate authority to approve funding for changes to employer contribution rates. Although we believe frequent experience studies and review of actuarial projections are a positive foundation for pension funding policy, the somewhat aggressive actuarial plan assumptions and a delayed responsiveness to declining funded ratios signal weaker pension funding discipline, in our view.

MSPERS pension benefits include a compounded annual 3% cost-of-living increase for eligible retirees after they reach age 55, although the board extended the age to 60 for new hires in fiscal 2012. The MSPERS board of trustees also revised the assumed rate of return to 7.75% from 8.00% and incorporated updated mortality tables as a result of the plan's 2014 experience study. The 2016 experience study does not recommend a change to the assumed long-term rate of return, which includes a 4.75% real rate of return and 3.00% inflation assumption, but does recommend a lower payroll growth assumption of 3.25% from 3.75%, based on experience. Although we view the lower payroll growth assumption to be more conservative, we note that it could still be optimistic given the state's demographic trends. We understand the board will use the experience study to recommend any changes in future assumptions, which it will incorporate into its next valuation report in the fall. We calculate that total annual plan contributions across systems in fiscal years 2014, 2015, and 2016 have not covered levels equal to service cost and an interest cost component plus some amortization of the unfunded liability.

We believe, on the whole, management factors and actuarial inputs do not significantly encumber or improve our view of the state's overall pension funding discipline. The plan reported an actual 7.2% five-year average rate of return in its fiscal 2016 comprehensive annual financial report, which is slightly under the targeted long-term actuarial 7.75% assumed rate and incorporates the plan's actual 1.2% return as of June 2016. The combined ratio of active members to beneficiaries in the plan equals 1.55, which is slightly better than the median national ratio of 1.50. We believe the system incorporates experience trends and industry standards in its experience study and we favorably view its practice to produce an experience study every two years. The MSPERS system does not project an asset depletion date under Governmental Accounting Standards Board 67; however, we believe MSPERS's amortization method is aggressive in that it uses an open amortization period with 36 years remaining and a "level percentage of pay" method,

which assumes rising future payroll and results in escalating pension contributions over time. Furthermore, in light of the state's slow revenue growth and recent budget adjustments, as well as relatively slow population growth compared with that of the nation, increases to already relatively high employer pension contribution rates could heighten budgetary pressure.

Mississippi's proportionate share of the total plans' net pension liability translates to what we view as a moderate \$1,143 per capita and 3.2% of personal income.

We view Mississippi's other postemployment benefit (OPEB) risk to be moderate compared with that of other states, given a relatively low unfunded OPEB liability per capita and an annual OPEB cost that is relatively low in relation to the state budget. Mississippi provides just one OPEB plan, a medical plan, and a life insurance program administered by the State and School Employees' Health Insurance Management Board. Based on the plan's most recent valuation on June 30, 2016, the total unfunded actuarial accrued liability was about \$709 million, or about \$237 per capita. The state finances the plan on a pay-as-you-go basis and has no assets accumulated in a trust. It funded almost 66% of the approximately \$49 million annual OPEB cost in fiscal 2016, which represents only 0.8% of the state's general fund budget.

On a scale where '1.0' is the strongest score and '4.0' is the weakest, we have assigned a score of '2.8' to Mississippi's debt and liability profile.

Ratings Detail (As Of May 1, 2017)		
Amory Sch Dist GO		
<i>Long Term Rating</i>	AA-/Negative	Outlook Revised
Baldwyn Pub Sch Dist SCHSTPR		
<i>Long Term Rating</i>	AA-/Negative	Outlook Revised
Biloxi Pub Sch Dist SCHSTPR		
<i>Long Term Rating</i>	AA-/Negative	Outlook Revised
Cleveland Sch DisGO		
<i>Long Term Rating</i>	AA-/Negative	Outlook Revised
Copiah Cnty Sch Dist GO		
<i>Long Term Rating</i>	AA-/Negative	Outlook Revised
Copiah-Lincoln Comnty Coll Dist spl oblig bnds (Program Only)		
<i>Long Term Rating</i>	AA-/Negative	Outlook Revised
East Central Comnty Coll Dist spl oblig bnds (Program Rating Only) ser 2016 due 04/01/2046		
<i>Long Term Rating</i>	AA-/Negative	Outlook Revised
Forrest Cnty Sch Dist GO		
<i>Long Term Rating</i>	AA-/Negative	Outlook Revised
Greenwood Pub Sch Dist st aid cap imp rfdg		
<i>Long Term Rating</i>	AA-/Negative	Outlook Revised
Grenada Sch Dist State GO		
<i>Long Term Rating</i>	AA-/Negative	Outlook Revised

Ratings Detail (As Of May 1, 2017) (cont.)		
Hancock Cnty Sch Dist GO State Enhancement Program		
<i>Long Term Rating</i>	AA-/Negative	Outlook Revised
Harrison Cnty Sch Dist		
<i>Long Term Rating</i>	AA-/Negative	Outlook Revised
Holly Springs Sch Dist SCHSTPR		
<i>Long Term Rating</i>	AA-/Negative	Outlook Revised
Holmes Cnty Sch Dist GO		
<i>Long Term Rating</i>	AA-/Negative	Outlook Revised
Indianola Sch Dist GO		
<i>Long Term Rating</i>	AA-/Negative	Outlook Revised
Jefferson Cnty Sch Dist GO		
<i>Long Term Rating</i>	AA-/Negative	Outlook Revised
Kemper Cnty Sch Dist GO		
<i>Long Term Rating</i>	AA-/Negative	Outlook Revised
Kosciusko Sch Dist GO State Credit Enhancement		
<i>Long Term Rating</i>	AA-/Negative	Outlook Revised
Lincoln Cnty Sch Dist GO		
<i>Long Term Rating</i>	AA-/Negative	Outlook Revised
Long Beach Sch Dist GO		
<i>Long Term Rating</i>	AA-/Negative	Outlook Revised
Madison Cnty Sch Dist sch st prog		
<i>Long Term Rating</i>	AA-/Negative	Outlook Revised
Marshall Cnty Sch Dist GO		
<i>Long Term Rating</i>	AA-/Negative	Outlook Revised
McComb Sch Dist SCHSTPR		
<i>Long Term Rating</i>	AA-/Negative	Outlook Revised
Mississippi		
<i>Long Term Rating</i>	AA-/Negative	Outlook Revised
Mississippi Dev Bank (Meridian Comb Wtr & Swr Sys Rfdg Proj)		
<i>Long Term Rating</i>	A/Negative	Outlook Revised
Mississippi GO		
<i>Long Term Rating</i>	AA/Negative	Outlook Revised
Mississippi GO		
<i>Long Term Rating</i>	AA/Negative	Outlook Revised
Mississippi GO		
<i>Long Term Rating</i>	AA/Negative	Outlook Revised
Mississippi GO (AGM) (SEC MKT)		
<i>Unenhanced Rating</i>	AA(SPUR)/Negative	Outlook Revised
Mississippi GO (Cap Imp Proj)		
<i>Long Term Rating</i>	AA/Negative	Outlook Revised

Ratings Detail (As Of May 1, 2017) (cont.)		
Mississippi GO		
<i>Long Term Rating</i>	AA/Negative	Outlook Revised
Mississippi GO		
<i>Long Term Rating</i>	AA/Negative	Outlook Revised
Mississippi GO		
<i>Long Term Rating</i>	AA/Negative	Outlook Revised
Mississippi GO		
<i>Long Term Rating</i>	AA/Negative	Outlook Revised
Mississippi (Nissan North America, Inc Proj)		
<i>Long Term Rating</i>	AA/Negative	Outlook Revised
Mississippi (Nissan North America, Inc Proj)		
<i>Long Term Rating</i>	AA/Negative	Outlook Revised
Mississippi (Nissan North America, Inc Proj)		
<i>Long Term Rating</i>	AA/Negative	Outlook Revised
Monroe Cnty Sch Dist GO		
<i>Long Term Rating</i>	AA-/Negative	Outlook Revised
Neshoba Cnty Sch Dist GO		
<i>Long Term Rating</i>	AA-/Negative	Outlook Revised
North Bolivar Sch Dist GO		
<i>Long Term Rating</i>	AA-/Negative	Outlook Revised
North Panola Cons Sch Dist GO		
<i>Long Term Rating</i>	AA-/Negative	Outlook Revised
Noxubee Cnty Sch Dist GO		
<i>Long Term Rating</i>	AA-/Negative	Outlook Revised
Okolona Mun Separate Sch Dist GO		
<i>Long Term Rating</i>	AA-/Negative	Outlook Revised
Oktibbeha Cnty Sch Dist GO		
<i>Long Term Rating</i>	AA-/Negative	Outlook Revised
Oxford Sch Dist GOst sch prog		
<i>Long Term Rating</i>	AA-/Negative	Outlook Revised
Perry Cnty Sch Dist GO		
<i>Long Term Rating</i>	AA-/Negative	Outlook Revised
Prentiss Cnty Sch Dist GO		
<i>Long Term Rating</i>	AA-/Negative	Outlook Revised
South Panola Sch Dist state aid cap imp rfdg bnds		
<i>Long Term Rating</i>	AA-/Negative	Outlook Revised
Starkville Sch Dist GO		
<i>Long Term Rating</i>	AA-/Negative	Outlook Revised
Sunflower Cnty Sch Dist		
<i>Long Term Rating</i>	AA-/Negative	Outlook Revised

Ratings Detail (As Of May 1, 2017) (cont.)

Sunflower Cnty Sch Dist state aid cap imp bnds (Drew Sch Dist) ser 1998 dtd 03/01/1998 due 03/01/2001-2018		
<i>Long Term Rating</i>	AA-/Negative	Outlook Revised
Union Cnty Sch Dist GO		
<i>Long Term Rating</i>	AA-/Negative	Outlook Revised
Vicksburg Warren Sch Dist GO		
<i>Long Term Rating</i>	AA-/Negative	Outlook Revised
Walthall Cnty Sch Dist GO		
<i>Long Term Rating</i>	AA-/Negative	Outlook Revised
Water Vy Sch Dist GO		
<i>Long Term Rating</i>	AA-/Negative	Outlook Revised
Wayne Cnty Sch Dist GO		
<i>Long Term Rating</i>	AA-/Negative	Outlook Revised
West Bolivar Sch Dist Mississippi St Aid		
<i>Long Term Rating</i>	AA-/Negative	Outlook Revised
West Jasper Sch Dist SCHSTPR		
<i>Long Term Rating</i>	AA-/Negative	Outlook Revised
West Point Sch Dist Mississippi State Aid		
<i>Long Term Rating</i>	AA-/Negative	Outlook Revised
Yazoo City Mun Sch Dist GO		
<i>Long Term Rating</i>	AA-/Negative	Outlook Revised
Mississippi Dev Bank spl oblig bnds (Booneville Comb Wtr Swr & Solid Waste Disp Sys Proj) ser 2002		
<i>Unenhanced Rating</i>	A(SPUR)/Negative	Outlook Revised
Mississippi Dev Bank spl oblig bnds (Pearl River Cnty Ltd Oblig Hosp Imp Bnd Proj) ser 2002		
<i>Unenhanced Rating</i>	A(SPUR)/Negative	Outlook Revised
Mississippi Dev Bank spl oblig bnds (Rankin Cnty Pub Imp Proj) ser 2005		
<i>Unenhanced Rating</i>	A(SPUR)/Negative	Outlook Revised
Mississippi GO		
<i>Unenhanced Rating</i>	AA(SPUR)/Negative	Outlook Revised
Clarksdale Mun Sch Dist, Mississippi		
Coahoma Cnty, Mississippi		
Clarksdale Mun Sch Dist SCHSTPR		
<i>Long Term Rating</i>	AA-/Negative	Outlook Revised
Jackson State Univ Educl Bldg Corp, Mississippi		
Mississippi		
Jackson State Univ Educl Bldg Corp (Mississippi)		
<i>Long Term Rating</i>	AA-/Negative	Outlook Revised
Medical Center Educational Building Corporation, Mississippi		
Mississippi		

Ratings Detail (As Of May 1, 2017) (cont.)		
Medical Center Educl Bldg Corp (Mississippi)		
<i>Long Term Rating</i>	AA-/Negative	Outlook Revised
Medical Center Educl Bldg Corp (Mississippi) (Univ of Mississippi Medl Ctr Facs Expansion & Renovation Proj)		
<i>Long Term Rating</i>	AA-/Negative	Outlook Revised
Medical Center Educl Bldg Corp (Mississippi) (Univ of Mississippi Medl Ctr Facs Expansion & Renovation Proj)		
<i>Long Term Rating</i>	AA-/Negative	Outlook Revised
Medical Center Educl Bldg Corp (Mississippi) (Univ of Mississippi Medl Ctr Facs Expansion & Renovation)		
<i>Long Term Rating</i>	AA-/Negative	Outlook Revised
Medical Ctr Educl Bldg Corp (Mississippi) (Medl Ctr Facs Expansion & Renovation Proj)		
<i>Long Term Rating</i>	AA-/Negative	Outlook Revised
Medical Ctr Educl Bldg Corp (Mississippi) (Medl Ctr Facs Expansion & Renovation Proj)		
<i>Long Term Rating</i>	AA-/Negative	Outlook Revised
Mississippi Dept of Transp, Mississippi		
Mississippi Dev Bank, Mississippi		
Mississippi Dept of Transp spl oblig bnds (Mississippi Dev Bank) (Desoto Cnty, Ms Highway Construction Proj)		
<i>Long Term Rating</i>	AA-/Negative	Outlook Revised
Mississippi Dept of Transp (Mississippi Dev Bank) spl oblig rfdg bnds (Mississippi Dev Bank) (Desoto Cnty, Ms Hwy Rfdg Proj) ser 2017B		
<i>Long Term Rating</i>	AA-/Negative	Outlook Revised
Mississippi Dept Of Fin & Admin, Mississippi		
Mississippi		
Mississippi Dept of Fin & Admin (Mississippi) (Master Lse Prog For Sch Dists & Comnty Coll Dists)		
<i>Long Term Rating</i>	AA-/Negative	Outlook Revised
Mississippi Dept Of Fin & Admin (Mississippi) APPROP		
<i>Long Term Rating</i>	AA-/Negative	Outlook Revised
Mississippi Dept Of Fin & Admin (Mississippi) (Master Lse Prog For State Agencies)		
<i>Long Term Rating</i>	AA-/Negative	Outlook Revised
Mississippi Dept Of Fin & Admin (Mississippi) (Sch Dist Master Lse Prog)		
<i>Long Term Rating</i>	AA-/Negative	Outlook Revised
Mississippi Dept of Fin & Admin (Mississippi) lse rev cert of part (Master Lse Prog) ser 2002 dtd 11/21/2002 due 12/15/2003-2017		
<i>Unenhanced Rating</i>	AA-(SPUR)/Negative	Outlook Revised
Mississippi Dev Bank, Mississippi		
Claiborne Cnty, Mississippi		
Mississippi Dev Bank (Claiborne Cnty)		
<i>Long Term Rating</i>	A/Negative	Outlook Revised
Mississippi Dev Bank (Claiborne Cnty)		
<i>Long Term Rating</i>	A/Negative	Outlook Revised
Mississippi Dev Bank, Mississippi		
D'Iberville, Mississippi		
Mississippi Dev Bank (D'Iberville)		
<i>Long Term Rating</i>	A/Negative	Outlook Revised

Ratings Detail (As Of May 1, 2017) (cont.)

Mississippi Dev Bank, Mississippi

East Mississippi Comnty Coll, Mississippi

Mississippi Dev Bank NONSCHSTPR

Long Term Rating AA-/Negative Outlook Revised

Mississippi Dev Bank (East Mississippi Comnty Coll) spl oblig bnds (East Mississippi Comnty Coll) (Capital Improvements Proj) ser 2014

Long Term Rating AA-/Negative Outlook Revised

Mississippi Dev Bank, Mississippi

Gulfport, Mississippi

Mississippi Dev Bank (Gulfport) (Mississippi Pub Imp Proj) (AGM)

Unenhanced Rating A(SPUR)/Negative Upgraded

Mississippi Dev Bank, Mississippi

Jefferson Cnty, Mississippi

Mississippi Dev Bank (Jefferson Cnty) MORALOBLIG

Long Term Rating A/Negative Outlook Revised

Mississippi Dev Bank, Mississippi

Lowndes Cnty, Mississippi

Mississippi Dev Bank (Lowndes Cnty) spl oblig (Lowndes Cnty Ms Industrial Dev Proj) ser 2007

Unenhanced Rating A(SPUR)/Negative Outlook Revised

Mississippi Dev Bank, Mississippi

Madison, Mississippi

Mississippi Dev Bank (Madison) (Madison Mississippi Swr Sys Proj)

Unenhanced Rating A(SPUR)/Negative Outlook Revised

Mississippi Dev Bank, Mississippi

Mississippi

Mississippi Dev Bank spl oblig bnds (Mississippi) (Yazoo Cnty, Mississippi Correctional Fac Rfdg Proj)

Long Term Rating A/Negative Outlook Revised

Mississippi Dev Bank (Mississippi) spl oblig bnds (Ms Department Corrections East Mississippi Correction Fac Rfdg Bnds Proj) ser 2016C

Long Term Rating AA-/Negative Outlook Revised

Mississippi Dev Bank (Mississippi) spl oblig bnds (Ms Dept Of Corrections Walnut Grove Youth Correctional Fac Rfdg Bnds Proj) ser 2016A

Long Term Rating AA-/Negative Outlook Revised

Mississippi Dev Bank (Mississippi) spl oblig (AGM)

Unenhanced Rating A(SPUR)/Negative Outlook Revised

Mississippi Dev Bank (Mississippi) spl oblig (AGM)

Unenhanced Rating A(SPUR)/Negative Outlook Revised

Mississippi Dev Bank (Mississippi) spl oblig (AGM)

Unenhanced Rating A(SPUR)/Negative Outlook Revised

Mississippi Dev Bank (Mississippi) spl oblig (AGM)

Unenhanced Rating A(SPUR)/Negative Outlook Revised

Mississippi Dev Bank (Mississippi) taxable spl oblig bnds (Mississippi) (Ms Department Corrections Walnut Grove Correct Fac Rfdg) ser 2016B

Ratings Detail (As Of May 1, 2017) (cont.)		
Long Term Rating	AA-/Negative	Outlook Revised
Mississippi Dev Bank (Mississippi) taxable spl oblig bnds (Ms Department Of Corrections East Mississippi Correctional Fac Rfdg Bnds) ser 2016D		
Long Term Rating	AA-/Negative	Outlook Revised
Mississippi Dev Bank (Mississippi) GO (BAM)		
Unenhanced Rating	A(SPUR)/Negative	Outlook Revised
Mississippi Dev Bank (Mississippi) MORALOBLIG		
Long Term Rating	A/Negative	Outlook Revised
Mississippi Dev Bank (Mississippi) MORALOBLIG		
Unenhanced Rating	A(SPUR)/Negative	Outlook Revised
Mississippi Dev Bank (Mississippi) MORALOBLIG		
Long Term Rating	A/Negative	Outlook Revised
Mississippi Dev Bank (Mississippi) (Alcorn Cnty Regl Correctional Fac Bnd Proj) (ASSURED GTY)		
Unenhanced Rating	A(SPUR)/Negative	Outlook Revised
Mississippi Dev Bank (Mississippi) (Attala Cnty Montfort Jones Mem Hosp Proj)		
Long Term Rating	A/Negative	Outlook Revised
Mississippi Dev Bank (Mississippi) (Bolivar Cnty Correctional Fac Rfdg Proj) (AGM)		
Unenhanced Rating	A(SPUR)/Negative	Outlook Revised
Mississippi Dev Bank (Mississippi) (Bolivar Cnty Correctional Fac Rfdg Proj) (AGM)		
Unenhanced Rating	A(SPUR)/Negative	Outlook Revised
Mississippi Dev Bank (Mississippi) (Cap Proj & Equip Acquis Prog)		
Long Term Rating	A/Negative	Outlook Revised
Mississippi Dev Bank (Mississippi) (Cap Proj & Equip Acquis Prog)		
Long Term Rating	A/Negative	Outlook Revised
Mississippi Dev Bank (Mississippi) (Clay Cnty Proj)		
Long Term Rating	A/Negative	Outlook Revised
Mississippi Dev Bank (Mississippi) (Dept of Corrections East Mississippi Correctional Fac Rfdg Bnds Proj)		
Long Term Rating	AA-/Negative	Outlook Revised
Mississippi Dev Bank (Mississippi) (Dept of Corrections Marshall Cnty Correctional Fac Rfdg Bnds Proj)		
Long Term Rating	AA-/Negative	Outlook Revised
Mississippi Dev Bank (Mississippi) (Dept of Corrections Walnut Grove Youth Correctional Fac Rfdg Bnds Proj)		
Long Term Rating	AA-/Negative	Outlook Revised
Mississippi Dev Bank (Mississippi) (Dept of Corrections Wilkinson Cnty Correctional Fac Rfdg Bnds Proj)		
Long Term Rating	AA-/Negative	Outlook Revised
Mississippi Dev Bank (Mississippi) (Dept of Rehab Svcs Cap Imp Proj) (AGM)		
Unenhanced Rating	A(SPUR)/Negative	Outlook Revised
Mississippi Dev Bank (Mississippi) (Diamondhead Wtr & Swr Dist Proj)		
Long Term Rating	A/Negative	Outlook Revised
Mississippi Dev Bank (Mississippi) (D'Iberville Comb Wtr & Swr Sys Rev Proj) (ASSURED GTY)		
Unenhanced Rating	A(SPUR)/Negative	Outlook Revised
Mississippi Dev Bank (Mississippi) (Gautier comb util sys rev proj)		
Long Term Rating	A/Negative	Outlook Revised
Mississippi Dev Bank (Mississippi) (George-Greene Cnty Regl Corr Fac Rfdg Bnd Proj)		
Long Term Rating	A/Negative	Outlook Revised

Ratings Detail (As Of May 1, 2017) (cont.)		
Mississippi Dev Bank (Mississippi) (Greene Cnty, MS Hosp Proj)		
<i>Long Term Rating</i>	A/Negative	Outlook Revised
Mississippi Dev Bank (Mississippi) (Hinds Comnty Coll Dist Cap Imp Proj) (AGM)		
<i>Unenhanced Rating</i>	AA-(SPUR)/Negative	Outlook Revised
Mississippi Dev Bank (Mississippi) (Horn Lake Wtr & Swr Sys Proj) (BAM)		
<i>Unenhanced Rating</i>	A(SPUR)/Negative	Outlook Revised
Mississippi Dev Bank (Mississippi) (Jackson Cnty Singing River Hlth Sys) (AGM)		
<i>Unenhanced Rating</i>	A(SPUR)/Negative	Outlook Revised
Mississippi Dev Bank (Mississippi) (Jackson Cnty) (Singing River Hlth Sys) (ASSURED GTY)		
<i>Unenhanced Rating</i>	A(SPUR)/Negative	Outlook Revised
Mississippi Dev Bank (Mississippi) (Jones Cnty Jr Coll Dist Cap Imp Proj) (ASSURED GTY)		
<i>Unenhanced Rating</i>	A(SPUR)/Negative	Outlook Revised
Mississippi Dev Bank (Mississippi) (Jones Cnty Jr Coll) moral oblig (BAM)		
<i>Unenhanced Rating</i>	A(SPUR)/Negative	Outlook Revised
Mississippi Dev Bank (Mississippi) (Meridian Wtr & Swr Sys Rev Rfdg Proj)		
<i>Long Term Rating</i>	A/Negative	Outlook Revised
Mississippi Dev Bank (Mississippi) (Ocean Springs, MS Pub Safety & Recreational Facs Proj)		
<i>Long Term Rating</i>	A/Negative	Outlook Revised
Mississippi Dev Bank (Mississippi) (Pearl Cap Imp Projs) (AGM)		
<i>Unenhanced Rating</i>	A(SPUR)/Negative	Outlook Revised
Mississippi Dev Bank (Mississippi) (Pearl Childre Road Urban Renewal Rfdg Proj) (AGM)		
<i>Unenhanced Rating</i>	A(SPUR)/Negative	Outlook Revised
Mississippi Dev Bank (Mississippi) (Pearl River Comnty Coll Dist Rfdg Proj) (AGM)		
<i>Unenhanced Rating</i>	A(SPUR)/Negative	Outlook Revised
Mississippi Dev Bank (Mississippi) (Southaven Recre Facs Rfdg Proj) (BAM)		
<i>Unenhanced Rating</i>	A(SPUR)/Negative	Outlook Revised
Mississippi Dev Bank (Mississippi) (West Jackson Cnty Util Dist Rev Bnd Proj)		
<i>Long Term Rating</i>	A/Negative	Outlook Revised
Mississippi Dev Bank (Mississippi) (West Rankin Util Auth Proj) (AGM)		
<i>Unenhanced Rating</i>	A(SPUR)/Negative	Outlook Revised
Mississippi Dev Bank spl oblig bnds (Mississippi) (Desoto Cnty Regl Util Auth Wastewtr Treatment Sys rev bnd Proj)		
<i>Unenhanced Rating</i>	A(SPUR)/Negative	Outlook Revised
Mississippi Dev Bank spl oblig rev bnds (Wtr & Swr Sys Rev Rfdg Proj) ser 1998		
<i>Unenhanced Rating</i>	A(SPUR)/Negative	Outlook Revised
Mississippi Dev Bank spl oblig (Lee Cnty, Industrial Dev Go Bnd Proj)		
<i>Unenhanced Rating</i>	A(SPUR)/Negative	Outlook Revised
Mississippi Dev Bank spl oblig (Mississippi) (Desoto Cnty Prom Nt Rfdg Proj)		
<i>Unenhanced Rating</i>	A(SPUR)/Negative	Outlook Revised
Mississippi Dev Bank (Mississippi) (Southaven, MS Recreation Facs Rfdg Bnd Proj) ser 2006		
<i>Unenhanced Rating</i>	A(SPUR)/Negative	Outlook Revised
Mississippi Dev Bank (Pontotoc County) (Pontotoc Cnty Taxable Go Indl Dev Bnd Proj)		

Ratings Detail (As Of May 1, 2017) (cont.)		
<i>Unenhanced Rating</i>	A(SPUR)/Negative	Outlook Revised
Mississippi Dev Bank (Southaven) spl oblig bnds (Southaven Recreation Fac Proj) ser 2004		
<i>Unenhanced Rating</i>	A(SPUR)/Negative	Outlook Revised
Mississippi Dev Bank (Union Cnty) (Union Cnty Taxable Go Industrial Dev Bnd Proj)		
<i>Unenhanced Rating</i>	A(SPUR)/Negative	Outlook Revised
Mississippi Dev Bank, Mississippi		
Mississippi Dept of Transp, Mississippi		
Mississippi Dev Bank (Mississippi Dept of Transp) spl oblig rfdg bnds (Mississippi Dept of Transp) ser 2017 due 07/01/2040		
<i>Long Term Rating</i>	AA-/Negative	Outlook Revised
Mississippi Dev Bank (Mississippi Dept of Transp) spl oblig rfdg bnds (Mississippi Dept of Transp) (Indl Dev Auth Marshall Cnty Hwy Constr Proj) ser		
<i>Long Term Rating</i>	AA-/Negative	Outlook Revised
Mississippi Dev Bank (Mississippi Dept of Transp) APPROP		
<i>Long Term Rating</i>	AA-/Negative	Outlook Revised
Mississippi Dev Bank (Mississippi Dept of Transp) (Desoto Cnty Hwy Rfdg Proj)		
<i>Long Term Rating</i>	AA-/Negative	Outlook Revised
Mississippi Dev Bank (Mississippi Dept of Transp) (Marshall Cnty Proj)		
<i>Long Term Rating</i>	AA-/Negative	Outlook Revised
Mississippi Dev Bank (Mississippi Dept of Transp) (Tunica Cnty Proj)		
<i>Long Term Rating</i>	AA-/Negative	Outlook Revised
Mississippi Dev Bnk (Mississippi Dept of Transp) (Harrison Cnty Proj)		
<i>Long Term Rating</i>	AA-/Negative	Outlook Revised
Mississippi Dev Bnk (Mississippi Dept of Transp) (Laurel Proj)		
<i>Long Term Rating</i>	AA-/Negative	Outlook Revised
Mississippi Dev Bnk (Mississippi Dept of Transp) (Madison Cnty Proj)		
<i>Long Term Rating</i>	AA-/Negative	Outlook Revised
Mississippi Development Bank (Mississippi) (DeSoto Cnty Highway Construction Proj)		
<i>Unenhanced Rating</i>	AA-(SPUR)/Negative	Outlook Revised
Mississippi Dev Bank (Mississippi Dept of Transp) (DeSoto Cnty Hwy Const Proj)		
<i>Long Term Rating</i>	AA-/Negative	Outlook Revised
Mississippi Dev Bank (Mississippi Dept of Transp) (Harrison Cnty Hwy Construction Proj)		
<i>Long Term Rating</i>	AA-/Negative	Outlook Revised
Mississippi Dev Bank (Mississippi) (Marshall Cnty Indl Dev Auth Highway Construction Proj)		
<i>Unenhanced Rating</i>	AA-(SPUR)/Negative	Outlook Revised
Mississippi Dev Bank, Mississippi		
Mississippi Dept Of Fin & Admin, Mississippi		
Mississippi Dev Bank (Mississippi Dept Of Fin & Admin) (Bldgs Acquis & Rfdg Proj) ser 2007		
<i>Unenhanced Rating</i>	A(SPUR)/Negative	Outlook Revised
Mississippi Dev Bank, Mississippi		
Mississippi Gulf Coast Comnty Coll Dist, Mississippi		

Ratings Detail (As Of May 1, 2017) (cont.)		
Mississippi Dev Bank (Mississippi Gulf Coast Comnty Coll Dist) spl oblig bnds (Mississippi Gulf Coast Comnty Coll Dist) (Facilities Construction & Ref)		
Long Term Rating	AA-/Negative	Outlook Revised
Mississippi Dev Bank (Mississippi Gulf Coast Comnty Coll Dist) State Enhancement Prog (BAM) (SECMKT)		
Unenhanced Rating	AA-(SPUR)/Negative	Outlook Revised
Mississippi Dev Bank, Mississippi		
Natchez, Mississippi		
Mississippi Dev Bank (Natchez) moral oblig		
Unenhanced Rating	A(SPUR)/Negative	Outlook Revised
Mississippi Dev Bank, Mississippi		
Pearl, Mississippi		
Mississippi Dev Bank (Pearl) (Pearl, Mississippi Cap Proj & Equip Prepayment Proj) GO		
Unenhanced Rating	A(SPUR)/Negative	Outlook Revised
Mississippi Dev Bank, Mississippi		
Petal, Mississippi		
Mississippi Dev Bank (Petal) (Mississippi Comb Wtr & Swr Sys Proj)		
Unenhanced Rating	A(SPUR)/Negative	Outlook Revised
Mississippi Dev Bank, Mississippi		
Washington Cnty, Mississippi		
Mississippi Dev Bank (Washington Cnty) (Regl Correctional Fac Bnd Proj) (ASSURED GTY)		
Unenhanced Rating	A(SPUR)/Negative	Outlook Revised
Mississippi Dev Bank, Mississippi		
Yazoo Cnty, Mississippi		
Mississippi Dev Bank (Yazoo Cnty) (ASSURED GTY)		
Unenhanced Rating	A(SPUR)/Negative	Outlook Revised
Mississippi Institutions of Hgr Learning Brd of Trustees, Mississippi		
Mississippi		
Mississippi Inst of Hgr Learning Brd of Trustees (Mississippi)		
Long Term Rating	AA-/Negative	Outlook Revised

Many issues are enhanced by bond insurance.

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