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# THE IMPACT OF STOCK OPTIONS COMPENSATION ON EARNINGS AND PROBABILITY OF BANKRUPTCY

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## ABSTRACT

*The objective of this study is to provide a basic and direct empirical investigation into the impact of stock options compensation on the earnings and the probability of bankruptcy of the firm. We test the relationship between measures of stock option values and different measure of earnings, including reported operating earnings and non-discretionary earnings. We use Altman (1968) Z-Score as a proxy for firm's probability of bankruptcy. The findings show that, regardless of the choice of proxy for earnings, using executive stock options could have positive impact on the value of the firm, as reflected in the positive and significant coefficients of the Black-Scholes measure in the regression of earnings on stock options. However, the impact of stock options compensation seems to be more pronounced when reported operating earnings are used as a proxy for earnings than when non-discretionary earnings are used as a proxy. We argue that the lower impact resulting when non-discretionary earnings are used as a proxy for earnings is more reliable since the reported operating earnings proxy do not adjust for earnings management. Our results also show that the use of stock options compensation is not related to an increase in the probability of bankruptcy of the firm. The results from this study contribute to the literature on executive stock options compensation.*

## INTRODUCTION

As the debate around excessive corporate executive compensation heats up in the United States in the era of Troubled Asset Relief Program (TARP), the debate on the efficacy of stock options compensation is not yet settled. The restrictions on executive salaries and bonuses by firms that benefitted from TARP is likely to spread to comparable companies in the US. To avoid high political costs while at the same keeping the option of providing incentives for managers to optimize firm value, Board of Directors may opt to increase equity related compensations such as stock options. Our assertion is informed by the fact that many firms that participate in TARP have been under intense scrutiny of the regulators and the congress such that the congress insists that the firms must pay back their TARP obligations before paying out the usual big cash compensation to executives. For more on TARP, see the Emergency Economic Stabilization Act of 2008, and Public Law 110-343.

The objective of this study is to investigate the impact of stock options compensation on earnings and probability of bankruptcy of the firm. Hanlon, Rajgopal and Shevlin 2003 (HRS) document the incentive alignment hypothesis of executive stock options, but the authors use reported operating performance as the dependent measure. We argue that the positive contributions of executive stock options to reported earnings documented in that study could have been exaggerated if one considers the real potentials of earnings management, and so corporate boards and compensation committees should exercise caution in the interpretations of

HRS finding. Therefore, in part, we examine executive stock options contributions to other measure of earnings after controlling for earnings management using nondiscretionary earnings as a dependent measure. While we find a positive contribution consistent with incentive alignment, the magnitude of such contribution is substantially lower. This suggests that nondiscretionary earnings will be a better measure of corporate performance as a guide for executive compensation decisions.

Prior studies have examined empirically and analytically a variety of issues ranging from the role of taxes in the decision to grant options (e.g., Klassen and Mawani, 2000), the choice between incentive stock options and nonqualified options (e.g., Austin et al, 1998), the tax deductibility of stock options (e.g., Balsam et al., 1996 & 1997; Mawani, 2003a), to the firm's disclosure behavior around the granting of the options (e.g., Aboody and Kasznik, 2000) as well as the tax and accounting income consideration for the cancellation of executive stock options (e.g., Mawani 2003b). However, very few (e.g., HRS; Kato et al, (2005); Sanders and Hambrick (2007)) have attempted to provide direct evidence of the impact of executive stock options on the firm's earnings. HRS conclude that every dollar of stock options (using Black-Scholes values) granted to the top five executives contributes \$3.71 to future operating earnings of the company over the next five years. Kato et al, using Japanese data and an event methodology, also conclude that operating performance improves with stock options. However Sanders and Hambrick (2007) have shown that while stock options do affect CEO behaviors, their heavy use produces more losses than gains. Other agency theorists wondered whether the traditional ESO plans for executives are not leading to creative ways of managing earnings while ignoring the cost of equity (Jensen, Murphy, and Wruck (2004).

These mixed results are manifestations that the question of whether stock options induce managers to take appropriate actions is still not settled. Researchers using the incentive alignment hypothesis argue that stock options compensation could be utilized for reducing the incentives asymmetry between managers and shareholders (e.g., Rajgopal and Shevlin (2002); HRS; Mawani, (2003a)). However, other researchers using the rent extraction hypothesis argue that this compensation package can be a conduit of transferring wealth from shareholders to the management/top executives (e.g., Johnson (2003); Aboody and Kasznik (2000); Baker, Collins, and Reitenga (2003)).

This study is motivated by the need to fill this important gap in the literature with the intent to examining the impact of granting options to top corporate executives on the firms' earnings and the probability of bankruptcy, and by extension the value of the firm. We build on the future operating earnings based model used by HRS which we believe has advantages over models using ex-post stock price performance like that used by Kato et al. Future operating earnings do not suffer from stockholder expectation problem embedded in ex-post price performance of shares. We adjust HRS's model for challenges suggested by HRS and Larcker (2003). We use the nondiscretionary component of earnings to avoid problems caused by earnings management. As HRS recognizes, if some firms overstate or understate earnings the results "might reflect earnings management as a function of ESO grant values rather than economic payoffs" (HRS, pp 37). We also took into account the alternative "forward-looking" research design suggested by Larcker (2003) to address same or similar research questions raised by HRS.

Furthermore, we use Altman's Z-score to test suggestions in the literature that ESO induce managers to take too many risks and may cause financial distress. We use the probability of bankruptcy represented by the Altman's Z-score as a proxy for a change in the cost of equity.

In effect, Altman's Z-score is inversely related to the cost of equity. The higher the Altman's Z-Score, the lower is the cost of equity. Results from our models are consistent with the incentive alignment hypothesis and are inconsistent with the overall conclusion of Sanders and Hambrick (2007) that stock options cause more losses than gains. However, they are consistent with Sanders and Hambrick (2007)'s less emphasized result that moderate levels of stock options (20% to 50%) do actually induce executives to become more risk neutral (less risk averse) with performance symmetrically divided between losses and gains. The overall implication of our results is that, at least in our sample of firms, partly compensating top executives with stock options not only induces them to improve earnings, it also motivates them to take moderate risks.

The rest of the paper proceeds as follows. Section 2 provides the theoretical background for the study and the hypotheses tested. Research methodology and design is the subject of section 3. Section 4 provides the results and findings of the study. The final section provides a summary and the potential limitations/constraints that this study may face.

### SAMPLE SELECTION

This study covers all US firms with available data in the Execucomp database as well as the Compustat tapes. The Execucomp database contains the compensation data for the top five executives of individual firms in the S&P 1500 (comprising those in the S&P 500 index, S&P 400 mid cap index and the S&P 600 small cap index). This data coverage ranges from 1992 to 2004. We extract the necessary data regarding the Black-Scholes value of an option from this database. For the entire model, we start with an initial sample of 2,507 firms with 17,970 firm years.

After interpolating and intersecting data from the two databases, deleting missing observations and conducting other data screening exercises, we have for the 'backward-looking' research design 858 firms with 2,579 firm-years. The forward-looking design comprises three different model categories viz:  $n + 1$ ,  $\text{Sum } n + 1 + 2$  and  $\text{Sum } n + 1 + 2 + 3$  (where  $n$  is the grant year). Therefore, the first has 1,666 firms spanning 8,384 firm-years; the second has 1,476 firms with 6,666 firm-years and the third has 1,283 firms covering 5,357 firm-years. (The discrepancies in the number of firms and firm-years between and within the backward and forward looking models are mainly due to the stronger data requirement constraints imposed by their underlying characteristics, as the final sample in each of these categories contains only firms and firm-year observations with required compensation and financial data. Also note that we use firm-years and not firm-quarters or other potentially usable periods because the Execucomp which is the source of our stock options data is available on annual basis.) We believe that the larger sample size and the longer sample period relative to HRS better maximize the generalizability of findings in this critically important area of compensation research in empirical accounting.

To avoid complications caused by differences in reporting rules, the sample firms are required to be incorporated in the US. This is consistent with Matsunaga (1995). Also, regulated firms such as utilities companies (SIC codes 4900-4999) and financial institutions (SIC codes 6000-6099) are excluded so as to control for the differential incentives and motivational situations faced by executives operating in those regulatory environments relative to their counterparts in the non-regulated industries.

## CONCLUSIONS

Granting stock options is a strategic corporate activity aimed at achieving certain corporate objectives, theoretically in the overall shareholders' ultimate interests. Executive stock options compensation has continued to remain an increasingly substantial component of management compensation packages.

Not many studies have provided direct evidence of the impact of executive stock options on the primary components of firm value which include earnings and cost of discounting the earnings. A notable exception is the study of Hanlon, Rajgopal and Shevlin, 2003 (HRS) which examined the executive stock options vis-à-vis future earnings of the firm. However, our findings extend HRS findings by showing in part that nondiscretionary measure could be a more appropriate guide to compensation committees and corporate boards when making executive compensation decisions. In fact, our findings could have potential public policy implications and ramifications giving the contemporariness of executive compensations in the debates surrounding current global economic turmoil. Generally, studies on employees/executive stock options appear to assume that the value of the firm is impacted by the use of this compensation package and thus build the focus of their investigations on this premise. While such an assumption could be well placed, it is yet sufficiently unclear which component of the firm value is individually or jointly impacted by the use of stock options to compensate executives. Therefore, this study is being motivated by the need to fill this important gap (and generally the taken-for-granted view) in the literature with the intent to examining the impact of granting options to top corporate executives on the firms' earnings, cost of capital and by extension the value of the firm.

The concept of accounting earnings and the cost of discounting such earnings is central to the value of the firm. Theoretically, therefore, the effect of using stock options to compensate executives should be reflected in those two major components of the firm value i.e. the earnings component and the cost of capital or discount rate associated with the earnings. Thus, central to this study is the firms' cost of discounting earnings, as well as the various measures of earnings. The volatility of the firm's earnings and the probability of bankruptcy are used to capture the responsiveness of the firm's cost of capital to the use of stock options to compensating top executives, while the measures of earnings employed are the reported operating earnings and 'nondiscretionary' earnings. Overall, both the lagged model (i.e. 'backward-looking') design and the 'forward-looking' model design findings collectively and consistently provide strong evidence of incentive alignment hypothesis, meaning that it is in the interests of shareholders to remunerate top corporate executives with executive stock options as this corporate granting behavior strongly motivates executives towards improving future corporate performance, an action that will be in the interest of shareholders. The evidence becomes more compelling as the findings consistently hold if one considers not only reported operating performance measures, but the other measure of the earnings believed to reflect the concept of 'true' performance as such a performance measure is devoid of managers earnings management actions, motivations for which are stronger when there are opportunities to maximize compensation payoffs like one can find in executive stock options. In other words, we could not find support for the competing rent extraction hypothesis, as executive stock option grants improve future corporate performance as measured by the earnings measures.



Corroboratively, the empirical findings in relation to the proxy of cost of discounting earnings as measured by the Altman Z-Score statistic of bankruptcy probability also reinforce the earnings components findings, even as volatility increases in executive stock option grants.

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# OPTION CHARACTERISTICS OF CORPORATE INCOME TAX

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## ABSTRACT

*The conventional wisdom has been that lowering the corporate tax will enhance economic growth and hence create more jobs. If merely lowering the tax rate can accomplish this, then elimination of corporate tax should create an economic boom. However, despite this possibility, the United States has yet to make a shift to Value Added (VAT) tax system. Moreover, one of the popular criticisms of the corporate form of business organization is the "double taxation" of dividends. Even though this concept assumes that taxes follow the money rather than the economic unit, policy makers tend to advocate elimination of the tax on dividend income. In addition, elimination of corporate tax according to the stance of these advocates should spur economic growth and avoid the perceived double taxation of dividends. Yet, no pro-business entities have proposed the elimination of corporate taxes. The objective of this paper is to demonstrate that the corporate tax system provides an option contract on the earnings of the corporation. The corporation is the seller of the contract, while the government is the holder of the call option contract. Thus the existence of corporate tax in and of itself has value to the corporation and hence the shareholders.*

## INTRODUCTION

The debate on the level of corporate tax and its effect on entrepreneurship and economic growth are age-old. Over the years most of this debate has centered around the need to pay for public goods versus the negative impact of taxes on investment decisions. In a market economy, the government must pay for the public goods it provides by levying taxes on its citizens. The corporation, as a legal economic unit, must also share this burden in as much as it consumes public goods. In the United States, the cost of public goods and government is allocated based on the income of its citizens, hence the corporate income tax burden on corporations. Under the current tax system, corporations face a maximum average tax rate of 35%, with the marginal tax rate going as high as 39% for the \$100,001 to \$335,000 income tax bracket. According to the *Internal Revenue Service Statistics of Income- 2005*, corporations paid an average tax rate of 25.98% on their income. As a percent of gross receipts, the corporate income tax represented only 1.374%.

Garner (2005) calculated the percent of federal receipts from corporate income tax to be 10.1% in 2004. This number contrasts with 82% from combined individual income taxes and social insurance and retirement receipts. Based on the attention given to corporate tax issues, one would expect its share of federal receipts to be much higher. This statistic seems to corporate tax trivial. The relevant statistic is not the taxes actually paid by the corporations, but the taxes collected from consumers by the corporations. Corporations pay for all their expenses from the revenue generated from operations. Taxes are a business expense, hence deductible from revenues. Good capital budgeting practice requires that all incremental cash flows associated with a project be included in the capital budgeting decision process. The relevant tax rate for this

process is the marginal tax rate. The difference between the projected taxes and actual taxes paid on the project is the source of the benefit and the reason for the resistance to the elimination of the corporate tax system.

Corporate taxes have a way of adversely influencing investment decisions. The concept of accelerated depreciation groups assets into depreciable lives that are independent of the economic life of the asset. This practice tends to arbitrarily penalize investments in assets grouped into longer lives while rewarding shorter-lived assets whose shorter depreciable lives increases the present value of a project's expected cash flow and hence its acceptability.

Another distortive effect of corporate taxes, resides in the fact that taxes are a cost of doing business. The existence of corporate taxes affects the cash flow available to suppliers of capital. Since investment projects are evaluated on an after tax basis, the level of operating income needed to achieve profitability is elevated. Thus, the corporate income tax system reduces the pool of available investments.

The distortive effects of corporate taxes are perhaps most salient in capital structure decisions. Interest payment to creditors is considered a business expense for tax purposes, where dividend payment to shareholders is not. It is because of this disparaging treatment of equity that led Modigliani and Miller (1958) to conclude that in the absence of risk and bankruptcy costs, the optimal capital structure would be 100% debt. The tax shield from interest payment reduces the cost of capital and hence increases the value of the firm. In response to this preferential treatment of debt, opponents have advocated eliminating the personal income tax on dividends, describing it as double taxation.

It is apparent that the corporate income tax system plays a major role in the investment decisions of corporations. These decisions in turn determine the output and employment levels within the economy. Despite these distortions, the movement to eliminate the corporate income tax systems is virtually non-existent. The objective of this paper is to show that the lack of interest in abolishing the U.S. corporate income tax is at least partially due to its value to the firm in the form of options. The rest of the paper is organized as follows: section II looks at the role of value-added/consumption tax as an alternative source of revenue for the government. Section III develops the option value model of the corporate income tax. Section IV provides some concluding remarks.

## **OPTION VALUE OF THE MODEL OF CORPORATE INCOME TAX**

The use of option models to value contingent claims is no longer a novelty in financial management practice. Capital budgeting decisions can now be refined using real options embedded in the project. Such options include expansion, timing, abandonment, scale and strategic implications. These are actions that the management can take given its experience as the project unfolds. Ross et al. (2008, pp651) discusses the implicit options embedded in capital structure decisions and the concept of stocks and bonds as options. The bondholder's position is described as an embedded option: as a creditor owed principal and interest payments by the shareholders or as a market participant having "sold a put option on the firm to the stockholders with an exercise price" equal to the principal and interest payments. Alternately, shareholders own a call option on the firm with an exercise price equal to the value of the debt. Bondholders assume the role of owners of the firm who have sold a call option to the shareholders. If the value of the firm exceeds the value of debt, shareholders exercise the option by retiring the debt.

If on the other hand the value of the firm is less than the value of debt, bondholders take possession of the firm through bankruptcy proceedings.

The above situation is analogous to the government/firm relationship on corporate taxes. The corporation through its management has essentially sold a call option on the firm revenues to the government. Consider a firm's common-size income statement on a "per unit of product sold" basis. From capital budgeting studies, firms make decisions based on an after-tax cash flow. Thus, the unit price received by the firm has embedded within it the portion of the tax liability for the project. Although the consumer has paid the portion of the corporate tax for the consumption of the product or service, the government does not have any claim to this tax until the corporation has generated enough revenue to cover its costs, interest expense included. The total cost at which taxable income equals zero acts as the exercise price of the option. For revenues greater than the exercise revenue, the government receives the contribution margin times the marginal tax rate. As such, the government's receipt of tax revenues is actually a contingent claim dependent on how well the corporation controls its expenses and the degree of public acceptance of the firm's goods/services.

Following the approach of Burger-Helmchen (2007), the conceptual analogy between corporate tax options and financial options following the Black-Scholes (BS) model, is depicted as below:

### Similarity Between Financial Options and Corporate Tax Option

Variable	Financial Option	Corporate Tax Option
E	Exercise Price	Operating cost plus Interest expense
S	Stock Price	Revenue from operations
T	Time to expiration	Tax period
$\sigma^2$	Variance of the stock returns	Variance of the firm's annual revenue
R	Risk-free rate of return	Risk-free rate of return

With these variable definitions, the Black-Scholes option-pricing model can be used to calculate the value of the corporate tax option.

### Black-Scholes Model

$$C = SN(d_1) - Ee^{-Rt} N(d_2) \quad (1)$$

Where

C is the value of the call option

$$d_1 = \left[ \ln \left( \frac{S}{E} \right) + \left( R + \frac{\sigma^2}{2} \right) t \right] / \sqrt{\sigma^2 t} \quad (2)$$

$$d_2 = d_1 - \sqrt{\sigma^2 t} \quad (3)$$

$N(d)$  = Probability that a standardized, normally distributed, random variable will be less than or equal to  $d$ .

### CONCLUSION

The objective of this paper was to show that despite the opposition to the corporate tax system and its distortive effects on investment decisions, corporations and shareholders have not attempted to repeal the tax system because the benefits that result from the existence of the corporate tax system outweigh such concerns. It was further hypothesized that this benefit is tied

to an embedded real option in the corporate tax structure. The results of this study have demonstrated the existence of this option. In addition, it has identified the variables that drive the magnitude of the option in the context of the Black-Scholes model parameters.

This study has tax policy implications. Given that less than 2% of corporate revenue goes to taxes, whereas households (consumers) pay more in expected taxes to corporations, government can raise more revenue from taxes by switching from the current corporate income tax to a consumption tax without raising taxes on consumers. Because corporations will lose the option to retain the collected taxes, advocates of this proposal should be ready to face stiff opposition. The arguments of regressivity and administrative costs made by the supporters of the current system are merely a cover-up for the actual benefit of the system: the value of the tax option. The extension of this study will be an empirical determination of the magnitude of this option value of the corporate income tax system.

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# **AVONDALE ESTATES: A CASE STUDY IN GOVERNMENTAL ACCOUNTING AND AUDITING: AN HISTORICAL APPROACH**

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## **ABSTRACT**

*The seventy - seven years of accounting evolution that separates the audits of 1928 and 2005 under different accounting and auditing standards is examined through a cross-disciplined case study that compares the historical 1928 and the contemporary 2005 financial statements and the accompanying audit reports of Avondale Estates, Georgia. The 1928 and 2005 reports and financial statements of this municipality along with the municipality's current budget information accessible over the internet can be used in a number of ways to enhance the instruction of Governmental Accounting at the undergraduate, graduate and doctoral levels. In addition to aiding in the teaching of current Governmental accounting standards, the case also can be used to give the student a historical perspective on Governmental Accounting and the Accounting Profession. By comparing the accounting and reporting standards used in 1928 and 2005, the student will gain an understanding of the evolution of accounting thought. Moreover, the auditor's reports for the two periods illustrate the historical and continuing public service role of the CPA Profession as detailed in ET Section 53 of the AICPA Professional Standards (2002). Thus, this case study gives the accounting instructor a useful vehicle for teaching accounting history and thought.*

*Key Words: governmental, history, teaching, municipal, stewardship, ethics, case study, standards, GASB 34.*

## WHAT AFFECT HAS SARBANES-OXLEY HAD ON HIRING PRACTICES OF ACCOUNTANTS?

Wilbur R. Clark, Stephen F. Austin State University

### ABSTRACT

*Business failures from fraud and greed during the late 1990's and early 2000's, led to Congressional passage of The Sarbanes-Oxley Act of 2002. This act is intended to curb the fraud and abuse of accountants and senior managers of large business firms. Has there now been a change in accountant hiring practices? In an attempt to determine if this may be the case, a mailed survey, with 48% return rate, was conducted. The accountants surveyed were requested to indicate (1) which characteristics/qualifications were desired at the time they graduated from college and (2) what those characteristics/qualifications are today. The survey provided the accountants with a list of twenty characteristics/qualifications compiled from advertisements in magazines, newspapers, and online job listings. The respondents were also asked to supply any characteristics or qualifications that were not listed. Some of these additional items included study skills, language skills, willingness to work, etc. A preliminary review of the data indicates that the act has had some affect. The majority of the respondents surveyed list either ethics or integrity as the most important characteristic today and technical skills were more important when the respondents graduated from college.*

# DIFFERENCES AND AGREEMENTS ON SYLLABI COMPONENTS BETWEEN FACULTY AND STUDENTS IN THE PRINCIPLES OF ACCOUNTING COURSE

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## ABSTRACT

*Faculty often spend a great deal of time preparing their course syllabi. What goes into the syllabus is often dictated by requirements of their respective universities and by various accrediting agencies. In addition, the faculty may want to relay information that they think is most important to their students' success and wish to stress this information in the course syllabi.*

*However, the information that the faculty feels most important may not be the same as what students feel most important. To make the syllabi more useful to students, faculty members need to know what information the students most want. This study identifies 28 items required or found on most course syllabi and asks both faculty and students to rate their importance on a 7 point Likert scale. A Welch ANOVA was used to test whether significant differences exist as to faculty and student perceptions.*

## INTRODUCTION

The syllabus is a course contract between a faculty member and the students and contains a great deal of information. What a faculty member includes in the syllabus is often dictated by their respective university or accrediting body. When preparing their syllabus or when reviewing it with the students on the opening day of class, a faculty member may highlight and put more emphasis on the things the faculty member feels the students need to be successful in the course and may, therefore, cover these topics in more detail.

Students on the other hand, may consider certain items to be more important than the faculty member thought. If so, then the faculty member should be aware of the students' perceptions and place greater importance on the items in the printed syllabus and class introduction.

A survey was conducted in the Principles of Accounting course at 31 academic institutions to compare faculty and student perceptions as to the relative importance of various items typically found on course syllabi. When having their students complete the survey, the faculty member also completed a separate survey asking the same information. A seven-point Likert scale was used to ask the students 'how much attention they paid' and the faculty member 'how much attention they thought the student paid' to 28 items found on a typical course syllabus, with '1' being 'No Attention at All' to '7' being 'great deal of attention.' A Welch ANOVA was used to test whether the perceptions of the faculty members were significantly different from the perception of the students. Of the 28 items surveyed, 16 were found to be significantly different between the two groups.



## RESEARCH METHODOLOGY

Accounting faculty at 50 colleges and universities were contacted and asked to participate in a study pertaining to the course syllabus. The contacted faculty members were asked to administer a survey questionnaire to students enrolled in an introductory accounting course. Some faculty stated they were interested in the research concept but were not teaching an introductory course in the spring term. Other faculty stated that institutional policies or other reasons made them unable/unwilling to participate in this study. Faculty at 31 institutions in 19 states agreed to administer the survey questionnaire to students enrolled in the Principles of Accounting course. Faculty who agreed to have their classes participate in the study were mailed a package that contained a specified number of student survey questionnaires and a pre-paid, pre-addressed envelope in which to return the completed student questionnaires. Each faculty participant was asked to distribute the student questionnaires to willing volunteers. The students answered the survey questions after their class session.

The instructions at the top of the survey were: "The Syllabus for a course is an 'agreement' between the instructor and the students in a course. We are researching what factors students feel are important to include in a Syllabus." The survey instrument contained two sections. The first section contained 28 items that frequently appear on a course syllabus. For the most part, the items used in this study were also used in the study by Becker and Calhoun (1999). A seven-point Likert scale was assigned to the student responses (where "1" = "no attention at all" to "7" = "great deal of attention"). Each item in this section had a corresponding reference to a course syllabus component (e.g., "attendance policy," "examination and quiz dates," "late assignment policy," "course goals and objectives," and "required prerequisite coursework to enroll in the course").

The second section of the survey requested demographic data from the individual student respondent. Specific questions pertained to the respondent's gender, age, year in school, primary field of study, and grade point average. Each faculty member who agreed to distribute the surveys to undergraduates received a separate envelope with five copies of a faculty version of the survey and five self-addressed, pre-paid envelopes. The faculty member was asked to complete one of the faculty surveys and to distribute the other four faculty surveys to colleagues (with the enclosed envelopes). Specific questions inquired if the institution was either private or state-assisted, if the school of business was accredited by the Association to Advance Collegiate Schools of Business-International (AACSB), the state in which the college/university was located, and the approximate "full-time equivalent" (FTE) size of the student body.

## RESULTS

The total number of students responding to the survey was 1,726. Students at state-assisted institutions accounted for 71.4 percent (1,233 of 1,726) of the respondents, although only 61.3 percent (19 of 31) of the colleges and universities that administered the survey were public institutions. Approximately 39 percent (672 of 1,726) of the student respondents were at institutions accredited by the AACSB. Using full-time equivalent (FTE) enrollment as a proxy for the size of the institution, the data reveals that almost half of the student group were from institutions that had student enrollment at less than 5,000 FTE. The number of male and female respondents was approximately equal. Most students were in their second (44.8 percent) or third (31.6 percent) year of collegiate studies. Although the most frequent majors reported by the

students were within the business disciplines, with Management being cited the most frequently (18.4 percent of the students), at least 15 academic majors were represented by the respondents. Based on averages, the typical respondent was slightly over the age of 21, had a 3.0 GPA, and was taking slightly more than 14 credit hours of classes in the semester of the survey.

Of the 56 faculty members responding to the survey, 51.8 percent were at AACSB institutions. Similar to the student group, almost 68 percent (38 of 56) were teaching at public colleges and universities and exactly half of the instructors were working at institutions with student enrollment at less than 5,000 FTE. More males than females responded to the survey. Most of the respondents had obtained a doctorate degree, although 30.4 percent of the instructors report having acquired an MBA as their highest degree of education. The number of MBA respondents is not a surprising result, given that many accounting programs only require a master's degree to be qualified to teach the accounting principles courses. Also, the data indicate an almost equal spread across the academic ranks, and a variety of experience levels accumulated by the faculty respondents.

The means for each survey item were created from the responses on a seven-point Likert scale, where both faculty and students indicated their perceived importance ("1" = "no attention at all" to "7" = "great deal of attention") of a given syllabi component. The mean score for each survey item for each group was computed. The faculty group size varied from 54 to 56 responses, depending on the item. The student group size varied from 1705 to 1726 responses. Ideally, each group would be the same size with a normal distribution. Yet, if each group is larger than 30 subjects, a traditional ANOVA procedure is robust against moderate departures from normality (Lehman et al. 2005). However, Stevens (2002) suggests that if the number of subjects in the largest group is more than 1.5 times than the number in the smaller group, the assumption of equal variances on the responses of the groups may be violated. Therefore, for each syllabi component the mean scores of each group were compared using a Welch ANOVA as a conservative approach. The Welch ANOVA, which will yield the same results as a Welch *t*-test, will accommodate the difference in sample size between the two groups as well as unequal variances (Welch 1951).

Instructors' and students' perceptions on the importance of syllabi components differ significantly ( $p < .001$ ) on 11 of 28 items (or 16 out of 28 components when  $p < .01$ ). Faculty considered the following items more important than students: "Title and authors of textbooks and readings," "Course information (for example, course number and title, section number, credit hours)," "Required prerequisite coursework necessary to enroll in the course," "Instructor information (for example, name, title, office location, phone number, e-mail address)," "Instructor's office hours," and "Grading procedure and policies." In contrast, students considered the following syllabi components more important than faculty members: "Whether extra credit can be earned," "Type of examinations and quizzes (for example, multiple choice, essay)," "Dates and time of special events that must be attended outside of class," "Available support services (for example, tutoring, computerized study guides)," and "Where to obtain materials for class (for example, texts, readings, lab materials)."

## DISCUSSION AND CONCLUSION

The content of the course syllabus is important to a number of stakeholders for several different reasons. First, the syllabus documents the course content and policies. Second, the syllabus communicates the instructor's expectations and requirements necessary for a successful

learning experience. Third, the syllabus is useful for resolving disputes between instructors and students. Fourth, the course syllabus is closely scrutinized during the accreditation process. Finally, the syllabus may influence the prospective student's decision to enroll into the class. Given all of these important reasons, it is surprising that the syllabus has received so little empirical study. The primary purpose of this study was to determine if students and faculty placed different levels of importance on items typically included in a course syllabus.

The results of this study do indicate that faculty and students differ in their opinion on the importance of several syllabi components. In general, the accounting instructors considered procedural and contact information as more important than the student subjects. Procedural items, such as required prerequisites or grading procedures, were rated higher in importance by faculty than students. Likewise, contact information such as the instructor's office hours or the instructor's name and phone number received higher scores by faculty. In addition, basic information such as the course title, course number, or the title and authors of required textbooks were perceived to be more important by the accounting instructors.

In contrast, students appear to place more emphasis than faculty in factors that may affect their grades or items that involve out-of-class activities. For example, students were more interested in whether extra credit assignments were available or the type of examinations/quizzes used in the course. Some instructors believe that extra credit should not be necessary, and others insist that they will offer extra credit only if special circumstances warrant the additional assignment. Thus, they may feel that information on extra credit assignments should not be in the syllabus and presented on the first day of class. Also, some faculty may feel that if a student really learns the material, the format of the exam should not affect the student's score significantly. Therefore, they may place less importance on communicating the types of exams and quizzes they will use in the course. Concern for their grades may have caused students to rate available support services (e.g., tutoring) higher than faculty members. While instructors may think that special events outside of normal class times should be a normal part of the university experience, students may be scoring this item higher than faculty because they will have to adjust the schedules of their other activities (e.g., work) to attend the event. Finally, faculty may assume that obtaining course materials should be a simple matter for students, but students may have a greater appreciation for the convenience provided by information in the syllabus that would help them to locate and obtain the materials.

This study focused on comparing faculty ratings to students' ratings on the importance of particular syllabi items in the hope of developing further insights that improve communication and course administration. The results of the study reveal the amount of importance that students assign to different syllabus components significantly differs from faculty perceptions of the same components. This study extends previous research on syllabus components because no other study has been conducted on syllabus components that compared accounting instructors and students enrolled in an accounting principles course. The only study conducted in a business field tested the recall of syllabus elements and by upper-level marketing students.

However, this study does not specifically address how an instructor should incorporate these findings into their syllabus. Becker and Calhoun (1999) suggest alternative strategies may be used to communicate syllabus information. An instructor who wishes to satisfy student interests can use the results from this study to place the student's highest-rated components on the first page of the syllabus or to give the information a prominent display using word processing features (e.g., boldface type, different font sizes, etc.). An alternative strategy is to use the results to determine where student interest is lower, but the instructor believes the

information is highly important. Then, the instructor may attempt to overcome the lack of interest by making those syllabus items more prominent. A variant of this approach would be to create special handouts of the items the instructor considers the most important, or conversely, if the instructor feels their syllabus creates information overload, to eliminate unnecessary information and to use separate handouts for topics of lesser importance.

A limitation of this study is survey response bias, which is inherent in all survey research. However, the large sample size should overcome most objections to this limitation. Furthermore, the study's institutional response rate is 62 percent, as 31 of 50 schools agreed to participate in this study. Further research might look for other factors that influence syllabi components. For example, how much influence do accreditation agencies exert upon the syllabus? A longitudinal study investigating changes in syllabi components over time may be of interest to educators and administrators. Finally, a study comparing business students with differing majors or personality types and their preferences on syllabi components could yield interesting results. In conclusion, we hope that faculty members may use the findings of this study to reassess their syllabi and perhaps include, emphasize, or provide more complete explanations of those items that are of the greatest concern to their students.

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# LIQUIDITY AND FINANCIAL LEVERAGE RATIOS: THEIR IMPACT ON COMPLIANCE WITH INTERNATIONAL FINANCIAL REPORTING STANDARDS (IFRS)

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## ABSTRACT

*This paper investigates how liquidity and leverage ratios exert significant effect on the degree of compliance with International Financial Reporting Standard disclosure as measured by Balance Sheet and Income Statement of Publicly Listed Corporations. The researcher analyzed the effects of current ratio, quick ratio, debt equity ratio and interest coverage ratio on compliance with IFRS. The compliance audit output was used by the author to calculate the financial statement disclosure index using a dichotomous procedure to score each of the company indices. This study covered 100 publicly listed corporations in the Philippines from different industries out of the 244 PLCs. The companies belong to different sectors / industries such as Financials, Industrial, Holding Firms, Property, Services, and Mining and Oil. Published annual reports of the aforesaid companies have been used as a secondary source.*

*Disclosure indices were constructed from 475 items of Balance Sheet disclosure checklist and 263 items of Income Statement disclosure checklist based on the compliance audit consistent with the International Financial Reporting Standard (IFRS) Report Checklist.*

*Using multiple regression analysis, the author regressed each of balance sheet index, income statement index and total of income statement – balance sheet indices, against liquidity ratios and financial leverage ratios such as current ratio, quick ratio, debt ratio and interest coverage ratio.*

*Finding suggests that none of the indices exert a significant effect on the financial variables cited based on the computed t-statistics whose p-values are greater than the level of significance ( $\alpha = 0.05$ ). Therefore, the null hypothesis, that liquidity and financial leverage have no effect on IFRS when the latter is expressed in terms of Balance Sheet and Income Statement indices, is accepted.*

# OWNERSHIP STRUCTURE AND FINANCIAL PERFORMANCE IN THE TRUCKING INDUSTRY

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## ABSTRACT

*We compare the financial performance of firms with public and private equity in the trucking industry. From an agency theory perspective, the owner-manager agency conflict should be less pronounced in firms with privately held equity than it is for firms with publicly held equity. However, as the level of competition within an industry increases, economic Darwinism leads to a strong focus on efficiency improvements regardless of the ownership structure of individual firms. Given the level of competition in the trucking industry, we expect the weaker intensity of the agency conflict in privately held firms to mitigate the role of accounting as a performance measure. This weaker role should be reflected in private firms exhibiting poorer financial performance than their public counterparts. We analyze financial performance from the perspective of return of net operating assets, current ratio, interest coverage ratio, and firm growth. The first contribution of our study is to shed additional light on the differences in the operating environment of public and private firms. The second contribution appears through our focus on the trucking industry. We are able to provide some evidence on the importance of agency implications of the separation of ownership and control within a highly competitive industry.*

# **TEACHING ETHICS AT THE UNIVERSITY LEVEL: WHY DO WE HESITATE TO ADDRESS THE ISSUE?**

**Melinda Kushniroff, Millikin University**

## **ABSTRACT**

*Although research has been done in the ethics learning discipline, implementation in our colleges and universities remains lax at best. With hundreds of college accounting programs in the U.S., why is it difficult to find a college curriculum that emphasizes ethics? Most accounting degree curricula, if they offer an ethics course at all, only offer one class and that often is a small percentage of the overall curriculum – less than 3% in most cases. Yet, if someone were to ask the deans of these colleges if they believed ethics were important, they would almost all answer in the affirmative. The question then becomes why is there not the emphasis on ethics-based coursework?*

# **CAPITAL ASSET REPORTING BY THE FIFTY U.S. STATES: A 2009 STATUS REPORT**

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**Keren H. Deal, Auburn University Montgomery**

## **ABSTRACT**

*This study identified current practices for reporting capital assets by the 50 state governments of the United States. The survey determined the States' compliance with financial reporting requirements for capital assets as prescribed by the GASB. In addition, we present the 50 state governments' current choice of reporting their infrastructure and intangible assets.*

## **INTRODUCTION**

Currently required capital asset reporting by State and Local Governments (SLGs) began in June 1999 with the issuance of Governmental Accounting Standards Board (GASB) Statement 34. Capital asset reporting under Statement 34 requires that capital assets are to be presented within the SLGs Government -Wide Statement of Net Assets, Statement of Activities, Notes to the Basic Financial Statements, and Required Supplementary Information. The government-wide statements are part of the Basic Financial Statements. Capital assets include land, buildings, equipment, improvements other than buildings, intangibles (patents, copy writes, certain software, and other rights) and infrastructure. Infrastructure assets include "roads, bridges, tunnels, drainage systems, water and sewer systems, dams and lighting systems (1)".

The changes fostered by Statement 34 were basically two parts. First, capital assets, other than infrastructure and intangibles would be subject to depreciation and reported net of depreciation. However, infrastructure assets could be reported net of depreciation or be reported without depreciation, using a Modified Method. Second, intangible asset reporting and amortization was at the discretion of the SLGs management.

Prior to Statement 34, infrastructure assets and intangible assets were basically unreported by SLGs. Because intangibles did not require reporting by 34, intangibles were a non-issue to the profession during the exposure draft comment period. The issue that did generate professional interest, comments and discussion was infrastructure assets reporting. In fact during the latter part of the 1990s, the governmental accounting literature and conferences contained many presentations with opinions and arguments for and against the proposed infrastructure reporting alternatives. The Modified Method was developed by GASB during this period as an alternative to infrastructure depreciation only after "extensive due process that infrastructure reporting is vital to demonstrating accountability for all government assets and the cost of its services (2)."

## **PURPOSE OF THIS PAPER**

The purpose of the paper is three-fold. First, a review of the fifty U.S. state governments' 2009 Comprehensive Annual Financial Report (CAFR) to determine the individual and



collective capital asset reporting and compliance with the GASB 34 requirements. Second, the CAFR review will be used to determine how the states actually report infrastructure assets. Do they depreciate or are they using the modified method? The reason for the query is informational only which stems from the strong arguments against infrastructure asset depreciation and the ready acceptance of the alternative modified method when originally proposed and incorporated within Statement 34. And third, the review survey will determine if intangible capital assets are currently being reported and if so, are those intangible assets being amortized. The results of the intangible inquiry will provide a base line for intangible reporting prior to the implementation GASB Statement 51, Accounting and Reporting for Intangible Assets, which becomes effective on a phase in basis for the states with fiscal year beginning after June 15, 2009.

## PAPER ORGANIZATION

The paper is organized in five sections. The Introduction states the reporting issues, purpose of the paper, and paper organization. The Introductory section is followed by a General Background section which briefly discusses the development of GASB reporting standards leading up to Statement 34. The third section of the paper presents the Study Methodology including a brief discussion of the authors' archival research techniques and survey methodology. The fourth section, Study Findings, presents the authors' study findings and descriptive data regarding the paper's purposes. The paper's final section, Summary and Authors' Comments, is then presented.

## GENERAL BACKGROUND

Basic financial statements for state and local governments (SLG) have developed over the years as a result of accounting practice and the issuance of reporting standards by the Governmental Accounting Standards Board (GASB) and its predecessor organizations. In 1987, the GASB issued its first concept Statement, *Objectives of Financial Reporting*. This document confirmed that financial reporting should assist in fulfilling governments' need to be publicly accountable and should enable users to assess that accountability. Financial reporting should (1) provide information to determine if current year revenues were sufficient to pay for current year services, (2) demonstrate compliance with the legally adopted budget and other finance-related or contractual requirements, and (3) provide information to determine whether the entity's financial condition improved or deteriorated as a result of operating activities (3).

The new governmental financial reporting model was initially placed on the project agenda when the GASB was established in 1984. Concept Statement No. 1 and the results of several research reports sponsored by the GASB provided the additional information to move this project forward. From 1992 through 1999, the GASB exposed specific components of a new financial reporting model and alternative financial reporting models through due process. One of the highly controversial components of the proposed financial reporting model was the reporting of and the depreciation of capital assets, especially infrastructure assets. Now, capital assets with the inclusion of infrastructure assets are required to be reported under GASB Statement No. 34, *Basic Financial Statements- and Management's Discussion and Analysis - for State and Local Governments*. This change came after extensive due process which included infrastructure reporting as vital to demonstrating accountability for all government assets and the cost of its services (4). Required reporting of infrastructure assets would not only improve the

accountability of management's stewardship but could promote the preservation of infrastructure assets and decrease the likelihood they will be allowed to deteriorate (5). This reason, as well as the desire to improve governmental financial reporting requirements, prompted the GASB to propose a new financial reporting model for state and local governments.

The new standards required SLGs to capitalize infrastructure assets and depreciate those assets or use a modified approach which would charge operations with an annual maintenance cost to preserve the infrastructure assets rather than depreciate them. This new model financial reporting by SLGs was implemented over three years, beginning in 2001 based on government size:

<u>Implementation Period</u>	<u>Government Size</u>
Periods beginning after June 15, 2001	Phase 1 - Total Revenues of \$100 million or more
Periods beginning after June 15, 2002 million	Phase 2 - Total Revenues of \$10 million and less than \$100 million
Periods beginning after June 15, 2003	Phase 3 - Total Revenues less than \$10 million

## STUDY METHODOLOGY

The methodology selected for this study was archival research in the primary domain (6). The original documents studied were found in the CAFRs of the fifty state governments for fiscal years ended 2009. All fifty states have their CAFRS available "on-line". The fifty states were selected for this study because of their financial size, reporting complexities, myriad classes of assets and resources, as well having history due to the fact of being one of the earliest implementers of the requirements of Statement 34 due to their size. A list of major capital asset reporting requirements mandated by Statement 34 were placed in a survey instrument to be used for gathering capital assets reporting practices by the individual states. Techniques of scanning and observation as well as reading the financial statement disclosures for additional clarity and understanding were used to determine the extent and type of capital asset financial reporting by the fifty states. Data for each state regarding their reporting of capital assets was then recorded on the survey instrument. All fifty states surveyed were then combined in an excel spread, tabulated, and expressed as quantitative data and descriptive statistics. The authors then compared the findings to the initial research questions summarized the findings in tables that follow the initial research questions. A summary of the findings from this study is presented in the following section.

## STUDY FINDINGS

GASB 34 requires capital assets that are being or have been depreciated (subject to depreciation) to be reported net of accumulated depreciation in the statement of net assets. Capital assets that are not being depreciated (not subject to depreciation) should be reported separately if the government has significant amount of these assets. Capital assets also may be reported in greater detail than depreciable or non-depreciable, such as by major class of asset (7). The class of assets, Infrastructure, is to be depreciated or reported under the 34 allowed "Modified Method (8)". Although Statement 34 does not require SLGs to report ownership of, or amortization of Intangible assets, 34 does suggest that if owned they should be reported in the capital assets section of the Statement of Net Assets and amortized (9). Finally Statement 34

requires that the total capital assets should be reported net of depreciation. Table 1 summarizes the fifty states current reporting of capital assets.

Information Reported:	No.	%
Capital assets subject to depreciation net of accumulated depreciation	26	52
Capital assets not subject to depreciation	29	58
Capital assets reported by class	21	42
Infrastructure assets	25	50
Intangible assets	1	2

There were different presentations of capital asset information reported in the Statement of Net Assets by the states. Twenty-six (52%) of the states reported depreciable assets net of accumulated depreciation in the body of the statement. Twenty-nine (58%) of the states reported the non-depreciable capital assets in the body of the statement. Twenty-one (42%) of the states reported capital assets by class. Those states that did not report this information in the body of the Statement of Net Assets did disclose the information in the notes to the financial statement.

Only one state (2%) reported intangible assets in their financial statement (10). The intangible asset was being amortized and reported in a Component Unit of a non-major fund and not the Primary Government. The question of intangible asset statement disclosure was incorporated into the survey because of two issues. First the question was, do state governments, even though not required, report intangible assets as recommended in GASB 34? Second, the authors will create a base line to study the effect of GASB Statement 51 which will require reporting, if applicable, and amortization of intangible assets under capital assets. The new reporting standard will require all SLGs to report their ownership of intangible assets including, but not limited to, right-of-ways, certain software and others in the Statement of Net Assets, capital asset section for financial reporting years beginning after June 15, 2009 (11).

Depreciation expense for capital assets should be reported in the statement of activities (12). No depreciation expense, amortization expense, or infrastructure expense was reported in the Statement of Activities. The author's expected to find this condition because expenses are summarized and reported not by object code but collectively with other expenses within the appropriate function or program.

Detailed information regarding the capital assets and related expenses are normally presented in the notes to the financial statements. The authors reviewed the notes to basic financial states to determine if the necessary disclosures were included. Table 2 summarized the major findings in the note disclosures. All fifty states (100%) provided note disclosures for capital assets and depreciation expense. Forty-five states (90%) reported total capital assets net of depreciation. Those states that do not provide the accumulated depreciation within the capital asset section of the Statement of Net Assets do provide information so as the reader of the

statements could compute the total net capital assets. The five states that follow this type of presentation are: CA, OR, TN, WI, and TX.

Table 2 Capital Asset Reporting in the Notes to the Basic Financial Statements By the 50 States in Fiscal Years Ending 2009		
Information Reported:	No.	%
Significant accounting policies which included the basis for capitalization, determination of estimated useful lives and expense recognition, method of allocation of cost to function or program categories, and total amount of depreciation expense included in the statement of activities	50	100
Schedule of changes in capital assets by class	50	100
Differentiation of capital assets by government activities and business activities	50	100
Differentiation of capital assets between those being depreciated and those not being depreciated	50	100
Total capital assets net of depreciation	45	90

Governments may choose to depreciate infrastructure assets or use the modified method. If the modified method is used it will be necessary to prepare an estimate of the annual dollar amounts needed to maintain the established condition level of the infrastructure assets. Basically the modified method requires an asset management system that provides detail information about asset condition, maintenance requirements, annual maintenance expenditures, additions and deletions either in footnotes to the financial statements or in the Required Supplementary Information section. The required disclosures for modified method of infrastructure reporting by the 20 (40%) states selecting this method met the GASB 34 as summarized in Table 3.

Table 3 Modified Approach-Infrastructure disclosures required in Required Supplementary Information By the 20 of 50 States that selected this approach in Fiscal Years Ending 2009		
Information Reported:	No.	%
Use of the infrastructure modified approach	20	100
Schedule of assessment of condition methodology	20	100
Schedule of estimated maintenance cost to preserve infrastructure	20	100
Schedule of actual cost incurred to preserve infrastructure	20	100

## SUMMARY AND AUTHORS COMMENTS

This study provides information on the current capital assets reporting practices by the fifty state governments. The authors found acceptable differences of statement disclosures among the state CAFRs. All states were in compliance with GAAP. Only twenty states report infrastructure assets under the modified method. Only one state reported intangible assets.

Capital asset reporting by the fifty states does follow GASB 34 guidelines. However, some reporting differences exist. Five state governments do not report total capital assets, net of depreciation in the Statement of Net Assets even though this is a stated requirement. Those states, however, do report capital assets net of depreciation in the notes to the financial statements. This appears to be a backhanded way of satisfying the reporting guidelines as there was no mention of this presentation not being in compliance with GAAP within the independent auditor's report. So, all is well. The other minor variations in reporting capital seem insignificant.

Intangible assets left the authors with more questions than answers. Do the states have significant unreported intangible assets? Why does only one state report intangibles and then only in a non-major fund. Further research will be conducted after all fifty states implement GASB 51.

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# **WHERE DO WE GO TO ENSURE THE CONTINUATION OF ACCOUNTING EDUCATION?**

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## **ABSTRACT**

*Critics of accounting education charge that its programs and curricula have failed to remain relevant to students and employers. Some educators have heeded the warnings and made significant changes; however, such forward-thinking individuals are in the minority. Accounting programs are consequently experiencing dramatic decreases in student enrollments. Moreover, many practicing accountants and educators say that they would not choose an accounting education if given the chance to do it again. This indicates a serious problem at the profession's most vulnerable point: the quality of its professionals.*

# MARKET IMPLICATION OF HUMAN CAPITAL INVESTMENT IN TRAINING

**Chih-Hsien Liao, National Taiwan University**  
**Songtao Mo, Purdue University Calumet**  
**Julia Grant, Case Western Reserve University**

## ABSTRACT

*The empirical determination of whether human capital investment creates intangible assets and contributes to firms' profitability and market values is seriously hampered by the lack of publicly disclosed information on such practices. Using unique survey data regarding employee training practices, we examine and find that employee training expenditures are positively related to both contemporaneous and future operating performance, as well as to market values. Further, following the balanced scorecard theory, we test whether incorporating training into the firm's performance measurement system has a positive effect on firm value. The empirical results suggest that training in conjunction with the use of non-financial performance metrics (from customer, internal process, and learning and growth perspectives) is positively related to the use of performance metrics in the financial perspective, which in turn has a positive effect on firms' market values. The establishment of a direct relationship between market price and human capital investment sheds light on corporations' human resource management practices. This attempt integrates empirical financial accounting research with general management research, broadening the horizon for accounting scholars with regard to the significance of such internally-developed intangibles.*

# EVIDENCE OF COGNITIVE BIASES IN STUDENTS' ACADEMIC SELF-ASSESSMENT IN THE INTRODUCTORY FINANCE COURSE

**John G. Marcis, Coastal Carolina University**  
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## ABSTRACT

*Student grade expectations are an important consideration in student satisfaction with college programs. Given the level of debate concerning the issue of grading and grade inflation, there is naturally growing interest in studying factors that affect student retention. This study examines how students in the introductory finance course actually perform relative to their own expectations concerning performance. The study specifically examines students in the introductory finance course. The data suggest that students in this course exhibited common cognitive biases in their formation of grade expectations and in their interpretation of deviations between expected grades and actual grades.*

## INTRODUCTION AND OVERVIEW

What does a grade in a course represent? Alternatively stated, what information is conveyed by a specific grade in a course? Disagreement concerning the meaning of grades can be a frequent source of student and faculty conflict. Even though faculty may explicitly state in the course syllabus the course requirements, instructional/learning objectives, and grading system, students are often disappointed and upset with their final course grade. Some of the angst may be due to a disagreement as to what is important or appropriate in evaluating student performance. In addition to differing from faculty in their preferences concerning grading (and grades), not all students are likely to have the same preferences for grading strategies. These possible differences between faculty and students may explain much of the dissatisfaction students express when they receive grades lower than they had expected.

It is also likely that students are subject to cognitive biases in their formation of expectations concerning grading and in their understanding of why they earn the grades they do. The field of Behavioral Finance has emerged as a response to the realization that common cognitive biases have an impact on financial decision-making in the context of investment management and corporate finance. The awareness of the existence of cognitive biases has changed the way financial researchers examine and explain various phenomena. It is likely that the consideration of cognitive biases may aid in understanding finance students' grade expectations as well.

Shefrin (2007) discusses several known cognitive biases and discusses their impact on the formation of expectations and decision-making. Two biases that seem appropriate to student grade satisfaction are 1) *Overconfidence Bias* and 2) *Self-attribution Bias*. Overconfidence bias describes the tendency for individuals to "make mistakes more frequently than they believe and view themselves as better than average." (Shefrin, 2007, 6). Self-attribution bias describes the tendency for individuals "to take credit for positive outcomes and to blame others or bad luck for



negative outcomes." (Shefrin, 2007, 131). If students suffer from overconfidence bias, they will expect a higher than average grade because they may believe they are better than average. Clearly, not all students can be better than average. Also, the overconfidence bias would tend to cause students to believe that they had performed better than they actually had in both exam preparation and in exam performance. If students suffer from self-attribution bias, then they will tend to take credit for good grades they receive and attribute any poor grades they receive as arising from the shortcomings of others, such as the instructor, the author of the textbook, or even other students.

There is growing interest in studying factors that affect student satisfaction and retention in business courses, especially those courses that are required. The objective of this study is to investigate how students in the introductory finance course prefer to be graded, their expected grade in the course, and the grade they actually received in the course. Specifically, this study examines the relationship between a student's expected grade in the introductory finance course and the actual grade received in the course.

The next section provides a brief review of the literature on student expectations, performance, and satisfaction. Section 2 reviews the methodology and describes the survey questionnaire used in this study. Section 3 summarizes the responses and analyzes the results. The final section of the paper offers concluding remarks concerning students' expectations in the introductory finance course and actual performance.

## PREVIOUS RESEARCH

Three studies in business journals were found that addressed the grade expected by students. Montondon & Eikner (1997) focused on the relative performance of transfer students from two-year institutions and "native" students in the intermediate accounting I class. Montondon & Eikner observed "Two-thirds of the transfers expected to earn an A in intermediate accounting I, while slightly less than half of the native students were so optimistic" (Montondon & Eikner, 1997, 30) and "transfer students may have based their expectations on their higher GPAs and lack of forewarning about the intermediate course. However, both groups were more optimistic than their past performance warranted" (Montondon & Eikner, 1997, 35). Christensen, Fogarty, & Wallace (2002) examined how students assessed their success in the cost accounting class during the semester and the manner in which the students modified their behavior during the term. Immediately after completing their first examination in the course, students were asked to predict their score for the examination. The authors found that when the predicted examination score was *below* the actual examination score, students responded by performing better in the subsequent examination. However, the authors also found that when the predicted examination score was *above* the actual examination score, students did not do relatively as well in the subsequent examination. Chan, Lung, & Shum (2005) applied the Christensen et al. methodology to a senior-level portfolio management course. The findings of Chan et al. are consistent with the findings of the Christensen et al. study. Chan et al. note "poor-performing students miscalculate, misgauge, and misread their own performance although various cues might exist" (Chang, Lung, & Shum, 2005, 27).

## SURVEY INSTRUMENT

The survey instrument was designed to address a number of issues (and questions) raised in previous studies. The survey instrument was pilot-tested during a Summer term when it was administered to students in two sections of the introductory finance class. The survey was rewritten reflecting recommendations and suggestions made by students and other faculty. The survey instrument had three sections. The first section of the survey requested demographic data from the individual respondent. Specific questions pertained to the respondent's gender, age, employment status while attending classes, ethnicity, and major field of study.

The second section of the survey contained 26 questions, with the majority of questions being in a multiple-choice format although a small number of open-ended questions also appeared. Some questions addressed the same topic or issue and these questions were placed with similar ones. For example, three sets of three questions asked students for the source of their confusion when they do not understand the material in the, three questions asked students what was the reason they received a good grade in a course, and three questions asked students what was the reason for a poor performance in a course. Five questions asked students to allocate 100 points across five different areas as to how he/she feels a course grade *should be* determined (for example, class attendance, mastery of the material as demonstrated by examination scores, class participation, effort, and out-of-class project or paper).

The third section of the survey contained six questions. A set of five questions asked students to provide the percentage of students in the course who should receive each of the letter grades "A", "B", "C", "D", and "F". The final question on the survey was "What grade do you expect to receive in this course?"

## SURVEY RESULTS

The first part of the survey instrument requested demographic information. All 175 students enrolled in the five sections of the introductory finance course completed and returned the survey. Almost 62 percent (108 of 175) of the respondents identified themselves as male. Over 83 percent (146) of the respondents identified themselves as Caucasian/White and almost 13 percent (22) identified themselves as African-American/Black. Only four respondents identified themselves as Hispanic (Latino or Latina). Because of the low absolute and relative number of Hispanic respondents, these participants were grouped for analytical reasons with three international students. The age of the respondents ranged from 19 to 45, with almost 92 percent (160) of the respondents self-reported as under the age of 25. Management and Marketing were the two most common majors, with 35 percent (62) and 25 percent (44) of the respondents, respectively. (NOTE: Because of space limitations, the referenced tables are available from the first author upon request.)

The second section of the survey contained 26 questions related to the respondent's course performance relative to past expectations and factors that might shape a student's expectations in a course. Respondents reported they preferred examinations that were dominated by multiple-choice questions, with almost 79 percent expressing a preference for examinations with either only multiple-choice questions or primarily multiple-choice questions with some numerical problems. Respondents were strongly opposed to a "strict curve," preferring either predetermined values for grades or a "modified curve" that is based on "natural breaks" in the grade distribution. Although 85 percent of the respondents indicated they usually received the

final grade expected, when a student is surprised by his/her final grade, about one-out-of-four indicated the grade received was usually lower than expected and one-out-of-three indicated the grade received was usually higher than expected.

Three different scenarios were presented to the students with three questions each. For each scenario there were a total of three responses. However, only two responses were presented at a time. The student had to select the better of the two responses presented. The students appeared to be consistent across their pair-wise comparisons and concluded (of course) that the reason why they did not understand the material in the course was because the instructor (or text) did not explain the material well. Assuming competent instruction, this strong tendency in the data could be seen as evidence of *self-attribution bias*. The responses that would attribute the grade result to the students' own actions were significantly underrepresented.

The second scenario pertained to the student receiving a good grade in a course. The students were consistent across their pair-wise comparisons and stated that when they receive a good grade in a course that either the examinations reflected the lecture material or they worked very hard to understand the material. The third scenario pertained to the reason why the student performed poorly in a course. Again, the students appeared to be consistent across their pair-wise comparisons and concluded that the examinations did not reflect the lecture material. Again, this tendency would be consistent with a *self-attribution bias*.

One question asked students to provide the percentage of students in the course who should receive each of the letter grades "A", "B", "C", "D", and "F". The responses for these five questions were inputted to the data set and then a short computer algorithm scanned each of the responses for each individual to monitor that the student used all 100 percent. One student responded that 100 percent of the students should receive an "A" for the course. Consequently, this meant that the minimum value of the other four possibilities would be zero. Students indicated the mean values for each grade should be: 25.9 percent "A"; 23.7 percent "B"; 21.19 percent "C"; 11.2 percent "D"; and 5.5 percent "F". Although the responses for each student were reviewed, these values do not sum to 100 percent. The reason for that is that the mean is influenced by extreme values (either very small or very large) and some students apparently had relatively low percentage values for grades of "A", "D", and "F".

The final question on the survey was "What grade do you expect to receive in this course?" Table 2 and Table 3 provide the grades expected by students. Table 2 is a cross-tabulation analysis of the grade expected and the final course grade. No student indicated his/her expected grade was less than a "C". Seven students withdrew from the course by the designated date. Over 42 percent of the students expected a grade of "A" for the course and over 50 percent expected a grade in the "B-range" (either "B" or "B+"). In fact, the average expected grade for the original respondents was 3.52 while the actual course grade (for the 168 respondents who completed the course) was 2.65. A Chi-Square test of significance was performed on the data contained in Table 2 and the resulting  $\chi^2$  statistic of 64.2408 generated a p-value of 0.0001. This optimism in grade expectations is consistent with *over confidence bias* on the part of the students.

Table 3 provides a further analysis of the students' expected grade and final course grade. Panel A of Table 3 presents both the expected grade and the final course grade along gender lines. However, the Chi-Square test of significance generated a  $\chi^2$  value of 2.9782 for the expected grade and a  $\chi^2$  value of 9.3574 for the final course grade, neither of which is statistically significant at any generally acceptable level for the appropriate degrees of freedom. Panel B of Table 3 presents both the expected grade and the final course grade along ethnic lines.

Again, the Chi-Square test of significance generated a  $\chi^2$  value of 9.4954 for the expected grade and a  $\chi^2$  value of 12.1198 for the final course grade, neither of which is statistically significant at any generally acceptable level for the appropriate degrees of freedom.

## CONCLUSIONS

Understanding student expectations is an important first step in managing student expectations in the current academic environment in which the potentially conflicting goals of maintaining academic rigor, maximizing student retention, and maintaining student satisfaction are advanced. If student's expectations are overly optimistic, then student satisfaction will only occur if grade inflation is permitted or student expectations are modified. Clearly, grade inflation is not sustainable in the long run for various societal reasons. The alternative is to attempt to better understand the formation of student expectations in the hopes of being able to modify expectations to a more reasonable level.

This paper has examined the grade expectations formation and explanation of outcomes reported by students in multiple sections of the introductory finance course. The data clearly indicates that the students form impossibly optimistic expectations of grading outcomes. This tendency is consistent with *overconfidence bias*. Further, the data strongly suggest that students attribute poor grades to factors that do not include those under the student's own control. Specifically, the students in the study explain poor grades they receive as being caused by poor instruction, low correlation between class material and exam topics, and poorly written textbooks. Alternative explanations such as low student effort and low student capability are significantly underreported. This tendency in the data is consistent with *self-attribution bias*.

While it is interesting to find evidence of students in the introductory class exhibiting biases common in investment managers and corporate financial managers, the real benefit of the findings is in providing a basis upon which professors can begin to systematically manage student expectations. As discussed earlier in the paper, grade expectations management techniques such as exceedingly rigorous first exams can be useful in moderating student expectations. However, there are likely numerous existing techniques for educating decision makers concerning the impact of cognitive biases that would be useful in this setting. However, a full examination of the potential for managing student expectations through correcting student cognitive biases is left for future research.

The current societal debate concerning the role and nature of grading academic performance is unlikely to disappear soon. It is hoped that this study has provided insights that will be useful to the business academic faced with the issue.

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# ANALYSTS' EARNINGS FORECASTS: IMPLICATIONS FOR MANAGED EARNINGS

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## ABSTRACT

*Analysts' earnings forecasts create capital market incentives for firms to manage bottom-line reported earnings. This study examines whether or not pension expense is strategically used by firms to manipulate reported earnings in the direction that will move them closer to their analysts' earnings forecasts than they would otherwise be without the manipulation.*

*This study extends earlier research by not limiting the sampling technique to only those firms with actual earnings in the vicinity extremely near their analysts' earnings forecasts. This allows for a broader array of firms to be included in this study and not just those firms expected to exhibit the strongest sensitivity to manage earnings.*

*Based on a proxy for earnings before manipulation, two distinct groups of interest are formed. These groups consist of firms hypothetically missing their analysts' earnings forecasts (i.e., benchmark firms) and firms hypothetically exceeding their analysts' earnings forecasts (i.e., smoothing firms). Both groups of firms are shown to strategically manipulate pension expense.*

# ETHICAL THEORIES AND THE INCIDENCE OF OCCUPATIONAL FRAUD

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## ABSTRACT

*The Association of Certified Fraud Examiners (ACFE) has conducted studies on occupational fraud for over a decade. The ACFE has published several reports between 1996 and 2010. These reports cover various aspects of occupational fraud. The ACFE defines occupational fraud as, “[T]he use of one’s occupation for personal enrichment through the deliberate misuse of or misapplication of the employing organization’s resources or assets.” The purpose of this article is to discuss how occupational fraud has been committed in the past. It is based on evidence provided by the ACFE reports. A further purpose is to discuss various ethical principles and theories and to discuss how they can be used to help minimize fraudulent behavior.*

## INTRODUCTION & PURPOSE

In 1996 the Association of Certified Fraud Examiners (ACFE) published an extensive report on the state of fraud and white-collar crime in the United States. The 1996 report represented the largest privately-funded project of this sort on the subject of occupational fraud and abuse. The ACFE has subsequently followed-up with similar reports – one each in 2002, 2004, 2006, 2008 and 2010.

It is important to understand how occupational fraud is defined, before looking at how it is committed. The ACFE has defined occupational fraud as, “[T]he use of one’s occupation for personal enrichment through the deliberate misuse of or misapplication of the employing organization’s resources or assets.” Four key elements are common in every fraud scheme: The scheme is clandestine; it violates the perpetrator’s duties to the organization; it is committed for direct or indirect financial gain; and it costs the organization assets, revenue or reserves. Furthermore, occupational fraud is widespread and evidence shows that most organizations are affected by some form of fraud.

As mentioned earlier, the ACFE has issued several reports between 1996 and 2010. The 1996 report was based on contributions by 2,608 certified fraud examiners and losses based on fraud were estimated at around \$15 billion. The 2002 report was based on 663 cases of occupational fraud and losses were estimated at over \$7 billion. The 2004 report was based on 508 cases of occupational fraud and losses were estimated at over \$761 million. The 2006 report was based on 1,134 cases of occupational fraud and the estimate was that organizations lost approximately 5% of their annual revenues to fraud (previous studies estimated 6%). This translated to about \$652 billion in losses due to fraud, in the US economy. The 2008 report was based on 959 cases investigated between January 2006 and February 2008. Losses were estimated at \$994 billion and approximately 7% of revenues. The most recent report, in 2010, was based on 1,843 cases between January 2008 and December 2009. With an estimated loss of 5% of revenues, the report approximated a loss of about \$2.9 trillion. Further, this is the first report that is based on fraud across nations and the report found that fraud is a global problem!

The reports have provided significant evidence regarding occupational fraud. The reports indicate that occupational fraud is widespread and costly for organizations and the overall economy. The purpose of this article is to focus on the question of how occupational fraud has been committed in the past. Details of how fraud was committed will be discussed as they fall into three major categories: Asset Misappropriation, Corruption, and Fraudulent Statements. Each major category and how fraud has been committed within them will be studied next. The trends in how frauds have been committed will be discussed by comparing the ACFE reports. Overall conclusions about the methods used to commit fraud will be discussed in the next section of the article. Ethical theories and principles will be discussed next. The contribution of the article is that readers will be better informed as to how occupational fraud has and can be committed and they will learn about how ethical principles and theories may be used to minimize such behavior. This should enable readers design strategies to limit exposure of their organizations to occupational fraud and abuse.

### **TYPES OF OCCUPATIONAL FRAUD & ABUSE**

There are three major categories of occupational fraud and abuse: Asset Misappropriations; Corruption; and Fraudulent Statements. Data shows that the most number of cases of fraud fall under asset misappropriations; however, the ones with the largest impact fall under the category of financial statement fraud. It is important to note that an incident of fraud need not fall under one category only. So, a fraud scheme might involve elements from each category. The categories are as follows.

**Asset Misappropriations:** As the name suggests, asset misappropriations involve assets which are misappropriated in some way or the other. Some misappropriations are concealed as false debits (a debit to “miscellaneous expense” when cash is stolen), omitted credits (a sale is not recorded and its corresponding cash is stolen), or misappropriations are not concealed and show up as books which are out-of-balance (tangible assets are not physically counted periodically which leads to books which are out-of-balance). There are two major categories of assets which are misappropriated: one is cash and the other is inventory and other assets.

**Corruption:** Corruption represents cases wherein fraudsters get some benefits for themselves by wrongly using influence in a business transaction. These schemes involve transactions that represent violations of the rules of the company. There are four major categories of fraud under corruption.

**Fraudulent Statements:** Fraudulent statement fraud represents situations where either financial or non-financial statements are misrepresented due to fraud.

### **INCIDENCE OF TYPES OF OCCUPATIONAL FRAUD & ABUSE**

This section discusses the incidence of the different types of occupational fraud and abuse. Results from the ACFE studies (1996, 2002, 2004, 2006, 2008, and 2010), are used to reflect on how different schemes have been used over time.

Occupational fraud is extremely costly to organizations. Cases of occupational fraud take time to be detected and often cause significant financial harm.

## PRINCIPLES & THEORIES OF ETHICS

This section discusses ethical principles and theories. The goal of this section is to help companies understand what might influence individuals to commit fraud. Companies can determine which ethical principles or theories their individual employees subscribe to. Once they have such an understanding they can assess if individuals are straying. This knowledge should help minimize the incidence of fraudulent behavior.

The information on principles and theories come from:

<http://www.bio.davidson.edu/people/kabernd/indep/carainbow/Theories.htm>.

There are at least four ethical principles. They are beneficence, least harm, respect for autonomy, and justice.

The abovementioned ethical principles are the basis for various ethical theories. There are at least five ethical theories. They are deontology, utilitarianism, rights, casuist, and virtue. It is common for people to base their ethical decisions on their life experiences.

## CONCLUSION

The purpose of this article is to discuss how occupational fraud and abuse have been committed; using information provided in the four ACFE studies, reported in 1996, 2002, 2004, 2006, 2008, and 2010. Further, ethical principles and theories are also discussed in an effort to provide a context to evaluate individuals to help minimize the incidence of fraudulent behaviors. Evidence points to the fact that fraud is costing virtually every organization. The three main classes of fraud are shown to be asset misappropriations, corruption, and fraudulent statements.

Asset misappropriations are the most common scheme used to commit fraud. Within that category, cash misappropriation is the most common method. Organizations should improve their internal control procedures over cash. Internal and external auditors should also design tests to improve oversight over cash within organizations. It is further important to note that the median loss is the lowest in the case of asset misappropriations.

Corruption is the second most common scheme used to commit occupational fraud and abuse. Its median impact is significantly more than that of asset misappropriations. Organizations need to write-in and enforce procedures which ensure that employees understand what constitutes corruption and they are severely punished if they engage in such activities.

Fraudulent statement fraud is the least common scheme used to commit occupational fraud and abuse. However, its median impact is the most significant of all methods used to commit fraud. Organizations need to understand these schemes more fully and care needs to be taken to reduce the numbers and impact of such frauds. Further, penalties need to be more severe when employees engage in activities which lead to fraudulent statement frauds.

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# STATE AND LOCAL TAX EFFECT ON CORPORATE STRATEGY

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## ABSTRACT

*This State and local taxes (SALT) add to the total tax burdens of corporations. We investigated if SALT alter the effectiveness of business strategies in ways other than merely reducing the benefits of strategies because SALT are an additional cost. We tested a business strategy and found that when cash flow opportunities from the strategy were scaled for downside risk, SALT had a significant effect on strategy performance. The rate of SALT imposed also had a significant effect on the performance of the strategy we tested.*

*We examined the effect of SALT on a strategy that involved increasing production to levels in excess of expected sales to take advantage of unanticipated demand. We found that profits from increasing production were dramatically larger, relative to the amount of risk associated with the production increases, when SALT were considered. Such counter-intuitive results suggest that corporations might benefit from an examination of the way SALT are incorporated into operational and planning processes. Corporations that treat SALT as reductions in profit without considering more complex SALT effects run the risk of making less-than-optimal decisions under certain circumstances.*

# **PREDICTIVE ABILITY OF BLACK-SCHOLES MODEL IN PRICING INDIAN STOCK OPTIONS**

**Sankaran Venkateswar, Trinity University**

## **ABSTRACT**

*Options' trading was introduced in India in the year 2000 through trading in index futures contracts, and later in the year 2001 index and stock options trading were introduced.*

*The robustness of the Black-Scholes model as it applies to pricing options in the Indian options market was evaluated by its predictive ability using mean implied volatility instead of historic volatility.*

*The Mean Implied Volatility was calculated through an iterative process using a risk free return, various strike prices, and life of the option. There are as many implied volatilities as there are strike prices and expiration dates for those strike prices.*

*The mean implied volatilities were then used to calculate option prices using Black-Scholes model. They were then compared with the actual option prices to determine the errors. These errors were re-calculated using historical volatility. Now, the two sets of errors were compared to see if mean implied volatility had improved the pricing of options.*

*The results of the study on a sample of options prices for the period 2008 indicate that for the most part using mean implied volatility had dramatically improved the pricing of stock options.*

*As the Indian options market is a nascent market, further work needs to be done to assess the mechanism involved in pricing stock options in India and the robustness of such a mechanism.*

# AN ANALYSIS OF THE ACQUISITION AND PURCHASE METHODS

**Peter Aghimien, Indiana University South Bend**

## ABSTRACT

*Regulation regarding accounting for business combinations began in 1970 with APB Opinion 16, which allowed both the purchase and pooling of interests methods. Although popular due to its perceived advantages, pooling contributed to inconsistencies and a lack of comparability. In 2001, FASB issued SFAS 141, which allowed only the use of the purchase method in which the fair value of net assets recorded was based on cost allocations. In an effort to infuse full fair values and transparency into business acquisition accounting, FASB issued SFAS 141(R) and 160 in 2008. SFAS 141(R) prescribes the exclusive use of the acquisition method.*

## INTRODUCTION

The main purpose of this paper is to compare and contrast two methods of accounting for business combinations: the Purchase method and the Acquisition method. We will begin by briefly discussing business combinations and providing a historical background of regulatory issuances and previous methods used. Next, we will describe both of the two most recent methods and compare and contrast them in detail. The changes from the Statement of Financial Accounting Standards (SFAS) 141 to SFAS 141(R) and SFAS 160 include:

- Business Combination Costs
- Bargain purchase gain recognition
- Contingent Consideration
- Other Contingencies
- In Process R&D
- Goodwill Measurement
- Step Acquisitions
- Supplemental disclosures
- Measurement Period
- Non-Controlling Interest / Minority Interest
- Finally, we will provide a real-life example of a company's post-acquisition financial statement notes.

## BUSINESS COMBINATIONS

In order to facilitate an understanding of accounting methods for business combinations, the term 'business combination' must be defined. According to the Financial Accounting Standards Board (FASB), as written in SFAS 141(R), a business combination is "a transaction or other event in which an acquirer obtains control of one or more businesses" (FASB, 2007). In addition, SFAS 141(R) states that transactions otherwise thought of as mergers are also to be considered business combinations for the purposes of the statement. While control is currently

defined by SFAS 141(R) as the ownership of a majority, or more than 50% of the outstanding shares of a company, “ in a manner consistent with current Generally Accepted Accounting Principles (GAAP), Statement 160 requires that financial statements be consolidated when one entity controls another” (Deloitte, 2007). Because control may be held through contractual agreements, or other methods that do not necessarily require a majority ownership, care should be taken to consider whether or not true financial control exists over a subsidiary.

Some of the largest and most notable business combinations were enumerated by Hoyle, et al 2009), but mergers and acquisitions also occur between smaller companies, and locally. For example, two local institutions were recently involved in business combinations. An electronics manufacturer, CTS Corp. of Elkhart, In., acquired two companies in 2008: Orion Manufacturing, Inc. of San Jose, Ca. for \$10 million cash (CTS Corp., Mar. 2008) and Tusonix, Inc. of Tucson, Az. and Nogales, Mexico, for \$12.25 million cash (CTS Corp., Jan. 2008). Also, in July of 2008, MFB Financial, a local bank, was merged into Mutual Federal Savings Bank of Muncie, In., to form Mutual Bank (Mutual Bank, 2008). This merger involved an exchange of stock valued at approximately \$52.7 million. In both of these examples, the acquirers (CTS corp. and Mutual Federal Bank) gained 100% control over and benefit from the acquiree’s assets and liabilities. Even though one of the companies described was involved in acquisitions and the other was involved in a merger, according to the definitions provided by FASB, all of the transactions are considered to be types of business combinations.

The consolidation procedure, however, varies depending on the status of the acquiree upon acquisition. In the case of the bank merger, also known as a statutory merger, the acquiree was dissolved and went out of business. In that case, the consolidation process occurs only once, at acquisition: the assets and liabilities are transferred to the books of the acquirer. In the case of the manufacturing company acquisitions, the acquirees remained in existence as a subsidiary of the parent company. When this type of business combination takes place, the parent is required to prepare consolidated financial statements each time external financial statements are required.

Next, let us briefly examine some of the reasons why firms combine. From a common sense standpoint, the main goal of a business is to make a profit for its owners and shareholders. With this idea in mind, many companies engage in business combinations which allow them to increase efficiency by vertically integrating with suppliers, to obtain greater negotiation power by increasing in size, and to diversify risk by entering other markets. After losing much of its own market share, Sprint Nextel recently agreed to buy out Virgin Mobile USA in an effort to gain 5.25 million more users (B. News, 2009). In addition, software company, Oracle, has recently announced plans to buy Golden Gate software (Sadighi, 2009). The companies believe that, by combining their current software technology, they will be able to provide a better product for their consumers. So, while increased profit is a common goal of for-profit companies, the strategy and avenue taken to achieve the goal may differ from company to company.

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# **ACADEMIC DISHONESTY IN AN ACCOUNTING ETHICS CLASS: A CASE STUDY IN PLAGIARISM**

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## **ABSTRACT**

*This case addresses the issue of cheating in the form of plagiarism. With the ease with which students can copy and paste from internet available resources, plagiarism has become a major problem in today's business schools. The focus of this case is on plagiarism in an accounting ethics. Suggested research and discussion questions are provided. These research questions provide the instructor with a tool for educating the student regarding what constitutes plagiarism, the school's and teacher's policy regarding plagiarism, and the CPA exam and Continuing Professional Education requirements regarding plagiarism and ethics. The discussion questions provide students "food for thought" and the basis for in-class discussion of both the actual and potential consequences of cheating.*

