An Investigation of the Effect of Reporting Changes Proposed by the AICPA on Lending Decisions

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Abstract

In 1994, a Special Committee of the AICPA proposed to expand and reorganize financial statements. The main differences between the proposed model and current GAAP include increased segment information, a separation of core and non-core activities, and inclusion of more forward-looking information. This study examines the effect of the proposed changes on lending decisions made by bankers. The results indicate that the separation of financial statement data into core and non-core activities provides relevant information in making lending decisions. Combining core activity separation with expanded segment information further increases the decision usefulness of the statements.

Introduction

In 1994, a Special Committee on Financial Reporting of the American Institute of Certified Public Accountants (AICPA) issued their final report entitled, "A Model of Business Reporting" (1994). The proposed model both expands and reorganizes the information currently being provided in financial statements to make the statements more useful to investors and creditors. The most pronounced differences between the proposed model and current U.S. reporting include increased segment information, a separation of core and non-core activities in the financial statements, and inclusion of more forward-looking information. This study examines the importance of the proposed changes to bankers in making lending decisions.

The AICPA Model

The AICPA's "Model of Business Reporting" advocates changes in financial reporting in the following six areas: (1) Business segment reporting, (2) Financial statement presentation, (3) High-level operating data and performance measures, (4) Management's analysis, (5) Forward-looking information, and (6) Company background. Each of the above areas will now be briefly discussed.

Business Segment Reporting

The model expands current reporting on business segments to include both more financial and non-financial disclosures. A summary of financial and non-financial data is required for each industry segment. That data includes sales, gross margin, relevant ratios, and management analysis. Segment disclosures on a geographic basis are to be reported if disparate business opportunities and risks exists. Line-of-business or individual product information is to be provided if critical to the company's opportunities and risks. The amount of disclosure provided is significantly expanded to include a discussion by management regarding each segment's operations and results along with future plans.

Financial Statement Presentation

The model retains the form and content of today's financial statements, but proposes changes regarding display, measurement, disclo-
sure, summary data, and interim reporting. The model distinguishes between core and non-core activities on the income statement, the balance sheet, and the statement of cash flows. Core activities arise from usual and recurring business transactions and events excluding interest. Non-core activities include results of infrequent events, such as gains or losses on the sale of long-term plant assets. Non-core assets include those not currently used in operations, such as land held for future use. Non-core assets and liabilities are measured at fair value on the balance sheet. More disclosures about the risks associated with off-balance-sheet financing are required. A summary of selected financial and non-financial data on both a consolidated basis and an industry segment basis is also required. Interim information is to be provided at least quarterly, consisting of uncondensed financial statements, disaggregated information corresponding to that presented in annual statements, and quarterly cash-flow statements.

High-Level Operating Data and Performance Measures

These disclosures vary by industry and by company. Some of the following information might be considered for disclosure: statistics relating to activities producing revenues or costs, statistics related to productivity, measures related to innovation, measures of employee involvement, and measures of strength in vendor relationships. Any measures considered significant and meaningful by management are to be disclosed.

Management's Analysis

In this section, management explains in a non-financial business sense, what is reflected in the financial statements. Management provides reasons for changes in ratios, profitability, liquidity and financial flexibility, along with explanations of any other significant changes. Management also identifies any key trends (i.e. social, technological, political, etc.) which they believe significantly affect the business.

Forward-Looking Information

In this section, management identifies opportunities and risks characterized as "material trends, demands, commitments, concentrations, and events, including legal proceedings, known to management that cause reported financial information not to be necessarily indicative of future core earnings, net income, cash flows, or future financial conditions" (AICPA 1994). The forward-looking information also includes management's plans to carry out business strategies, and addresses the major differences between previously reported forward-looking information and actual results.

Company Background

This section consists mainly of disclosures of non-financial information with quantitative measurements presented where practical. Management's objectives and the strategies used to achieve those objectives are identified. A discussion of the industry structure and the impact of industry competition is also included.

Effects of the Model on Lending Decisions

Prior research has examined factors which affect lending decisions. Regarding supplemental disclosures, Harper et al. (1987) found that pension information is not incorporated into the lending decision as often when it is provided in the form of supplemental disclosure as opposed to being included in the body of the financial statements. Similar findings were found regarding the disclosure or inclusion in the body of the statements of other postretirement benefit obligations (Harper et al. 1991). However, both pension and other postretirement benefit data is not true "soft" information, but can instead be quantified and included in the body of the financial statements. Danos et al. (1989) found that bankers utilize general background information and forward-looking data in making lending decisions. They also found evidence that the level of confidence which bankers place in their decisions increases as the amount of information they receive is increased.

The AICPA's "Model of Business Reporting" requires an increase in the amount of "soft" information disclosed by companies. Bankers will be able to use the expanded information which includes performance measures, opportunities, trends and risks to better evaluate a company's future potential. Some companies now disclose much of this information if it appears to be of a positive nature. The new reporting model will require additional "soft" disclosures for all companies. Therefore, bankers will be able to compare the disclosures of loan applicants with the disclosures of other companies within the same industry. This will allow the bankers to better evaluate the reasonableness
of management's explanations of past results and trends and future projections.

Division of the financial statements into core and non-core activities will serve to aid bankers in estimating and assessing future earnings capability and future cash flows. Overall, the restructuring of financial statements and the increase of information provided in and along with them will enable lenders to better allocate resources throughout our economy.

Research Design

The research instrument mailed to bank loan officers consisted of a set of comparable financial statements for Fizzy Company, Inc., a fictitious soft drink and snack food company, for which the banker was asked to make a lending decision. All financial statements included a "clean" audit opinion.

The Variables

The research design is a 2x2x2 factorial. The three factors are (1) expanded segment information, (2) core, non-core activity separation, and (3) forward-looking information. These three factors comprise the most dramatic changes in the AICPA's "Model of Business Reporting." The performance measures and management analysis proposed by the model consists mainly of ratio disclosure and management discussion of ratios. These measures and their related analysis would often be provided on a segment basis, so they are included in this study in the expanded segment factor. Since the proposed company background information would also be reported on each segment, this information is also included in the expanded segment factor.

The expanded segment information variable has two levels, either included or not included. Fizzy Company, Inc. has two segments, a beverage segment and a snack food segment. Five-year summary data by segments is included on all financial statements. However, five-year summaries for statements with expanded segment information provide gross margin percentages, current ratios, average number of employees and revenue per employee in addition to the information provided on the non-expanded segment statements of revenue, net income, cash from operations, and capital expenditures. The expanded segment information statements also include an "Analysis of Financial and Non-Financial Data" which consists of two-year com-
parative income statement summaries along with an analysis of those statements on a segment basis. In addition, background information is provided for each segment in the expanded statements. This background information includes the objectives and strategies for each segment, and the impact of the related industry structure on each segment.

The core, non-core activity separation variable also has two levels, either included or not included. When the separation is included, the information presented in the financial statements (income statement, balance sheet, and statement of cash flows) is divided into core and non-core activities. A definition of core and non-core activities is provided in a footnote to the statements. The five-year summary data is also reported using core earnings instead of net income, and cash provided by core operations instead of cash provided by operations. While core and non-core assets are separated in the balance sheet, the total amount of assets and liabilities (and the current and long-term subtotals) is held constant between statements with and without the core separation. This is done so that ratios which bankers may use in their decision making process are not affected. In statements which also include expanded segment information, the additional financial information for segments is separated into core and non-core activities. For one of the segments, non-core activities produce 7% of the total segment income. For the other segment, the non-core activities produce a loss which causes a 10% decrease in going from income from core operations to net income. Thus, one segment has a positive income effect from non-core activities while the other segment has a negative income effect. Net income is the same for both segments on all statements whether or not core separation is used.

The third independent variable is forward-looking information which also has two levels, either included or not included. The forward-looking statements contain a section of forward-looking information which identifies opportunities, plans, and risks, including those resulting from key trends. Plans for expanding markets and introducing new products which are expected to increase market share along with identification of the risks involved are included here. Table 1 outlines the eight sets of financial statements used in this study.

Two dependent variables are used in this
Table 1.
Financial Statement Survey Groups

<table>
<thead>
<tr>
<th>Group</th>
<th>Expanded Segment Information</th>
<th>Core, Non-Core Activities</th>
<th>Forward-Looking Information</th>
</tr>
</thead>
<tbody>
<tr>
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<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>2</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>3</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>4</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
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<tr>
<td>5</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>6</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>7</td>
<td>No</td>
<td>No</td>
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</tr>
<tr>
<td>8</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
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</table>

study. All subjects were asked the maximum line of credit that they would be willing to grant Fizzy and the interest rate, stated as an amount above prime, that they would charge. They were told to assume a prime rate of 8 percent and that their bank had an unlimited amount of funds with which to make loans.

The Banker Subjects

The research instruments were mailed to 1,200 bank lending officers in the U.S. The names were obtained from The American Bank Directory (1994). Officers of banks with less than $75 million in assets were not sent questionnaires because it was believed that these banks would probably not be heavily involved in corporate lending. The sample was selected randomly from qualifying banks from across the U.S. Each banker received only one of the eight sets of financial statements on which to make a lending decision. The between-subjects design ensured that the subjects could not ascertain the manipulations.

Two hundred ninety-two instruments were obtained resulting in a 24.3% response rate. However, 22 responses were eliminated because the surveys were incomplete. Overall, the respondents had an average of approximately eight years of lending experience. A comparison of early and late responses indicated that response bias did not appear to exist.

Response Analysis

The focal point of this study is to determine if the AICPA’s proposed changes in financial reporting will affect decisions made by bank lending officers. The principal model is a 2x2x2 MANOVA, with the dependent variables of loan amount granted and interest rate charged (stated as a premium above prime).

The results of the MANOVA are presented in Table 2. Based on a significance level of .05, the only significant main effect is that of core, non-core separation. This significance indicates that bankers utilize the separation of core activities in assessing future core earnings and cash flows. Thus, bankers are able to make better informed decisions. In addition, the interaction effect of core, non-core separation along with expanded segment reporting is also significant.

According to Cooley and Lohnes, when the MANOVA test statistic produces a rejection of the null hypothesis for a main effect or an interaction, separate univariate ANOVA designs "may suggest which of the elements of the vector variable are contributing most to the discrimination of the groups, or alternately, which variables are most affected by the treatments" (1971, p. 230). Therefore,
a three-factor (2x2x2) analysis of variance was performed for each response variable.

The results of the univariate test for the dependent variable of loan amount are presented in Table 3. The ANOVA results indicate a significant main effect for the core, non-core separation variable. The core, non-core separation/expanded segment interaction is also significant.

Table 3. 
Univariate Analysis of Variance Results for the Response Variable of Loan Size

<table>
<thead>
<tr>
<th>Variable</th>
<th>df</th>
<th>F-value</th>
<th>Prob. &gt; F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Segment Information</td>
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<td>.46</td>
<td>.4981</td>
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<tr>
<td>Core, Non-Core Separation</td>
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<td>6.95</td>
<td>.0089*</td>
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<td>Forward-Looking Information</td>
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<td>Segment/Forward Interaction</td>
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<td>.87</td>
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<td>.8607</td>
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<tr>
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</table>

Note: *Significant at the .05 level.

The mean loan amount granted by each response group is presented in Table 4. Figure 1 depicts a graph of the relationship between loan amount granted and the independent variables. The figure reveals that overall, the respondents extended more credit to firms with financial statements reflecting a separation of core and non-core activities. The bankers apparently use the core information in assessing long-term credit worthiness. However, for firms using the core activity separation in their statements, higher loans were received when they did not include expanded segment information. In comparison, firms which did not separate core activities received higher loans when expanded segment information was included. The core activity separation carries the main significance, but use of the core activity separation in management's analysis of each segment (as included in the expanded segment statements) may provide additional information. It is possible that the amount of additional information provided by or the high level of difference between the statements with core separation and expanded segment information and the statements which bankers now normally receive caused them to "mistrust" the new-looking statements. This "mistrust" may have caused bankers to lend less to companies with both core activity separation and expanded segment information.

The results of the univariate test for the dependent variable of interest rate premium are presented in Table 5. None of the main or interaction effects are significant. The proposed changes in financial reporting apparently do not reflect information which would affect interest rate decisions.

Conclusions

Before preparing its report, the AICPA's Special Committee on Financial Reporting met with creditors and investors to get their viewpoints about the usefulness of financial reporting. The user groups indicated that financial reporting needs to be expanded to include more valuable information. The Special Committee's proposed "Model of Business Reporting" re-
Figure 1.
Loan Amounts as a Function of Segment Information, Core Activity Separation, and Forward-Looking Information.
Table 5.
Univariate Analysis of Variance Results
for the Response Variable of Interest Rate Premium

<table>
<thead>
<tr>
<th>Variable</th>
<th>df</th>
<th>F-value</th>
<th>Prob. &gt; F</th>
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<td>Core, Non-Core Separation</td>
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<td>.1980</td>
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<tr>
<td>Forwar-Looking Information</td>
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<td>.64</td>
<td>.4257</td>
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<tr>
<td>Segment/Core Interaction</td>
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<td>1.26</td>
<td>.2630</td>
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<tr>
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<td>.7732</td>
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-engineers financial reporting to better serve user needs. This study partially supports the increased usefulness of the new reporting model.

The most important factor of the new model as reflected in determining loan amounts granted by bank loan officers is the separation of financial statement data into core and non-core activities. This separation provides relevant input into the decision-making process. Combining core activity separation with expanded segment information in financial statements may further increase the usefulness of the statements, even if bankers do not now fully understand the additional information. If all financial statements were prepared using the "Business Reporting Model", lenders would quickly learn how to best integrate the new information provided into their decision-making models.

The accounting profession must recognize the needs of financial statement users. Investors and creditors are asking for more valuable information to be provided in financial reports. The AICPA's model contains some valuable suggestions which should be genuinely considered by the FASB and the SEC.

Suggestions for Future Research

Many companies now voluntarily disclose much of the "soft" information which would become required disclosure under the AICPA Model. These "soft" disclosures include more forward-looking information, expanded management analysis, and reporting of performance measures. Future research might look at the market reactions to statements containing these voluntary disclosures as compared to simi-
lar companies which do not voluntarily disclose additional "soft" information. If aspects of the proposed model should become GAAP, then actual market reaction to the change in reporting can be measured.

References
