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Not a one-trick pony: Price impact of rating agency information ☆

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ABSTRACT

Prior literature on the informational role of credit rating agencies has largely focused on announcements by the rating agencies regarding rating actions. We take a tangent in this paper and examine the relevance of rating agencies' other information disclosures beyond rating actions, such as credit opinions and sector comments. Credit opinions provide in-depth analyses of a firm's financial performance and gives visibility into how a credit rating is derived. Analyzing the stock return decomposition among Moody's information, earnings announcements, SEC filings, and earnings forecasts, we find that the additional disclosures by rating agencies, especially the credit opinions, are a source of useful and timely additional information to the market. Overall, our results indicate that stock market investors can do well to not only focus on credit rating actions, but also on credit opinions and other rating agency disclosures.

1. Introduction

A substantial body of literature documents that credit rating agencies provide relevant information to the market (e.g., Micu et al., 2006; Chung et al., 2012; Agarwal et al., 2016). Yet, this literature has largely focused on information about rating actions and ignores other information that credit rating agencies provide. Rating actions do make up most of the publications by rating agencies, but there has been an increase in other publication types that provide even more in-depth analyses of firms' credit risk. For example, Moody's publishes credit opinions, which are in-depth analyses of a firm's actual and predicted ratings, indicating exactly how a firm's current rating is derived from its accounting information. In this study, we explore whether and how these information types are relevant to market participants by examining the relative contribution of rating agency information to the information reflected in stock returns.

Understanding the impact of all rating agency research and information is important because credit rating agencies are important information intermediaries and gatekeepers in the financial system (Ferri et al., 1999; Kisgen, 2006; Roychowdhurry and Srinivasan, 2019). This notwithstanding, the rating agencies, primarily Moody's and S&P, are generally criticized for lack of timeliness in their credit ratings (Cornaggia and Cornaggia, 2013; Xia, 2014; Cheng and Neamtiu, 2009). The often-cited evidence is that the agencies maintained high ratings on several entities in the days leading up to these entities' spectacular defaults. However, little is said of other information that rating agencies publish to provide ongoing issuer credit risk assessments.

We present and evaluate the relevance of the information from several Moody's publications. We first show that announcements of rating actions make up about 45 percent of publications by Moody's. Four other publication types, namely issuer comment, other announcements, loss given default assessments, and credit opinions each make up at least 8 percent of the publications.[1] We then investigate and show that, collectively, information in Moody's publications is relevant to capital markets. Moreover, we show that a number of non-rating action publications provide incremental information to investors. Investors appear to value information in Moody's credit opinions, financial reports assessments, and peer snapshots.

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[1] Whereas rating action announcements announce rating changes (Micu et al., 2006), "other announcements" announce other credit risk insights. For example, on December 5, 2013 Moody's published an announcement on Apple, Inc: "Despite healthy cash, Apple needs to avoid extra debt to satisfy investor demands" (https://www.moodys.com/credit-ratings/Apple-Inc-credit-rating-197800/reports?category=Ratings_and_Assessments_Reports_rc&type=Announcement_rc).

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Table 1
Frequency of Moody's publications.

Publications	Frequency	%
Rating action	10 340	44.9
Issuer Comment	2110	9.2
Announcement	1969	8.6
LGD Assessment	1892	8.2
Credit Opinion	1850	8.0
Peer Snapshot	1063	4.6
Covenant Quality Assessment	805	3.5
Analysis	615	2.7
Industry outlook	443	1.9
Special comment	291	1.3
Financial statement ratios	263	1.1
Corporate governance assessment	209	0.9
Company profile	172	0.7
Credit focus	150	0.7
Liquidity risk assessment	147	0.6
Financial reporting assessment	146	0.6
Opinion update	132	0.6
Spec grade liquidity assessment	122	0.5
Other (Count < 100)	299	1.3
Total	**23,018**	**100.00%**

This table presents frequencies of Moody's publications for the period covering 2000–2017. The publications are hand-collected from www.moodys.com and are cleaned-up to correct for spelling variations.

2. Data and methodology

Our sample consists of rated US firms from 2000–2017. Dates of Moody's publications are from www.moodys.com, as accessed in September 2018.[2] We obtain dates for SEC filings (SEC) from WRDS SEC Analytics Suite, earnings announcements (EA) from Compustat, management earnings forecasts (MF) from CapitalIQ, analysts' forecasts (AF) from IBES, and stock returns to compute cumulative abnormal returns (CAR) from CRSP.

To assess the price impact of rating agency information, we test for the relative contribution of Moody's information to the overall information reflected in the stock prices (See Beyer et al., 2010). To do this, we estimate the following regression and assess the statistical significance of the coefficient on $CAR_{i,t}^{Moody's}$:

$$CAR_{i,t} = \beta_1 CAR_{i,t}^{\textbf{Moody's}} + \beta_5 CAR_{i,t}^{AF} + \beta_2 CAR_{i,t}^{SEC} + \beta_3 CAR_{i,t}^{EA} + \beta_4 CAR_{i,t}^{MF} + \varepsilon_{i,t} \quad (1)$$

where $CAR_{i,t}$ is the cumulative abnormal returns and proxy for the total information for a given firm-quarter. $CAR_{i,t}^{Moody's}$ is the CAR attributed to Moody's information, computed as the three-day CAR around publication dates. $CAR_{i,t}^{AF}$ is the CAR attributed to analysts forecast announcements, and zero if not issued. $CAR_{i,t}^{SEC}$ is the three-day CAR for each SEC filing date. $CAR_{i,t}^{EA}$ is the three-day CAR from information in the firm's earnings announcements. $CAR_{i,t}^{MF}$ is the CAR attributed to management forecast announcements, and zero if not issued. $\varepsilon_{i,t}$ is the random error term. Standard errors are corrected for clustering at the firm level.

3. Results

Table 1 presents frequencies of Moody's publications and show that announcements of rating actions make up 45% of publications. This indicates that other news types make up more than half of Moody's rating research, with a considerable proportion of the sample being "Issuer Comment", "Announcements", "LGD Assessment", "Credit Opinion", "Peer Snapshot", and "Covenant Quality Assessment". Other important issues are liquidity risk assessment, corporate governance assessment, and financial reporting assessment.

[2] To minimize data collection costs, we focus on Moody's only as prior literature suggests that the biggest agencies, S&P and Moody's, are reasonable substitutes (e.g., Bonsall et al., 2017).

Table 2
Value-relevance of Moody's publications.

	(1)	(2)	(3)
$CAR^{Moody's}$	0.228***	0.228***	0.200***
	(4.21)	(4.26)	(3.92)
CAR^{AF}	0.351***	0.352***	0.352***
	(20.58)	(20.60)	(20.36)
CAR^{SEC}	0.379***	0.377***	0.376***
	(19.85)	(19.63)	(18.17)
CAR^{EA}	0.539***	0.540***	0.477***
	(6.26)	(6.29)	(5.53)
CAR^{MF}	0.079	0.075	0.044
	(0.59)	(0.56)	(0.42)
Observations	8170	8170	8170
Adjusted R^2	0.631	0.633	0.654
Quarter fixed effects	Y	Y	Y
Industry fixed effects	N	Y	N
Firm fixed effects	N	N	Y

***, **, and * denotes two-tailed statistical significance for 1%, 5%, and 10% respectively.
This table reports results on the firm-quarter incremental contribution of Moody's total information and other information sources. The sample is limited to firms with at least one Moody's publications and SEC filing in a given quarter. The dependent variable CAR is the firm-quarter cumulative abnormal returns. $CAR^{Moody's}$ is the three-day CAR around Moody's publications. CAR^{AF} is the three-day CAR around analysts forecast announcements, and zero if not issued. CAR^{SEC} is the three-day CAR around SEC filing dates. CAR^{EA} is three-day CAR around earnings announcements. CAR^{MF} is the CAR attributed to management forecast announcements, and zero if not issued. Industry Fixed Effects is based on the SIC code. Estimates are corrected for clustering at the firm level.

Table 2 presents empirical results on the relative contribution of total information from Moody's. The results show that information from Moody's has a statistically and economically significant impact on a firm's total information reflected in stock prices. This impact is incremental to other sources of firm information, such as SEC filings, earnings announcements, and analysts forecasts. The results remain statistically significant in different specifications that control for industry or firm fixed effects. We confirmed that associated partial r-squared are non-zero.

In Table 3 we decompose the CAR for Moody's into various components including rating actions, credit opinions, announcements, peer snapshots, financial reporting assessment, and corporate governance assessment. Existing literature provide evidence that announcements of rating actions contain useful and timely information to the market (Micu et al., 2006). We document that other information types also provide useful and timely information to the market. The coefficients on a few other information types are statistically and economically significant. We also confirm that the partial r-squared are non-zero, suggesting that these types do explain a portion of the information in stock prices.

Overall, the findings provide some evidence that rating agencies do much more than publish announcements related to rating actions. They also publish a variety of other useful and timely information.

4. Conclusion

Extant literature on the price impact of credit ratings has largely focused on information about rating actions and left unexplored the impact of other information that credit rating agencies provide. We examine the impact of this other information and document that this information discernibly contributes to the total firm's information reflected in the stock prices.

We note that access to information from these publications is not all free. Users can access synopses and full reports on rating actions from Moody's for free. They can also access the synopses of all other reports (e.g., credit opinions, issuer comments, peer snapshots). However,

Table 3
Relevance of specific publications.

	(1)	(2)	(3)
$CAR^{Moody's_RatingAction}$	0.189**	0.194***	0.203***
	(2.58)	(2.68)	(2.70)
$CAR^{Moody's_Announcement}$	−0.010	−0.019	−0.055
	(−0.08)	(−0.15)	(−0.43)
$CAR^{Moody's_CreditOpinion}$	0.835**	0.834**	0.461**
	(2.53)	(2.52)	(2.04)
$CAR^{Moody's_PeerSnapshot}$	0.710***	0.701***	0.604***
	(5.08)	(5.17)	(4.52)
$CAR^{Moody's_CorpGovAssessment}$	0.046	0.034	0.117
	(0.19)	(0.14)	(0.44)
$CAR^{Moody's_FinReportAssessment}$	1.013***	0.994***	1.002**
	(2.75)	(2.61)	(2.42)
$CAR^{Moody's_LiqRiskAssessment}$	−2.057**	−2.048**	−2.242**
	(−2.02)	(−2.01)	(−2.25)
$CAR^{Moody's_CovQualityAssessment}$	0.092	0.120	0.065
	(0.35)	(0.45)	(0.23)
$CAR^{Moody's_LGDAssessment}$	0.368	0.360	0.330
	(1.63)	(1.60)	(1.30)
$CAR^{Moody's_AllOthers}$	0.029	0.027	0.058
	(0.31)	(0.29)	(0.63)
CAR^{AF}	0.352***	0.352***	0.352***
	(20.32)	(20.38)	(20.20)
CAR^{SEC}	0.383***	0.381***	0.378***
	(19.59)	(19.40)	(18.15)
CAR^{EA}	0.531***	0.529***	0.475***
	(5.97)	(5.97)	(5.42)
CAR^{MF}	0.092	0.088	0.050
	(0.69)	(0.65)	(0.47)
Observations	8170	8170	8170
Adjusted R^2	0.635	0.637	0.655
Quarter fixed effects	Y	Y	Y
Industry fixed effects	N	Y	N
Firm fixed effects	N	N	Y

***, **, and * denotes two-tailed statistical significance for 1%, 5%, and 10% respectively.
This table reports results on the firm-quarter incremental contribution of different Moody's publications and other information sources. The sample is limited to firms with at least one Moody's publications and SEC filing in a given quarter. The dependent variable CAR is the firm-quarter cumulative abnormal returns. $CAR^{Moody's_\langle TYPE \rangle}$ is the three-day CAR around the specified Moody's publications. CAR^{AF} is the three-day CAR around analysts forecast announcements, and zero if not issued. CAR^{SEC} is the three-day CAR around SEC filing dates. CAR^{EA} is three-day CAR around earnings announcements. CAR^{MF} is the CAR attributed to management forecast announcements, and zero if not issued. Industry Fixed Effects is based on the SIC code. Estimates are corrected for clustering at the firm level.

full access to these other reports requires a subscription to Moody's CreditView. While the free synopses can be informative to the user, full reports provide greater information advantages. Accordingly, the full information benefits of Moody's publications may only accrue to a segment of the capital market participants with resources to secure subscriptions.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Data availability

The authors do not have permission to share data.

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