Heightened Credit Risk Potentials in Areas Concentrated in Coal Mining Activity
On April 13, 2016, Peabody Energy Corporation—one of the largest domestic coal drilling organizations—filed for Chapter 11 bankruptcy. The move highlighted trends that had been evident for some time, that the coal industry has been under significant pressure amid declining prices and competition from other energy sources such as natural gas. Naturally, these market pressures have affected the overall economic health in many areas, leading to elevated levels of credit risks for financial institutions lending or otherwise operating in these markets. Examiners are closely monitoring the credit quality of bank loan portfolios and municipal bond portfolios in these areas.

Coal drilling activity is concentrated geographically in a few regions in the U.S. According to the U.S. Energy Information Administration, the five largest

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**Key Findings**

- As coal pits continue to close across the country, areas with high concentrations in coal mining face significant economic stress.
- As mining activity declines, organizations that service mining equipment, provide lodging, and the retail sector typically see declines.
- This interdependency can elevate risk in a financial institution’s credit portfolio, potentially beyond segments of the portfolio that are directly tied to coal mining activity.
- Non-current loans and leases are significantly higher in coal communities that are considered at-risk.
- Local governments also face significant budget shortfalls in light of reduced coal activity.

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**Figure 1: Aggregate coal mine average employees: percent change from 2013 to 2014**

Source: U.S. Department of Energy
coal-producing states, with production in million short tons, and share of total U.S. coal production in 2014 were:

- Wyoming: 395.7 (40%)
- West Virginia: 112.2 (11%)
- Kentucky: 77.3 (8%)
- Pennsylvania: 60.9 (6%)
- Illinois: 58.0 (6%)

Within these states, activity and economic dependence on that activity is concentrated further in certain regions or counties. Within these highly concentrated regions, the primary employment provider may be a coal mine or an organization that directly supports the coal mining operation. As the level of mining activity declines, so do employment opportunities, tax revenue, and local consumer spending. The number of active pits in the U.S. has declined 39 percent from the end of 2005 through June 2015, according to an analysis by Bloomberg. In eastern Kentucky, coal-related jobs at the end of 2014 were at about half the level they were in 2008.

Direct layoffs certainly impact the economic performance of a community, but the peripheral impacts can be just as challenging. As mining activity declines in these areas, organizations that service mining equipment, that provide lodging and other services, and the retail sector typically see declines. This interdependency can elevate risk in a financial institution’s credit portfolio, potentially beyond segments of the credit portfolio that are directly tied to coal mining activity.

Nationwide, the number of employees employed by coal mines has generally declined from 2013 to 2014, but this decline varies significantly by region as shown by Figure 1. In a few states, the number of staff employed by coal mines has risen over this time period. Nationwide, the average aggregate number of those employed by the mining industry has fallen by 18 percent between 2011 and 2014.

Regional Differences
Coal mining activity is concentrated in a handful of areas in the United States. One of the primary coal producing regions includes portions of many states in the Eastern United States, particularly those in the Appalachian Mountains. The Appalachian Regional Commission studies the economic performance of counties located in key coal-producing areas of this region and categorizes the counties according to their performance across several metrics. Each county is classified into one of five economic status designations:

- **Distressed**: Distressed counties are the most economically depressed counties. They rank in the worst 10 percent of the nation's counties.
- **At-Risk**: At-Risk counties are those at risk of becoming economically distressed.
- **Transitional**: Transitional counties are those transitioning between strong and weak economies. They make up the largest economic status designation.
- **Competitive**: Competitive counties are those that are able to compete in the national economy but are not in the highest 10 percent of the nation's counties.
- **Attainment**: Attainment counties are the economically strongest counties.

As Figure 2 illustrates, a majority of Appalachian counties in either distressed or at-risk status are concentrated in the regions of eastern Kentucky, western Virginia, and northeastern Mississippi. These counties exhibit heightened levels of unemployment and poverty, among other measures.

As mining activity declines and capital is reallocated, there is a risk that loan delinquencies will rise in areas already at risk of weak economic performance. As such, financial institutions in these areas may be at a higher risk for loan delinquencies or other credit portfolio stresses than institutions elsewhere.
As Figure 3 shows, there is a distinct difference in delinquency levels between counties categorized as competitive or transitional and those categorized as distressed or at-risk by the Appalachian Regional Commission. Similarly, there have been reports of municipalities in these areas suffering from steep budget shortfalls due to the reduced levels of severance tax, the payment remitted to a local jurisdiction for the raw material extracted from mines within its boundaries. In many municipalities, these severance payments have historically accounted for a substantial portion of the local infrastructure budget. A report by Bloomberg, for instance, highlights the decline in several counties. “In Kentucky, severance money paid to counties totaled $23.4 million in 2015, compared with $62 million five years ago,” according to the report⁴. Revenue reductions such as this strain municipal budgets and may lead to downgraded credit quality ratings or delinquencies on municipal debt obligations.

These combined pressures of reduced severance tax revenue and declining other sources of revenue may cause the quality of certain municipal debt obligations to deteriorate.

**Figure 3**

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**Levels of noncurrent loans and leases and county economic conditions in coal-producing areas**

<table>
<thead>
<tr>
<th></th>
<th>Average as of 3/31/2015</th>
<th>Average as of 6/30/2015</th>
<th>Average as of 9/30/2015</th>
<th>Average as of 12/31/2015</th>
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<td>At-Risk</td>
<td>2.00%</td>
<td>1.50%</td>
<td>1.00%</td>
<td>0.50%</td>
</tr>
<tr>
<td>Competitive</td>
<td>2.50%</td>
<td>2.00%</td>
<td>1.50%</td>
<td>1.00%</td>
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<tr>
<td>Distressed</td>
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<td>0.50%</td>
<td>0.00%</td>
</tr>
<tr>
<td>Transitional</td>
<td>1.00%</td>
<td>0.50%</td>
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<td>0.00%</td>
</tr>
</tbody>
</table>

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References


2 ibid.


Figure 3
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.