

ISSUER COMMENT

27 March 2018

RATING

General Obligation (or GO Related) ¹

Aa2 No Outlook

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Madison County, MS

Annual Comment on Madison County

Issuer Profile

Madison County is located in west central Mississippi, immediately northeast of Jackson. The county seat of Canton is approximately 20 miles northeast of downtown Jackson. The county has a population of 105,114 and a moderate population density of 142 people per square mile. The county's median family income is \$81,038 (1st quartile) and the December 2017 unemployment rate was 3.4% (2nd quartile) ². The largest industry sectors that drive the local economy are retail trade, manufacturing, and administrative/waste management services.

Credit Overview

Madison County's credit position is very strong, and its Aa2 rating is equal to the US counties median of Aa2. The key credit factors include a robust financial position, a considerable tax base and a strong wealth and income profile. The credit profile also reflects a manageable debt burden and a somewhat elevated pension liability.

Finances: The financial position of the county is very healthy and is relatively favorable with respect to the assigned rating of Aa2. Cash balance as a percent of operating revenues (54.7%) is materially higher than the US median, and rose significantly between 2012 and 2016. Additionally, fund balance as a percent of operating revenues (40.1%) is slightly above the US median.

Economy and Tax Base: The economy and tax base of the county are very strong and are in line with its Aa2 rating position. The total full value (\$10.2 billion) is slightly above the US median, and grew markedly from 2012 to 2016. Furthermore, the median family income equates to a healthy 118.7% of the US level. Lastly, the full value per capita (\$97,468) is stronger than other Moody's-rated counties nationwide. Madison County benefits from its proximity to Jackson, the state capital, located in Hinds County, which is adjacent on Madison's southern border.

Debt and Pensions: The debt burden of Madison County is light and is a modest credit strength relative to the assigned rating of Aa2. The net direct debt to full value (0.9%) is slightly higher than the US median, and stayed flat from 2012 to 2016. Yet, the pension liability of the county is somewhat elevated and is a weakness when compared to its Aa2 rating. Unfavorably, Moody's-adjusted net pension liability to operating revenues (1.9x) is higher than the US median. The contribution rate for the pension plan are established by the State of Mississippi Legislature and are below "tread-water", the contribution required to maintain NPL at current levels assuming all other plan assumptions are met. As a result, the county's pension liabilities will continue to grow in future years absent reform at the state

level. Significant growth of pension liabilities could present negative pressure on the county's rating.

Management and Governance: Mississippi counties have an Institutional Framework score ³ of Aaa, which is high compared to the nation. Institutional Framework scores measure a sector's legal ability to increase revenues and decrease expenditures. Mississippi counties have a high degree of revenue raising flexibility given their ability to increase annual yield for operations by 10%. Unpredictable revenue fluctuations tend to be minor, or under 5% annually. Across the sector, fixed and mandated costs are generally less than 25% of expenditures. Mississippi is a Right to Work state, providing significant expenditure-cutting ability. Unpredictable expenditure fluctuations tend to be minor, under 5% annually.

Sector Trends - Mississippi Counties

Mississippi counties will remain stable over the near term. Most of the state's economic regions have a heavy reliance on manufacturing, a risk that is mitigated by recently positive automotive industry performance, driven by low gas prices. That said, these economies have been slow to recover from the recession due to their dependence on manufacturing and government. We expect county financial reserves to remain strong, partially offsetting weak socioeconomic factors and elevated pension burdens.

This publication does not announce a credit rating action. For any credit ratings referenced in this publication, please see the ratings tab on the issuer/entity page on www.moody's.com for the most updated credit rating action information and rating history.

EXHIBIT 1

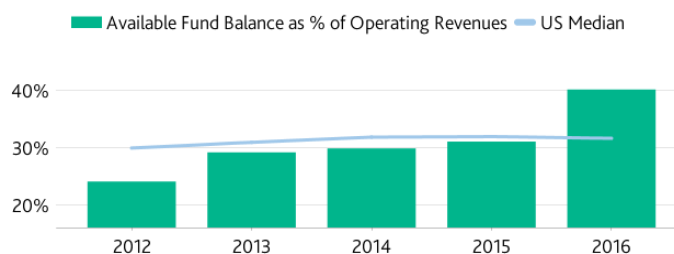
Key Indicators [4.5](#) Madison County

	2012	2013	2014	2015	2016	US Median	Credit Trend
Economy / Tax Base							
Total Full Value	\$9,068M	\$9,332M	\$9,576M	\$10,012M	\$10,245M	\$7,552M	Improved
Full Value Per Capita	\$94,980	\$96,060	\$97,103	\$99,927	\$97,468	\$80,731	Stable
Median Family Income (% of US Median)	116%	114%	116%	119%	119%	94%	Stable
Finances							
Available Fund Balance as % of Operating Revenues	24.1%	29.2%	29.8%	31.0%	40.1%	31.6%	Improved
Net Cash Balance as % of Operating Revenues	37.2%	38.6%	40.2%	40.7%	54.7%	35.9%	Improved
Debt / Pensions							
Net Direct Debt / Full Value	1.0%	0.9%	0.9%	1.0%	0.9%	0.5%	Stable
Net Direct Debt / Operating Revenues	2.18x	2.09x	2.16x	1.95x	1.96x	0.61x	Stable
Moody's-adjusted Net Pension Liability (3-yr average) to Full Value	0.7%	0.8%	0.8%	0.8%	0.9%	1.0%	Stable
Moody's-adjusted Net Pension Liability (3-yr average) to Operating Revenues	1.59x	1.73x	1.88x	1.52x	1.93x	1.23x	Stable
	2012	2013	2014	2015	2016	US Median	
Debt and Financial Data							
Population	95,481	97,151	98,622	100,202	105,114	N/A	
Available Fund Balance (\$000s)	\$9,671	\$12,080	\$12,543	\$16,317	\$19,084	\$20,856	
Net Cash Balance (\$000s)	\$14,945	\$15,997	\$16,909	\$21,383	\$26,009	\$22,190	
Operating Revenues (\$000s)	\$40,200	\$41,440	\$42,034	\$52,587	\$47,558	\$64,065	
Net Direct Debt (\$000s)	\$87,624	\$86,542	\$90,931	\$102,283	\$93,198	\$36,705	
Moody's Adjusted Net Pension Liability (3-yr average) (\$000s)	\$64,086	\$71,563	\$78,819	\$80,043	\$91,831	\$73,224	

Source: Moody's Investors Service

EXHIBIT 2

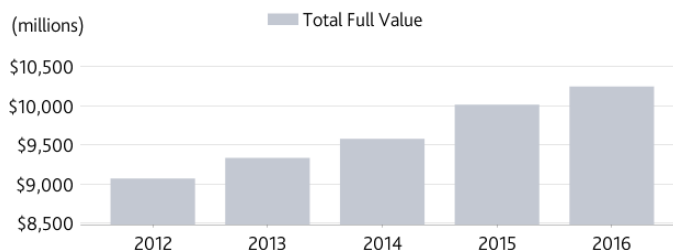
Available fund balance as a percent of operating revenues increased from 2012 to 2016



Source: Issuer financial statements; Moody's Investors Service

EXHIBIT 3

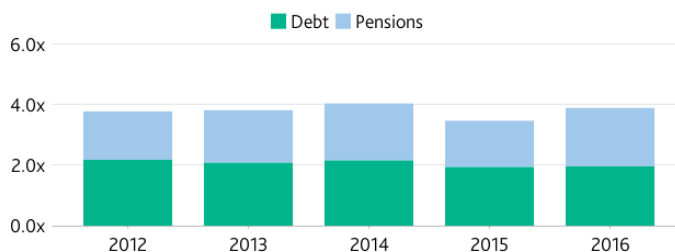
Full value of the property tax base increased from 2012 to 2016



Source: Issuer financial statements; Government data sources; Offering statements; Moody's Investors Service

EXHIBIT 4

Moody's-adjusted net pension liability and net direct debt to operating revenues remained stable from 2012 to 2016



Source: Issuer financial statements; Government data sources; Offering statements; Moody's Investors Service

Endnotes

- The rating referenced in this report is the issuer's General Obligation (GO) rating or its highest public rating that is GO-related. A GO bond is generally backed by the full faith and credit pledge and total taxing power of the issuer. GO-related securities include general obligation limited tax, annual appropriation, lease revenue, non-ad valorem, and moral obligation debt. The referenced ratings reflect the government's underlying credit quality without regard to state guarantees, enhancement programs or bond insurance.
 - The demographic data presented, including population, population density, per capita personal income and unemployment rate are derived from the most recently available US government databases. Population, population density and per capita personal income come from the American Community Survey while the unemployment rate comes from the Bureau of Labor Statistics.
- The largest industry sectors are derived from the Bureau of Economic Analysis. Moody's allocated the per capita personal income data and unemployment data for all counties in the US census into quartiles. The quartiles are ordered from strongest-to-weakest from a credit perspective: the highest per capita personal income quartile is first quartile, and the lowest unemployment rate is first quartile.
- The institutional framework score assesses a municipality's legal ability to match revenues with expenditures based on its constitutionally and legislatively conferred powers and responsibilities. See [US Local Government General Obligation Debt \(December 2016\)](#) methodology report for more details.
 - For definitions of the metrics in the Key Indicators Table, [US Local Government General Obligation Methodology and Scorecard User Guide \(July 2014\)](#). Metrics represented as N/A indicate the data were not available at the time of publication.
 - The medians come from our most recently published local government medians report, [Medians - Tax Base Growth Reinforces Sector Stability as Pension Troubles Remain \(March 2017\)](#) which is available on Moodys.com. The medians presented here are based on the key metrics outlined in Moody's GO methodology and the associated scorecard.

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