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EARNINGS QUALITY RATINGS AND CORPORATE GOVERNANCE: DO COMPANIES WITH GOOD GOVERNANCE HAVE FINANCIAL STATEMENTS THAT BETTER REFLECT REALITY?

ABSTRACT

This paper extends previous research which examined whether or not there was a correlation between governance ratings and earnings quality ratings. The current paper also compares the governance ratings and earnings quality ratings on a stratified basis (dividing companies into three groups, classified as having governance which is "good, "intermediate", and "poor"). As in the previous research, the comparison of governance ratings with earnings quality ratings did not find a statistically significant relationship. Stratifying the sample into three groups of governance classifications and comparing the average earnings quality ratings of the groups did not yield statistically significant differences, either. However, somewhat surprisingly, the highest average earnings quality rating was achieved by the "poor" governance group, and the lowest earnings quality rating was achieved by the "good" governance group

Key Words: earnings quality, governance, governance ratings, finance

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INTRODUCTION

Previous research (Haber and Braunstein 2008) investigated whether companies with good governance practices have good earnings quality. The research question tested the theory that companies with good governance, as evidenced by ratings issued by a governance rating organization, would have better earnings quality (defined as adherence to accounting principles that reflect the operations of the organization, therefore producing more robust and usable financial statements), as measured by an earnings rating company. The governance ratings were issued by GovernanceMetrics International, Inc. and the earnings quality ratings were issued by 3D Ratings. That study was based on a sample of 50 companies. While the results of that study were not statistically conclusive, there was some evidence to suggest that additional research should be conducted. This paper extends that study to 100 companies and takes the extra step of comparing the ratings of the companies sampled on both a non-stratified and stratified basis. By stratifying the companies into three groups by governance rating we also adjust the research question to ask whether companies with good governance have financial statements that better reflect reality, or alternatively stated, whether companies with good governance ratings also receive good earnings quality ratings.

Much of the existing literature concerns studying governance and earnings quality separately against variables such as market returns and stock prices. These studies use a variety of statistical techniques, and a common metric among the studies is Tobin's q (briefly defined as the ratio of the total market value of the firm divided by the total asset value of the firm) (Black, Jang, and Kim 2006; Bai, Liu, Lu, Song, and Zhang 2004, for two examples). We felt that Tobin's q was not appropriate for this paper because we wanted to relate two separate, independent ratings, produced by two separate ratings companies. Since Tobin's q is prevalent in governance research, we felt mentioning why it wasn't being used to be appropriate. The earnings quality rating is used as a proxy for financial statements that reflect reality, and the research question was formulated as "do companies with better governance have financial statements that better reflect reality?" The impetus for this paper is the availability of data based on validated, commercially accepted models that are usually only available by paid subscription.

GovernanceMetrics International (GMI) is a company that has developed a reputation as one of the three most respected governance rating companies. GMI is frequently cited in the popular press when governance metrics are needed and has developed a strong

following among investors who screen for governance. The GMI model is discussed in more detail below. The premise of the governance rating organizations is that companies that emphasize corporate governance will, in the long run, generate superior returns and economic performance. Many studies have confirmed the link between measures of corporate governance practices and performance of the firm (Anson 2006, Ashbaugh-Skaife, Collins, and LaFond 2006, Bhojraj and Sengupta 2003, Gompers, Ishii, and Metrick 2003, Millstein and MacAvoy 1998, Sherman 2004). It should be mentioned, however, that governance ratings companies and evaluations have their detractors, too. Some researchers suggest that governance rating companies provide ratings that don't work, and that there are possible conflicts of interest in the process (Koehn and Ueng 2005, Sonnenfeld 2004).

3D Ratings is a company that prepares earnings quality ratings. The ratings are accounting-principles based and there are three ratings that are calculated – one each for appropriateness, aggressiveness/conservativeness and transparency. The ratings have been validated in a previous study (Haber 2005). The earnings rating model will be discussed in more detail below, as well.

This paper utilizes a larger sample than our previous work to examine whether there is a correlation between the rating of a company's governance practices and the rating of the appropriateness of the accounting principles chosen by the company. Furthermore, this paper also stratifies the governance ratings into three groups ("good" governance, "intermediate" governance, and "poor" governance) to address the additional research question of whether companies with good governance tend to choose accounting principles that are more appropriate and whether companies with poor governance choose to tend accounting principles that are less appropriate.

THE GOVERNANCE RATING MODEL

GMI rating criteria are based on securities regulations, stock exchange listing requirements and various corporate governance codes and principles. Among the latter are principles promulgated by the OECD, the Commonwealth Association for Corporate Governance, the International Corporate Governance Network, and the Business Roundtable. In addition, they seek the views of various corporate governance and legal advisors, institutional investors, corporate officers and company directors, and utilize the combined experience of the founding partners.

This endeavor has produced a set of hundreds of metrics structured in a manner that can only produce yes, no, or not disclosed answers. In this way they attempt to eliminate a large degree of subjectivity to answer these metrics from official company filings with securities regulators and stock exchanges.

The GMI research process starts with a review of all pertinent public data, including regulatory filings, company websites, news services and other specialized websites. All data collected by GMI are entered into a relational database. Once the research template answers have been compiled and have been subjected to various quality control checks, data entry reports are sent to each company in the universe for a final accuracy check.

After any company adjustments are made, the data are locked and GMI runs a scoring model that calculates and assigns ratings to each company. Companies are scored on a scale of 1 (lowest) to 10 (highest), and are always scored relative to the other companies in the research universe. Companies are assigned 14 ratings in all. The first are GMI global ratings. Global ratings are designed to demonstrate how each company's governance profile compares to all others in the GMI universe. Global ratings include an overall GMI score and separate scores for each of GMI's six research categories. Each company rated by GMI also receives "home market" ratings that reflect how well its governance policies and practices compare to others in its home country or region. Home market ratings also include an overall GMI score and separate scores for each of GMI's six categories of analysis. Using this approach, subscribers are able to focus their analysis to either single-market or cross-border portfolios.

THE EARNINGS RATING MODEL

3D Ratings uses an accounting principles- based model of rating earnings quality. The basic underlying concept is that every transaction is recorded based on the accounting principles, and therefore the principles are the driving force behind the recording of all the transactions. Additionally, earnings quality ratings typically try to accomplish many things with one metric, often having the result of achieving none. 3D Ratings looks at the accounting principles in three dimensions: appropriateness, aggressiveness or conservativeness, and transparency. 3D Ratings considers each of these to be separate qualities. Within each dimension, a rating is calculated on a 1 (worst) to 10 (best) scale. For appropriateness, a 1 would relate to accounting principles that significantly depart from the operations of the company. A 10 would indicate that the chosen accounting principles

closely mirror the operations of the company. For the aggressive/conservative dimension, a 1 would relate to most aggressive and 10 most conservative. A 5 would be neutral. On the transparency scale, a 1 would indicate extensive influence by management and a 10 negligible influence by management. There is also a percentage adjustment factor calculated for each scale that should be applied to earnings.

Appropriateness of Accounting Principles

Companies have the right and responsibility to choose accounting principles from a wide assortment of acceptable alternatives. There is no requirement that the accounting principles chosen have any relationship to the operations of a company, only that the principles be applied consistently. The 3D Ratings model believes that accounting principles should be consistent with the operations of the company. If the company sells merchandise on a first-in, first-out basis, then FIFO is the accounting method they should be using. The same holds true for all of the chosen accounting principles. In addition, all of the accounting estimates should be reasonable in relation to the experience of the company.

Accounting principles that are not consonant with the operations of the company will cause variations between earnings estimates and actual earnings based on artifacts of the accounting process. These variations largely get called "noise" and comprise a portion of the discrepancies between early earnings estimates and actual. The concept is that even a prediction made that is correct in every respect may not correctly model the earnings because of accounting principle interference.

Aggressive/Conservative Scale

The 3D Ratings model does not make a value judgment that aggressive accounting principles are bad, nor that conservative principles are good. There is, however, value in discerning whether a company is aggressive or conservative for purposes of adjusting their earnings up (conservative) or down (aggressive) so that inter-company comparisons can be facilitated. Likewise, 3D Ratings does not use terms like "sustainable earnings." There is no reason why earnings need to have sustainability to be considered of quality, as long as the accounting earnings are an accurate reflection of the true earnings of the company.

Transparency

The 3D Ratings model defines transparency as the extent to which management influence is manifest in the financial statements. The extent to which the accounting principles allow (or require) management judgments on an annual basis is the extent to which earnings are subject to volatility and become an artifact of the managers, rather than a true reflection of the operations for the related period of time.

RESEARCH QUESTIONS

The authors were first interested in whether there was, in general, a relationship between the rating of a company's governance practices and the rating of the appropriateness of the company's selected accounting principles. In addition, the companies were divided into three classifications based on the governance ratings, with the intent of discovering whether or not the average earnings quality ratings differed between and among groups.

THE TEST - UNSTRATIFIED

GMI provided the names of 100 companies (the first 100 listed in their database of US companies). No ratings accompanied the names. Of these 100, 4 were eliminated because they did not file annual financial statements with the SEC. 3D Ratings provided the earnings quality rating for the remaining 96 companies to GMI, who inserted their governance ratings next to 3D's ratings.

When analyzing the data, it was discovered that there was an unanticipated difference in the ratings scales – GMI used a 1 to 10 scale, while 3D used a 0 to 10 scale (despite the earlier description which said that the 3D scale was based on 1 to 10, in fact the ratings ranged from 0 to 10). The earnings quality ratings were recalculated by 3D to be on the same 1 to 10 scale as GMI's governance ratings.

A superficial review of the data seemed to indicate some level of correlation between the two sets of ratings. 42% of the observations were within 1 rating point or fewer, 60% within 2 points or fewer, and 77% were within 3 points or fewer. The gut reactions of the managements of both 3D Ratings and GMI were that this might provide evidence of a close relationship between the sets of ratings. The descriptive statistics were:

Table 1: Descriptive Statistics

	GMI		3D Ratings
Mean rating	6.53		6.16
Standard deviation	1.63		2.09
Pearson correlation coefficient		-0.047	
Sample size		n = 96	

As Table 1 indicates, the Pearson correlation coefficient between the two sets of ratings is extremely close to zero (and certainly is not statistically significant). A non-parametric statistic, the Spearman rank correlation coefficient, was found to be insignificant, as well. We then performed a hypothesis test for equality of means using a paired two-sample test, since both types of rating procedures were applied to the same group of 96 companies:

Hypothesis 0: The mean governance and earnings quality ratings are equal
Hypothesis 1: The mean ratings are not equal

Testing at the 5% level of significance, the calculated t-statistic (1.33) does not exceed the critical value (1.99). Thus, we do not have strong evidence that the mean ratings are different. Recall, however, that the correlation coefficient between the two sets of ratings is not evenly remotely close to being statistically significant. So even though we don't have strong evidence that the mean rating for GMI differs from the mean rating of 3D, knowing how a particular company is rated by one system will not help us predict how the other system rated that same company.

In reality, we are not so concerned with the means when comparing ratings between the two organizations, but rather by how close the ratings are to each other on an individual observation (company) basis. Note also that both the correlation coefficient and the test for equality of means both are influenced by the direction of the difference in a company's ratings by the two organizations. In fact, what is of the most interest is the absolute value of the difference in a company's ratings by the two systems. This is because a primary concern is not whether the rating of an individual company by one rating agency lies above or below the rating given by the other agency, but rather how close the

ratings are to one another. The hypothesis was reformulated using the absolute value of the differences:

Hypothesis 0: The average absolute value of differences between ratings equals 0
Hypothesis 1: The average absolute value of differences does not equal 0

The calculated test statistic was 11.97, providing overwhelming evidence (at any significance level) that the average of the absolute values of the differences exceeds 0.

We then changed the null hypothesis to see if the average of the absolute value of the differences was fairly small (but not zero):

Hypothesis 0: The average of the absolute values of differences between ratings equals 1
Hypothesis 1: The average of the absolute values of differences is greater than 1

The calculated test statistic was 6.29, providing extremely strong evidence that the average of the absolute values is greater than 1 (again, significant at any level). Extending this, there was even strong evidence that the average of the absolute values of the differences was greater than 1.5 (calculated test statistic of 3.45 is significant at the .001 level).

THE TEST – STRATIFIED

We then divided the overall sample of 96 companies into three groups, those that had "poor" governance ratings (which we defined as a governance rating of 3.5 or lower), those with "good" governance ratings (defined as 7.5 or higher), and the middle or intermediate area (defined as above 3.5, but lower than 7.5). We then computed the average earnings quality rating for each of the three groups.

From table 2, one can see the surprising result that the average earnings quality rating was highest for the "poor" governance group (6.33) and lowest for the "good" governance group (5.93).

We then conducted three separate hypothesis tests for equality of means in order to compare the average 3D ratings for the various governance classifications. Specifically, we compared "poor" vs. "good," "good" vs. "intermediate" and "poor" vs. "intermediate."

Table 2: 3D Appropriateness of Accounting Principles Ratings for the Governance Classification

GMI Governance Rating	Classification
≤3.5	"Poor"
>3.5, but <7.5	"Intermediate"
≥7.5	"Good"

	Poor	Intermediate	Good
Sample size	6	62	28
Sample mean	6.33	6.25	5.93
Sample std deviation	1.47	2.08	2.24

"Poor vs. Good"

Hypothesis 0: The mean earnings quality ratings are equal

Hypothesis 1: The mean ratings are not equal

"Good vs. Intermediate"

Hypothesis 0: The mean earnings quality ratings are equal

Hypothesis 1: The mean ratings are not equal

"Poor vs. Intermediate"

Hypothesis 0: The mean earnings quality ratings are equal

Hypothesis 1: The mean ratings are not equal

In none of the tests were we even remotely close to being able to reject the null hypothesis that the population means are equal. That result is not surprising in light of the fact that a single factor analysis of variance test led to the non-rejection of the null hypothesis that all three means are equal (again, we were not even remotely close to being able to reject the null hypothesis). We also combined the poor and intermediate groups to compare "not good" and "good groups". Even in that case, there was not a statistically significant difference between the groups.

IMPLICATIONS FOR FURTHER RESEARCH

As in our previous study (Haber and Braunstein 2007), no strong statistical evidence was found of a relationship between the governance ratings and the earnings quality ratings.

Extending the sample from the previous group of 50 companies to this study's group of 96 produced no significant results on a non-stratified basis. When the sample was broken into three groups (good governance, intermediate governance, and poor governance), the average earnings quality rating for the poor governance group was the highest, and the good governance group had the lowest average earnings quality rating. Even though the differences in the means for the three groups were statistically insignificant, the result was surprising, nonetheless.

As stated previously, there are two other metrics of earnings quality: aggressiveness/conservativeness and transparency. Future research could examine the relationship between governance ratings and transparency ratings. Furthermore, we could also expand the number of observations to include all companies in the GMI US database (roughly 4,000 companies), to examine that issue or the ones that have already been investigated.

Apart from comparisons between governance and earnings quality that was the subject of this and the previous study, the aggressiveness/conservativeness ratings could be compared to the year-to-year changes in actual earnings. Companies that have chosen accounting principles that are considered very aggressive might be expected to have greater variance year-to-year, and companies with conservative accounting principles less variance.

CONCLUSION

This study took a sample of 96 companies and stratified them by their GMI governance rankings into three groups ("good" governance, "intermediate" governance and "poor" governance. We found that the "poor" governance group had the highest average earnings quality rating, and the "good" governance group had the lowest average earnings quality rating. In any comparison between groups the differences were not found to be statistically significant.

With that result one has to consider if it is indeed a statistical aberration or if there is an underlying cause that is meaningful. Future research will address this, but some possibilities are that companies with poor governance seek to improve, either because management has changed or they desire less scrutiny, or they feel their market value can be helped by a better rating. One of the most visual manifestations of governance to the

public is the financial statements the company issues. So perhaps companies improve the statements and the underlying accounting principles first.

That, of course, doesn't explain why good governance companies don't have equally high ratings for appropriateness of accounting principles. Perhaps they maintain the principles from a time long ago, no longer appropriate given changing business environments and operations, but feel consistency is best served. With a continuing high market for governance, there may be little incentive to change.

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