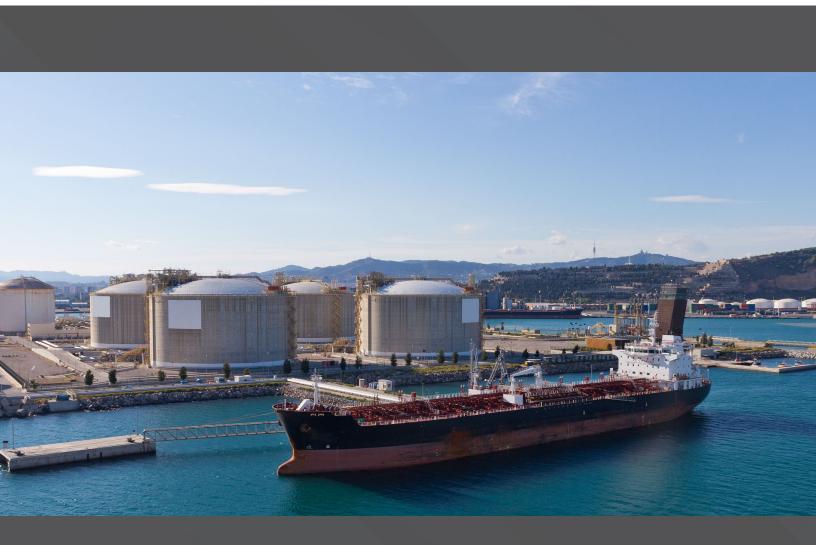
CSBS RISK SPOTLIGHT

State Bank Exposures to Municipal Bonds in Oil and Gas Producing States





CONFERENCE OF STATE BANK SUPERVISORS

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ince the financial crisis, financial institutions – especially community banks – have made significant investments in municipal bonds ("munis"). From 2005 – 2014, the share of municipal bonds held by banks more than doubled from 6 percent to 13 percent. Though generally considered safe investments, the

value of munis could be by localized swaved events that bankers and regulators should remain mindful of. For example, market watchers have been concerned that falling energy prices have negatively impacted the outlook of munis issued by local governments that rely heavily on oil and gas revenue. In a recent CSBS Quarterly Survey, state examiners expressed similar concerns about oil and gas regions should their

Key Findings

- Since the financial crisis, financial institutions have made significant investments in municipal bonds.
- Though the general health of municipal bonds is stable, some local governments with economies concentrated in oil and gas have had credit downgrades due to localized events.
- When analyzing a bank's municipal bond holdings, regulators consider the processes and procedures banks have in place to evaluate credit risk and determine a muni's health.
- Though rare, municipal bond defaults do occur and their potential risk should not be overlooked.

could purchase municipal bonds from and remain eligible for preferential tax treatment. Furthermore, the low-interest rate environment – coupled with limited loan demand – has made muni-yields much more desirable to investors. In 2015, municipal bonds led all other fixed-income assets with approximately 4 percent in total returns. All in all, investment

> advisors expect similar muni performance throughout 2016.

Though the general health of munis remains stable - if not positive localized events expose bondholders to various risks. Since the oil and gas slump began in 2014, number of local а governments have seen credit their ratings downgraded due to overreliance on energy related revenue. Many of these locales issued new debt to build roads,

capacity to repay their debt obligations diminish. This report will explore the health of the muni market in oil and gas reliant areas, and examine the extent to which state-chartered banks are exposed to heightened risk through munis.

The General Outlook of Municipal Bonds

There are a number of reasons why banks have flocked toward munis since the financial crisis. Under the American Recovery and Reinvestment Act of 2010 ("ARRA"), the U.S. Congress provided a number of tax benefits to financial institutions that purchased munis. Prior to its expiration, one ARRA provision expanded the number of issuers banks increase water supply, and provide other services to accommodate the booming oil and gas industry. The most recent energy downturn, however, has left these same boomtowns with laden debt and diminishing sources of revenue.

It is important to note that oil and gas producing governments have fared differently during the most recent energy downturn. A locale's mere production of oil and gas is not dispositive of its fiscal health. Oil and gas locales that recently received credit downgrades relied heavily on energy-related activity for general revenue. Contrarily, other locales – with more diverse public finance structures – have maintained stable credit outlooks despite their large production of oil and gas.

Texas – the largest oil producing state – is a great example of how a state's fiscal policies can influence its financial health and the outlook of its municipal bonds. While the State of Texas recently received Moody's highest rating on its government obligation bonds, a number of its municipalities were downgraded. Moody cited the State of Texas' large rainy-day fund and its low bonded debt levels as offsets to the state's loss of oil and gas related revenue. Conversely, 11 Texas local governments were placed under review for downgrades because a large share of their tax revenue is derived from oil and gas activity.

Not all states are doing as well as Texas. For example, in February 2016, Moody's downgraded Alaska's bonds since its financial reserves – though large – were overly-reliant on the assumption that oil prices would remain above \$100 per barrel during the next four years. Currently, oil prices are less than half this amount, setting Alaska on course toward depleting its budgetary reserves by 2019 (absent significant reforms).

All in all, munis remain relatively safe, but banks should monitor specific details of a locale's finance structure – and its economic conditions – to generate a more accurate outlook of their capacity to pay debt obligations.

Analyzing Municipal Bonds Issued by Oil and Gas Producing Regions

When analyzing a bank's municipal bond holdings, regulators consider the processes and procedures banks have in place to evaluate credit risk and determine a muni's health. To make a sound determination of a muni's quality, a diverse set of information should be considered. Assessing the economic conditions of an issuer's locale is only one, but a very important, part of a muni's quality determination. There are economic characteristics unique to oil and gas areas that bondholders should consider, particularly given the cyclical nature of energy booms. During an energy slowdown, losses in tax revenue are often the main cause of an oil and gas region's economic pain. Stalled oil production, less economic activity, and increased unemployment can shrink a local government's tax base and deplete its reserve funds. These circumstances can weaken a local government's capacity to meet debt obligations. Nonetheless, a local community's diverse fiscal structure could substantially offset revenue losses connected to an energy bust.

Loss of Severance Revenue

Severance taxes are those "imposed on the removal of nonrenewable resources such as crude oil, condensate and natural gas, coalbed methane and carbon dioxide." Some of the largest energy producers particularly Alaska, North Dakota, Wyoming, New Mexico, Montana, and Louisiana - rely differently on severance taxes. Texas raises revenue from more diverse sources than other large oil producing states, with 9 percent of its revenue being generated from severance taxes. Alaska's revenue sources are the least diverse of the oil producing states with 78 percent if its revenue derived from severances. Oklahoma and West Virginia - also large energy producers – have also experienced budgetary pressures caused by the oil and gas slowdown, with severance taxes accounting for 13 percent and 8 percent of their revenue collections in recent years respectively.

Similar to the states, municipalities also rely on severance revenue in varying ways. A study from Duke University's Energy Initiative examines how the largest oil producing states share severances with their cities and towns. For example, in Wyoming, where a 6 percent severance is assessed on oil and gas production, the state allocates 4.5 percent of those funds directly to cities and 3 percent to counties. In Texas, revenue is not allocated directly to municipalities; instead, 75 percent and 25 percent are allocated to the state's general fund and Foundation Schools Fund respectively. In both states, local governments assess a tax on the value of oil produced on their jurisdiction. The diverse ways states and municipalities tax and allocate energy related revenue makes it difficult to conduct reliable market-wide analysis. Instead, details of a local government's public finance structure must be reviewed in order to get a full sense of the impact a boom and bust cycle could have on certain municipal issuances.

Tax Base

In addition to loss severance taxes, a number of oil and gas locales may see their budgets pressured by a growing number of unemployed residents and a shrinking tax base. History has shown that when oil prices decline, unemployment increases significantly in energy-producing areas. Since 2014, there has been a 20 percent decline in mining and logging employment (which includes oil and gas jobs) from over 900,000 to 700,000. In Texas alone, 84,000 oil and gas related jobs were lost between January 2015 and April 2016, down 27.5 percent. Similarly, Duchesne County - a boomtown in Utah - lost more than 1,600 jobs in 2015 doubling their unemployment rate within one year. Moody's issued a negative outlook of the county's School District bonds considering the high concentration of taxpayers that lost oil and gas jobs. Such diminished economic activity will likely place downward pressure on property values in oil and gas areas leading to property tax losses for governments as well.

According to the Bureau of Labor Statistics, Washington County, Oklahoma, had the highest concentration of oil and gas employment in the country. Moody's is currently reviewing Washington County's Independent School District for a possible downgrade. Moody's cited the county's high dependence on state revenues connected to oil and gas. Similarly, Upton County, Texas, which has the second highest concentration of oil and gas employment, is currently under review for a downgrade. Moody's plans to assess the county's reliance on revenues sensitive to changes in the oil and gas industry, which will likely include employment losses. Another highly concentrated town, Crockett County, TX maintains a Ba1 rating on its general obligation bonds due to its exposures to oil and gas and, specifically, its "weak socioeconomic profile".

Assessing the Risks

Default rates on municipal bonds are uniquely low compared to other bonded debt. General obligation municipal bonds, for example, are often backed by the full faith and credit of the issuing governmental entity, a considerable reassurance given the government's unique power to raise revenue through taxes. Revenue municipal bonds are usually supported by a stream of income (e.g., utilities,), where governments may have the ability to adjust rates on utilities or tolls to compensate for shortfalls. Even when a muni-issuer defaults, bondholders are likely to recover considerable portions of their principal. Between 1970 – 2014, muni bond holders recovered 60 percent of their investment compared to a 48 percent recovery rate for corporate senior unsecured bonds between 1987 and 2013.

Though rare, municipal bond defaults do occur and their potential risk should not be overlooked. A municipal default can negatively affect an investor in multiple ways including nonpayment, delayed payment, or pricing disruptions. There are also risks associated with municipal downgrades. A muni's downgrade from a major credit agency signals heightened – albeit relatively low – risk. More risky bonds are less marketable and suffer value losses. This dynamic can put financial institutions in a bind, especially when they find themselves in a position where they must sell off certain assets. Accordingly, market watchers have suggested caution when investing in municipal bonds in areas witnessing slow growth or are heavily reliant on the energy industry. Muni liquidity problems occur when market conditions make it difficult for investors to sell off their bonds at a competitive price. According to the Federal Reserve Bank of St. Louis, muni liquidity issues are often heightened for community banks who typically hold small issuances that are inherently less likely to trade than issuances from states and larger local governments. Community banks can find themselves facing losses when selling off munis before their maturity dates, especially during a downturn.

State-Chartered Banks' Exposure to Municipal Bonds in Oil and Gas Reliant Areas

According to Call Report data, out of 10 large oil and gas producing states examined for this report ("studied states"), North Dakota's state-chartered institutions held the highest share of municipal bonds relative to their total assets at 8.69 percent. Among those studied states, a North Dakota bank had the second largest share of municipal bonds as assets, with munis accounting for 65.28% of its asset That North Dakota bank was only portfolio. surpassed by a Louisiana bank with municipal bonds comprising 71.67% of its assets. All in all, statechartered banks in the studied states are participating within the municipal bond market at varying levels, and a number of them are directing the lion's share of their investments in munis. There is, however, no way of determining through Call Report data alone which municipalities issued these bonds.

One relatively large Texas bank, with over \$25 billion in assets, highlighted in its annual report how the state's economic conditions could have a material adverse effect on the bank's financial position. While municipal bonds constituted 22.85 percent of the bank's portfolio, nearly all of their munis—97.8 percent— were issued by Texas State and its local governments. The bank noted that a significant change in Texas' economic condition – whether attributed to increased unemployment, decreasing oil prices, or other local factors – could impact the bank's muni-holdings and its overall financial standing.

Within the studied states, there are some statechartered banks that are highly concentrated in municipal bonds relative to their Tier 1 capital. Though the majority of state-chartered banks within these states have a concentration level under 200 percent (71 percent), there remain a handful of banks that are significantly more concentrated. Seven percent of banks in the studied states have concentration levels exceeding 300 percent, with one reaching as high as 791.30 percent.

In many cases, high concentrations are prudent business choices made by bankers with specific market expertise. Nevertheless, there are risks associated with high concentration levels that should be managed carefully. Accordingly, a bank's risk management processes and due diligence procedures are examined carefully by state examiners, especially when their asset concentration is high.

Conclusion

The overall state of the municipal bond market is stable and investors enjoy low default rates compared to corporate bonds. Though there are rising concerns with munis issued by energy reliant governments, most states and municipalities within these regions enjoy investment grade credit ratings and low risk of default. However, risk exposures to municipal bonds should still be managed well, especially by institutions with high concentrations of muni assets compared to their Tier 1 capital. In these cases, local and economic data should be examined carefully, as well as the specific structure of an issuer's bond. Banks should monitor the condition of munis both pre -purchase and during the life of a bond. All in all, bankers should have adequate processes and procedures in place to assess the risks associated with certain municipal bonds and to determine their appropriate risk appetite.

About the CSBS Risk ID Team and this Report

Each quarter, the members of the CSBS Risk Identification Team complete a standardized survey that collects their observations on the current risks, developing trends, and different aspects of the supervisory process. The survey results are compared to those of previous quarters to get a sense of how certain trends may be developing across the CSBS districts. Throughout the quarter, team members raise issues and discuss observations that may not be collected by the survey. The results of all these activities are summarized in this report, and often, a particular risk is the subject of the *Risk Spotlight*.

The CSBS Risk ID Team was created in 2013 to leverage the body of knowledge and skillset of the state bank examination staff nationwide. It has grown to over 100 state examiner members and includes representation from nearly every state banking department. The team is led by an Advisory Group, which is a subset of team members currently chaired by Lise Kruse, Chief Examiner of the North Dakota Department of Financial Institutions. Team findings, which are summarized in this public report, are used to inform the policymaking process of the regulatory and supervision functions of the states and CSBS, as well as inform the public about state bank examiners' perception of the risk environment affecting state banking institutions.



CSBS District Map

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