Bond Price Reaction to Being Placed on Credit Review: Does Ownership Concentration Matter

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Bond Price Reaction to Being Placed on Credit Review: Does Ownership Concentration Matter

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ABSTRACT
Both financial academics and financial practitioners have explored the issue of how bond prices react to credit rating agency (CRA) ratings actions. While one would expect a positive price reaction if a bond is put on credit review for an upgrade and a negative price reaction if placed on review for a downgrade, the evidence has been choppy and mixed. Results were dependent on whether the bond issue was placed on review for an upgrade or downgrade and if the bond had a subsequent ratings change. The research issue to be addressed here relates to how bond ownership concentration relates to issuer monitoring intensity. Apriori, one would expect if the bond holdings of the issuer are concentrated, a rating review would have less of a price impact given the “ratings lag” (the time lag between the news that resulted in the ratings review). In other words, if, in fact concentrated holdings is indicative of monitoring intensity, a rating review would be viewed as “old news” and therefore not be as price impactful.

1 INTRODUCTION
Do credit rating agencies (CRAs), through their rating efforts, provide new information to the market via a rating review and/or a rating change? Upon a “newsworthy” event, e.g., poor earnings, corporate restructurings, mergers & acquisitions, allegations of fraud, etc. the CRAs express a credit opinion either by putting the corporation on “review” and/or changing the security’s credit rating. If, in fact, new information is revealed to the market by such rating actions, one would expect a bond price reaction; a price increase from a positive credit opinion and a price decline from an adverse credit opinion. Conversely, if the CRA opinion does not provide new information, one would expect a muted or no price reaction.

2 CONCENTRATED HOLDING AND MONITORING
This research addresses the question of whether or not large block bondholders are more monitoring intensive than atomistic holders. In particular, do large block bondholders more closely monitor the performance of the corporation and management? It has been shown that that large block shareholders have a stronger incentive to monitor firm performance as opposed to small dispersed shareholders. Shleifer and Vishny (1986) maintain that large block outside shareholders serve to enhances firm value by their monitoring efforts and thereby mitigate the free-rider problems. Similarly, Demsetz and Lehn (1985) show that block holders with a long-term investment horizon have strong incentives to monitor management.

3 CRA REVIEW PROCESS
This section describes the general credit rating review process. While the different CRAs have their own processes and policies, while in general, they follow the same basic model. Commonly, a CRA assigns and initial credit rating when the Issuer requests that the CRA conduct a formal review. At that time, the Issuer provides the CRA with pertinent documents, including full financials. After the initial credit rating is published, the Issuer’s credit rating will be continually monitored on an ongoing basis and the CRA will change the rating if merited. The catalyst for such a change is usually a credit impactful (positive or negative) event. The event is usually followed by the CRA putting the Issuer on “review” (or “watch”) for either a ratings upgrade or downgrade. The review can result in a ratings change or the CRA may decide to keep the rating intact.

The figure below shows a basic depiction of the credit review process following a credit “event.”
As alluded to above, a ratings review is almost always preceded by a credit event, positive or negative. Sometime after the “event” the CRA may put the Issuer up for review. There is no specified time period between the event and the review announcement, although from my professional experience and observations, it can take between one to ten days. The review announcement is then followed by a ratings announcement to downgrade, upgrade, or affirm.

The table below (Table 1) depicts how the three major CRAs credit ratings classifications.

<table>
<thead>
<tr>
<th>Moody’s</th>
<th>S&amp;P</th>
<th>Fitch</th>
<th>Rating category definition</th>
<th>Investment status</th>
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<tr>
<td>Aaa</td>
<td>AAA</td>
<td>AAA</td>
<td>Prime</td>
<td>Investment grade</td>
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<td>AA+</td>
<td>AA+</td>
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<td></td>
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<td>Aa2</td>
<td>AA</td>
<td>AA</td>
<td>High</td>
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</tr>
<tr>
<td>Aa3</td>
<td>AA−</td>
<td>AA−</td>
<td></td>
<td></td>
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<tr>
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<td>A+</td>
<td>A+</td>
<td>Upper medium</td>
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</tr>
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<td>A</td>
<td>A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A3</td>
<td>A−</td>
<td>A−</td>
<td></td>
<td></td>
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<tr>
<td>Baa1</td>
<td>BBB+</td>
<td>BBB+</td>
<td>Lower medium</td>
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<tr>
<td>Baa2</td>
<td>BBB</td>
<td>BBB</td>
<td>Speculative</td>
<td></td>
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<tr>
<td>Baa3</td>
<td>BBB−</td>
<td>BBB−</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B1</td>
<td>B+</td>
<td>B+</td>
<td>Highly speculative</td>
<td></td>
</tr>
<tr>
<td>B2</td>
<td>B</td>
<td>B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B3</td>
<td>B−</td>
<td>B−</td>
<td></td>
<td></td>
</tr>
<tr>
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<td>CCC+</td>
<td>Substantial risk</td>
<td>Non-Investment grade</td>
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<tr>
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<td>CCC</td>
<td>CCC</td>
<td>Extremely speculative</td>
<td></td>
</tr>
<tr>
<td>Caa3</td>
<td>CCC−</td>
<td>CCC−</td>
<td>Default imminent</td>
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<td>Ca</td>
<td>CC</td>
<td>CC</td>
<td>with little prospect for recovery</td>
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<tr>
<td>C</td>
<td>D</td>
<td>DDD</td>
<td>In default</td>
<td></td>
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<tr>
<td>/</td>
<td></td>
<td>D</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4 PREVIOUS LITERATURE
Many academic researchers have studied how security prices (stock and bonds) and derivatives (Credit Default Swaps or CDS) react to both credit reviews and credit downgrades. Many previous studies reveal a negative share price reaction following rating downgrades (e.g. Bannier and Hirsch, 2010; Goh and Ederington, 1993, 1999; Wansley and Clauretie (1995) document an adverse significant equity and bond price impact when an Issuer is put on a ratings review for a downgrade and has a subsequent downgrade. Similarly, they find a significant positive price impact for both the Issuer’s equity and bonds when the corporation is put on credit review for an upgrade followed by a subsequent upgrade.

5 METHODOLOGY AND DATA
The research regression model specification is shown below:

\[ Y_i = b_0 + b_1X_{1i} + d_1D_{1i} + d_2D_{2i} + d_3D_{3i} + e \]

Where:

- \( Y_i \) = The Absolute Value of the % Change Price of the ith Bond Following Ratings Action - % Change Price of the Applicable Bond Index Following Ratings Action
- \( b_0 \) = Regression Constant
- \( X_{1i} \) = The HHI of the ith Bond
- \( D_{1i} = \begin{cases} 1, & \text{if bond is placed on Watch Negative (WN)} \\ 0, & \text{if bond is placed on Watch Positive (WP)} \end{cases} \)
- \( D_{2i} = \begin{cases} 1, & \text{if a notch away from Junk to Investment Grade} \\ 0, & \text{otherwise.} \end{cases} \)
- \( D_{3i} = \begin{cases} 1, & \text{if a notch away from Investment to Junk} \\ 0, & \text{otherwise.} \end{cases} \)
- \( e = \text{error term} \)
Sample Selection
The sample is obtained using Moody’s credit watch data obtained from the Professional Bloomberg Terminal. Bloomberg command RATC displays a list of those bonds that were put on credit review (watch) over a specified time period.

Dependent Variable
As noted above, the dependent variable in my model the absolute value of the % change price of the ith bond following the ratings action MINUS the % change price of the applicable bond index following the ratings action. An index is included to insure that the bond’s price movement was not driven by overall market changes. If the bond in question is a high yield bond the Bloomberg Barclay’s US Corporate High Yield Bond Index (Bloomberg ticker: LF98TRUU) is employed. If the bond in question is an investment grade bond the Bloomberg Barclay’s USD Liquid Investment Grade Index (Bloomberg ticker: BLQCTRUU) is employed.

Dependent Variables
The Herfindahl-Hirschman Index (HHI) is a measure of concentration used to measure industry competitiveness. It is the summation of each company’s market share (percent) multiplied by 100 and then squared. If you capture all the market players the HHI will range from near zero (many atomistic competitors) to 10,000 (one industry participant or monopoly). The specification can be seen below.

\[ \text{HHI} = \sum_{i=1}^{n} (h_i \cdot 100)^2 \]

Where:
- \( h_i \) = the percent holding of the ith bondholder and \( n \) = the number of disclosed bondholders
We introduce dummy variable \( D_{1i} \) to denote whether the bond in question is on review for a negative or positive ratings change as the literature reveals the downgrade reviews have a greater price impact compared to upgrade reviews.
We introduce dummy variable \( D_{2i} \) to denote whether a high yield bond is currently undergoing a watch-positive review and therefore moves up to investment grade status. One would expect a greater price impact for such a review.
We introduce dummy variable \( D_{3i} \) to denote whether an investment grade bond is currently undergoing a watch-negative review and therefore moves down to high yield status. One would expect a greater price impact for such a review.

6 REFERENCES


