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HAS INTRODUCTORY ACCOUNTING CHANGED?

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ABSTRACT

In the early 1990's several accounting bodies called for consideration of new approaches throughout the academic accounting program. These new approaches included change in focus from a preparer orientation to a user orientation, change in the utilization of technology, and change in delivery methods to include more emphasis on communication skills. We document these changes along with the current status of other teaching and assessment variables.

A survey for pedagogy in the introductory accounting courses was sent to 805 four-year programs in the United States offering accounting coursework. Current course offerings were compared to respondent perceptions of course offerings in 1991. For the schools responding to the questionnaire, significant change has occurred in introductory course pedagogy. The magnitude of that change, however, may be in the eye of the beholder.

Results of this study can be used to help judge whether introductory accounting classes are increasing the value added to a student's education sufficiently to warrant the current number of units devoted to the courses. Employers, other faculty, and administrators can use the results to support change in introductory courses. Finally, introductory instructors can compare the changes they have made to the results from this diverse sample of schools surveyed.

ON CORPORATE DEBT POLICY

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ABSTRACT

This essay analyzes the theoretical evidence for the capital structure theory. It discusses the practical implications of a prescriptive theory for corporate debt policy. It compares and contrasts the capital structure models that are based asset structure (complete and incomplete markets) with those models, which employ frictions (such as asymmetric information). A Summary table describes the theoretical foundations of this literature.

INTRODUCTION

The mix of securities a firm issues to finance its operations is known as its capital structure. Modigliani and Miller's (1958) "proposition I" states that, within a perfect economy, a firm cannot change its total value by varying its capital structure. This proposition allows a value?maximizing firm to completely separate its real and financial decisions. Consequently, when MM's irrelevancy result holds, a firm may maximize its value by focusing exclusively on capital budgeting decisions, without worrying about capital structure. In effect, MM provides a separation principal belonging to a family of such principals. (Such as the Fisherian separation paradigm which states that only real economic variables affect a firm's production decisions and output.)

Various economic interpretations of MM's proposition I have helped to enrich our understanding of corporate finance. Let us briefly focus on four such interpretations.

MM's irrelevancy result may be viewed as basic value additivity principal. In the case of the two securities, debt (D) and equity (E), this additivity property of the valuation operator (V) may be written as follows:

$$V(D+E) = V(D) + V(E)$$

This result relies on the following economic intuition: as long as owners of a firm can borrow and lend on the same terms as their firm, they can undo the effects of any change in the firm's capital structure. No matter how the firm splits its cash flows into different streams, investors will not pay a premium for capital structure. Assuming that investors and firms have equal access to financial markets, then securities issued by individual investors and those issued by firms are perfect substitutes (see Fama (1978)).

When investors are not put on the same footing as their firm, then they may alternatively use a financial intermediary to avoid paying a premium for capital structure. In this case, Stiglitz (1969, 1974) shows that a financial intermediary with equal access may replicate the securities of any firm which alters its capital structure. With costless intermediation, the investors' opportunity set can be restructured, so that they do not have to pay a premium for capital structure.

Modigliani and Miller's irrelevancy result may also be viewed as a fundamental value preservation principal, providing an economic intuition similar to that of the law of the preservation of energy in physics. Value is preserved so that, as long as there are no trade?frictions, a firm cannot generate value solely by varying its financing decision (see Miller (1991a)).

Similarly, this value preservation principal may be restated in terms of the no arbitrage condition of the asset pricing literature. In a frictionless economy with no arbitrage opportunities and with linear valuation operators, debt/equity ratios are irrelevant (see Ingersoll (1987), Duffie (1988), and Van Horn (1985)).

The earlier value additivity principal relies on the assumption that the owners of a firm enjoy equal access to capital markets (for example, they may borrow and lend on the same terms as the firm), so that the investors' opportunity sets are not affected by a firm's security offerings. In addition, the irrelevancy result implicitly assumes that investors unanimously agree on the market value of the cash flows that the firm offers, regardless of individual investors' attitude towards risk. This assumption of unanimity insures that investors do not differ in regard to the return they consider to be commensurate with a given firm's risk. These conditions hold as long as there is a complete market which investors may use to diversify their personal portfolios (see Fama and Miller (1972) and Baron (1979)).

When the asset structure is complete, the firm can concentrate on value maximization without worrying about security holders' diversification needs. Within a complete market economy, a firm cannot capture a monopoly rent accruing from the innovative and unique nature of its securities. In fact, a spanning condition holds, so that the investors may replicate any given security's payoff by using a portfolio of other available securities. Consequently, MM's irrelevancy result may be written as follows: within an economy with a complete asset structure and no trade?frictions, a firm cannot generate value solely by varying its financial structure.

Moving our attention from a firm's total market value to the value of its stocks, one may inquire whether a firm can use its debt/equity ratio as a means to increase its stock value by expropriating wealth from its bondholders. If capital structure irrelevancy applies to the firm's total market value, does it also apply to its stock value? Fama (1978) shows that the capital structure irrelevancy applies both to maximizing a firm's total value and to maximizing that firm's security holder's wealth, as long as bondholders impose a "me first" rule, or have "rational expectations," so that they fully account for the possibility of wealth expropriation. Given Fama's assertion, let us focus on the implication of the MM result regarding the debt policy a financial manager should follow.

DEBT POLICY

Financial managers benefit from a prescriptive capital structure theory --a theory that supports and suggests a particular course of action. Consequently, one may inquire what MM implies regarding the debt policy of a given firm. The following implications can easily be established:

A financial manager may not conclude that borrowing makes a firm less safe by adding financial risk to the riskiness of its cash flows. Although the firm may vary the risk of its bonds and stocks, the owners of the firm (both bondholders and stockholders) bear the risk of the firm's future cash flows, as determined by the firm's investment decisions. This cash flow risk depends solely on a firm's choice of real economic factors.
A financial manager may not conclude that borrowing allows his firm to undertake a project it could have not afforded without borrowing. If a project has a positive net present value, it should be undertaken. The financial form of ownership (debt or equity) should not matter. After all, the owners may use side bets to modify the contractual sharing rules that debt and equity imposes upon them.
A financial manager may not conclude that the (risk-adjusted) cost of debt capital is different from the cost of equity capital. If that were so, investors would engage in financial arbitrage by short?selling the more expensive security and buying the cheaper one. In a competitive market debt and equity are valued commensurate with their risk. Furthermore, both debtholders and stockholders demand a return in line with the risk imposed on them. This condition has been formally articulated in MM's proposition II.

Does MM mean that corporate management should not devote resources to adjusting the debt/equity ratio? Recalling that MM's result applies to a complete and frictionless economy, one quickly concludes that debt policy is only irrelevant in an artificial model economy. In real economies, however, there are various frictions (such as taxes, transaction costs, and asymmetric information). Furthermore, there are often missing assets, market impediments, and investment restrictions (such as a short?sale restriction), which contradict a complete asset structure assumption. The perfect economy assumption by MM does not necessarily imply that capital structure is relevant within an imperfect economy. The irrelevancy result may only be rejected after studying the implications of market imperfections and trade impediments on this result.

In fact, MM's groundbreaking research suggests that one needs to link the costs and benefits of leverage to specific market imperfections in order to prescribe corporate debt policy. Researchers also have the burden of establishing that the particular market imperfection under consideration is large enough to warrant inclusion in the formulation of a debt policy within a specific real?world economy, i.e., a proposed market imperfection, should be of an economically significant size. In addition, it should not suffice to simply articulate an arbitrary friction within an artificial economy. One needs to establish that the assumed imperfection survives a simple competitivity argument. This argument states that financial managers can only exploit those market imperfections, which their firms can remedy more cheaply than other firms and intermediaries. Let us briefly review the finance literature, which considers market imperfections.

AN IMPERFECT ECONOMY

Subsequent contributions to the capital structure literature have attempted to enrich the theory by providing more realism and generality than that achieved within MM's idealized economy. This has been accomplished by modeling frictions such as bankruptcy costs, taxes and asymmetric information, and market impediments such as a no?short?sale restriction. In these models, capital structure is relevant as long as frictions differentially affect a firm's securities. For example, capital structure may be important when debt and equity are differentially taxed or are traded at different transaction costs.

The theoretical framework for these results is summarized in table 1. The irrelevancy result of MM (1958) holds within the complete and frictionless economy of the first row and the first column of table 1. Within the complete market economy of the first column and the second row of table 1, the following three types of market frictions are considered:

Trade frictions caused by differential tax treatments;
Frictions caused by asymmetric information among various claimants to a firm's assets.
Trade frictions due to additional transaction costs associated with a particular security (including the bankruptcy penalty costs of debt).

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Table 1. The Theoretical Framework of the Capital Structure

Market Structure	Asset Structure	
	Complete	Incomplete
Frictionless Markets	MM '58	Linear Payoffs: DeMarzo '88, Duffie '88
		Non-Linear Payoffs: Gottardi '91
		Differential Risk Preferences: Rubinstein '73
Market Frictions	Taxes: DeAngelo & Masulis '80	Tax-clienteles: Miller '77
	Asymmetric Information: Ross '77	Signaling a change in agents' risk-aversion: Krainer '92
	Transaction Costs: Baumol & Malkiel '67	Differential Issuing Costs: Allen & Gale '88
	Bankruptcy Penalties: Kraus & Litzenberger '73, Kim '78, Baxter '67	Differential Marketing Costs: Madan & Soubra '91

R&D LEVERAGE - A MEASURE TO EVALUATE IMPACT OF R&D ON EARNINGS

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ABSTRACT

The literature in finance and economics views R&D expenditure as an attractive means of investment in valuable intangible capital that has differing degrees of relevance in different economic sectors. This paper measures the impact of R&D investment on earnings of firms by estimating the degree of R&D leverage - a measure similar to degrees of operating and financial leverage. In this paper we develop and test the impact of R&D on the earnings by estimating R&D leverage. Impact of R&D expenditure on firm value, size, and variability of cash flows has been studied widely.

This study develops and measures the earnings elasticity of R&D coined as Degree of R&D leverage using a log-linear model. The results indicate that a one-percent change in R&D expenditure results in a quarter-percent change in earnings on average. However, differential impact of R&D is observed across industry categories. Availability of protection of intellectual property rights, existence of competition, and the ability to translate innovation into commercial viability may be some of the reasons for the differences. The impact of R&D on earnings may take place on a lagged basis. Pooling time series and cross-sectional observations may be the next step for getting additional insights.

INTRODUCTION

Research and Development (R&D) is treated as an expense item in accounting. However, the literature in finance and economics views R&D expenditure as an attractive means of investment in valuable intangible capital that has differing degrees of relevance in different economic sectors. This paper measures the impact of R&D investment on earnings of firms by estimating the degree of R&D leverage - a measure similar to degrees of operating and financial leverage. In this paper we develop and test the impact of R&D on the earnings by estimating R&D leverage. Degree of R&D leverage is useful for investors and analysts. If investors are optimistic about prospects for an industry they might favor firms with a high degree of R&D leverage as it may be a predictor of earnings growth. This paper is organized as follows. In Section II a theoretical discussion of degree of R&D leverage is provided. Data, methodology, and results are discussed in Section III.

DEGREE OF R&D LEVERAGE: A THEORETICAL FRAMEWORK

Finance has borrowed the concept of leverage from physics. Leverage provides mechanical advantage in physics. In finance leverage implies amplification of earnings by application of inputs such as debt. Operating leverage and financial leverage have been referred in an earlier section of this paper. Degree of Total Leverage (DTL) is defined in terms of elasticity of earnings with respect to sales revenues and is equal to the product of DOL and DFL. The degree of R&D (DRL) leverage as defined by Sung -Puo Chen (1998) measures the earnings elasticity of R&D. The degree of R&D leverage is an index number that measures the effect of incremental R&D expenditure on the net earnings per share. According to Chen the effect of R&D can be dichotomized as follows. Firstly the effect of R&D on earnings before R&D and taxes is measured (denoted DRL1), and secondly the effect of earnings before R&D and taxes on net earnings is measured (denoted DRL2). DRL1 measures the pure operational elasticity of R&D by excluding the tax deductibility of R&D. DRL2 takes into account the impact of tax deductibility of R&D on the net income. The concomitant effect is measured by DRL that is operationalized in the following paragraphs.

(1) $DRL1 = \%\Delta EBRT / \%\Delta R$
(2) $DRL2 = \%\Delta EPS/\%\Delta EBRT$
(3) DRL = DRL1 (C) DRL2,
Where EBRT = Earnings before R&D and Taxes,
R = R&D expenditure
EPS = Earnings per share
Δ = Change in a given variable
We can rewrite equation (3) and transform it into its logarithmic form. Hence,
(4) $DRL = \%\Delta EPS/\%\Delta R = \Delta EPS * \partial \ln EPS/\partial EPS/\Delta R * \partial \ln R/\partial R$,
(5) $DRL = \partial \ln EPS/\partial \ln R$.
Equation 5 can be transformed as:
(6) $\ln EPS = \alpha + \beta \ln R$.
The slope of the model specified in equation (6) is an estimate of DRL. It measures the earnings elasticity of R&D. Bhagwat, Debruine, and Gondhalekar (2002) have discussed this methodology to test R&D leverage for firms in the Pharmaceutical industry.

DATA, METHODOLOGY, AND RESULTS

Descriptive Statistics

This study uses data for the years 1987 through 1998 compiled by Standard and Poor's COMPUSTAT Services. Data include annual sales, R&D, earnings per share before extraordinary items on an annual basis. R&D intensity is defined as the ratio of R&D to Revenues (Sales). Exhibit 1 describes the data for all the firms classified by one- digit SIC codes. The distribution of R&D and R&D intensity is fairly skewed. R&D expenditure is concentrated among manufacturing firms. More than fifty percent of the sample comprises of manufacturing firms in communications, transportation, electronics, and chemical industries.

<<<<<< Insert Exhibit I here >>>>>>

Spending patterns for companies with reported R&D expenditures indicate nominal increases during the observation period. Panel A of Exhibit II divides the sample into three four-year time periods and shows a pattern of steadily increasing industry-wide and average firm-wise sales and R&D expenditures. It may be inferred from Exhibit II that R&D intensity is higher especially in the case of industries with high rate of new business formation (inclusion in COMPUSTAT data set).

<<<<<<Insert Exhibit II here>>>>>>

This result becomes less pronounced when the sample is reduced to firms with positive EPS and at least one hundred observations per two-digit SIC code. Panel B of Exhibit 2 reports higher average firm sales and R&D expenditures as expected. Interestingly, R&D intensity remains virtually unchanged for the restricted sample, while the changes in average firm sales confirm that the newly formed firms (included in COMPUSTAT data set) have non-positive EPS. Firms with positive EPS maintain R&D intensity levels. R&D expenditures in absolute terms and in terms of intensity differ significantly among industries. Companies in the business services sector are almost twice as R&D intense, but on average spend less than half as much on R&D as manufacturing firms. High-tech firms also spend on fundamental research whereas other firms invest in applied research.

<<<<<<Insert Exhibit III>>>>>>

The restricted sample of two-digit SIC codes included in Exhibit II are further classified into high-tech and low-tech categories. The two-digit SIC codes - 28, 35, 36, 38, and 73 are classified as high-tech and two-digit SIC codes - 25, 26, 29, 30, 32, 33, 34, 37, 39, 48, 50, and 87 are classified as low tech groups. The R&D intensity for all high-tech groups is at least 5% and more than 1% higher than the highest low-tech group. The communications sector reports the highest average annual R&D expenditures. The business service industry has the highest R&D intensity (about 8%).

Methodology and Discussion of Results

This study employs a cross-sectional log-linear model:

$\ln EPS = \alpha + \beta \ln R$

The relationship is derived in Section III earlier. The model includes observations with non-negative EPS measurements. These are known as eligible firms. The coefficient of the independent variable is the measure of degree of R&D leverage. The relationship is estimated for all eligible firms and are reproduced in Exhibit IV.

<<<<<<Insert Exhibit IV here>>>>>>

On an average during the period 1987 through 1998 for all eligible firms, a 1-% increases in R&D expenditure results in a .27% increase in the EPS. The results were obtained for several

industries as food and kindred products, furniture and fixtures, paper and allied products, chemicals and allied products, petroleum refining, rubber and plastic products, clay and glass, metals and metal products, industrial machinery, measuring and analytical instruments, communications, business services, and engineering and other services. For every 1-% change in R&D the communications industry's EPS increases by .35%. and the R&D intensity of this industry is near the average for all firms. The high tech sector has above average R&D intensity and degree of R&D leverage. However, several firms with low R&D intensity show high R&D leverage. This implies that the earnings from operations are enhanced by increase in R&D. This needs to be studied further by analysis of DRL1 and DRL2 values defined in equations 1 and 2. The estimated models, intercept, and slope terms are highly significant with appropriate signs. The R2 value of .22 is also encouraging. In the absence of R&D the average earnings growth of firms would slowdown.

(ALL EXHIBITS AVAILABLE UPON REQUEST)

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BAYESIAN REVISION OF INFORMATION IN THE VARIANCE INVESTIGATION PROCESS

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ABSTRACT

This study describes a normative decision model for judgments in the variance investigation process and investigates whether decision makers who receive a supplied hypothesis about the cause of a variance make biased judgments. Further, the experimental environment allows for the operationalization of only the critical factors needed to test the ability of the model to describe judgment behavior; thus improving the model's descriptive ability if it is appropriate for the variance investigation process. The results indicate that subjects' judgements are not consistent with the normative model. One explanation for the observed deviations, anchoring on values given for the provided information items, is explored in some detail.

THE 5/54 GAP-A DISPARITY BETWEEN REPORTING AND AUDITING STANDARDS

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ABSTRACT

A promulgatory inconsistency exists between reporting and identifying loss contingencies associated with violations of operational laws and regulations (the disparity). In this regard, we first introduce the background of the disparity. Thereafter, we summarize the disparity. In conclusion, we suggest that the disparity is now a moot issue for the promulgating bodies given the current market demand for risk-based assurance (audit) methodologies.

INTRODUCTION

Statement of Financial Accounting Standards (SFAS) No. 5, Accounting for Contingencies (FASB, 1975) provides the underlying substantial authoritative support pertaining to reporting loss contingencies. In turn, Statement on Auditing Standards (SAS) No. 12, Inquiry of a Client's Lawyer Concerning Litigation, Claims, and Assessments (AICPA, 1976) and SAS No. 54, Illegal Acts by Clients (AICPA, 1988) provide the primary professional guidance with respect to the identification of possible loss contingencies that meet the requirements of SFAS No. 5.

SFAS No. 5 (FASB, paragraph 1, 1975) defines loss contingency as ". . . an existing condition, situation, or set of circumstances involving uncertainty as to possible . . . loss to an enterprise that will ultimately be resolved when one or more future events occur or fail to occur." Loss contingencies that meet the requirements of SFAS No. 5 often arise from litigation, claims, and assessments (LCAs).

SAS No. 12 (AICPA, sec. 337.05 & sec. 337.08, 2001) indicates that managements' representations regarding LCAs should be formally documented in written representations obtained from management and corroborated with a letter of audit inquiry to the client's lawyer. Additionally, SAS No. 12 (AICPA, sec. 337.07, 2001) states, "[t]he audit normally includes certain other procedures undertaken for different purposes that might also disclose litigation, claims, and assessments."

While SAS No. 12 specifically focuses on loss contingencies associated with LCAs, loss contingencies can also arise from activities other than LCAs. Reporting requirements regarding these types of loss contingencies are generally addressed by specific SFASs (e.g., pensions, other post-retirement benefits, and deferred income taxes). Professional guidance regarding the identification of these types of loss contingencies falls within the scope of the general evidence gathering procedures required to comply with generally accepted auditing standards, and are not specified in any particular SAS. Accordingly, no additional discussion is warranted in this regard. However, this is not the case with respect to LCAs.

Intuitively, LCAs may arise from either legal or illegal acts. Extrapolating from SAS No. 12 (AICPA, sec. 337.07, 2001), LCAs associated with legal acts can result from documents such as contracts, correspondence from taxing agencies, loan agreements, leases, and compliance with laws and regulations. While SAS No. 12 provides general guidance with respect to identifying LCAs associated with both legal and illegal acts, SAS No. 54 specifically addresses LCAs associated with illegal acts. In this regard, SAS No. 54 (AICPA, sec. 317.02, 2001) defines illegal acts as violations of laws or governmental regulations. For determining the auditor's responsibility for identifying LCAs associated with illegal acts, SAS No. 54 classifies illegal acts as either those with a direct effect on the financial statements (IADs) or those with an indirect effect on the financial statements (IAIs). Generally speaking, IADs relate to the financial and accounting aspects of an entity whereas IAIs relate to the operational aspects of an entity. LCAs associated with IADs can result from violations of tax laws and revenue recognition regulations under government contracts (AICPA, sec. 317.05, 2001). LCAs associated with IAIs can result from violations of operational laws and regulations, such as environmental, Americans with Disabilities Act (ADA), Occupational Safety and Health Administration (OSHA), and the Civil Rights Act of 1991 (AICPA, sec. 317.06, 2001).

THE DISPARITY

SAS No. 54 (AICPA, sec.317.06, 2001) suggests that auditors do not have sufficient basis for recognizing violations of laws and regulations relating to the operational aspects of an entity and therefore the auditor's responsibility for identifying loss contingencies associated with IAIs is limited. Stated otherwise, because violations of laws and regulations relating to the operational aspects of an entity are IAIs, the auditor has limited responsibility--under SAS No. 54-to identify loss contingencies associated with IAIs.

Given that SFAS No. 5 is silent on management's responsibility to specifically exclude (or include for that matter) loss contingencies associated with IAIs in the financial statements, and given that violations of laws and regulations relating to the operational aspects of the entity (IAIs) give rise to loss contingencies as defined in SFAS No. 5, a disparity exists between management's reporting responsibilities under SFAS No. 5 and the auditor's responsibility to identify such loss contingencies under SAS No. 54. Stated otherwise, while management has a responsibility to report all material loss contingencies, the auditor has limited responsibility to identify loss contingencies associated with IAIs. This disparity is referred to as the "5/54 Gap" in the remainder of this paper.

A MOOT ISSUE?

Realistically, it may be that "formally" closing the 5/54 Gap is a moot issue for the promulgating bodies. Specifically, given that risk-based audit methodologies are now firmly established in the marketplace, why would auditors not consider all possible risks inherent in the engagement? Conceptually, a risk assessment should be performed through uninhibited brain storming techniques-no constraints allowed (at least not on the first iteration). To perform a risk assessment on a limited basis undermines the underlying conceptual, as well as practical, underpinnings of the risk-based audit methodology itself. Practically, an appropriately designed and implemented risk assessment should cover all possible risks inherent in the engagement-if for

no other reason than to determine whether the client has the appropriate type and adequate amount of insurance coverage (e.g., employment practices liability insurance, a.k.a., EPL insurance). Accordingly, given that risk-based audit methodologies are firmly established in the marketplace, auditors now have strong incentives to identify material loss contingencies associated with IAIs. In essence, the demands of the marketplace closed the 5/54 Gap.

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ACCOUNTING INFORMATION SYSTEMS: DOES THERE CONTINUE TO BE A LACK OF STANDARDIZATION IN TEACHING MEDIA?

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ABSTRACT

Many factors affect the way we teach accounting courses including new FASB pronouncements, industry need and changing technology. Limited research exists on specific practices of Accounting Information Systems (AIS) courses offered.

The purpose of this study is to identify colleges and universities that offer AIS courses in traditional and distance learning formats. The study will test 2 hypotheses: Ho1: There is a lack of standardization in teaching AIS courses; Ho2: More than one software package will be utilized when teaching AIS courses.

A sample of 200 colleges and universities with accounting programs was sent a questionnaire survey with follow up responses via Email. A pilot study was initially conducted in order to enhance validity and reliability of the study. Both hypotheses were proven and a very interesting finding could be noted in that of the respondents that did not offer an AIS course, 65% stated that they did not offer AIS courses because they could not find qualified faculty to teach these subjects.

There can be many different formats to offer AIS courses. In addition, automated or manual practice sets could be used to enhance student learning. AIS can be considered a new emerging discipline. The results of this study may assist faculty members structure new AIS courses or enhance existing ones to better meet the needs of their accounting students.

INTRODUCTION

Accounting courses can be affected by many factors including new FASB pronouncements, industry need and changing technology. Limited research exists on Accounting Information Systems (AIS) course media offered and even less research can be noted on specific practices of such AIS courses conducted in a distance-learning format.

Articles on research in distance learning (Cooper, 1999; Matthews, 1999; Sonner, 1999), on AIS courses (Davis & Leitch, 1988; Groomer & Murthy, 1996), and a few case studies (Geerts & Waddington, 2000; Kundey, 1991) on AIS courses can be found. Much more data could be accumulated on the teaching methods currently initiated by AIS faculty members, which could offer more options for teaching these courses.

The purpose of this study is to identify colleges and universities that offer accounting information systems courses (AIS). In addition, the study also attempted to identify the type of practice sets assigned, computerized projects, cases, simulations and other media offered in these courses.

LITERATURE REVIEW

Although much research exists on accounting education and AIS curriculum (Boyd, et al., 2000; Cohen, 1989; Groomer & Murthy, 1996; Kudney, 1991; Pei, 1988; Shaoul, 1989), not much research exists on what media can be used in AIS course offerings. One article noted the importance of technical communication in AIS courses. The authors suggested that integrating communication skills into a technical course such as AIS to enhance the students' understanding of AIS as well as improve the students' writing skills (Gelinas et al., 1997).

Other authors suggested the use of a database software when teaching AIS (Reuber, 1988). The students could be responsible for generating, testing, and the evaluating of database models relevant to AIS, auditing, and other accounting endeavors. Geerts & Waddington (2000) suggested the use of the Resource-Event-Agent (REA) model to structure a database in AIS courses. The authors noted that two AIS textbooks, Romney and Steinbart (2000) and Hollander et al. (2000) cover the REA model. Other AIS textbooks include the use of Access software. Perry & Schneider (2000) co-authored an AIS textbook using Access. Not only database software can be utilized in AIS courses but faculty can adopt other media in their classes as well.

AIS students can be directed to purchase integrated accounting packages. AIS faculty can incorporate integrated computerized cases into their course requirements such as Granite Bay Jet Ski, Inc. by Mansuietti & Weidkamp (1999). This computerized business simulation can teach students what a simple accounting information system might look like and give the students an opportunity to practice working with AIS software packages before graduating and beginning their careers.

There can be many techniques AIS faculty can choose to enhance their AIS courses. The purpose of this study was to note if a lack of standardization still exists as to techniques utilized in AIS classrooms, and if so, what media is currently being utilized in AIS courses at the present time. In addition the researcher also wished to know if the type of media chosen in the course would differ depending upon what program offered the AIS course. Also, the study would question whether one or more software packages could currently be noted in individual AIS classes.

METHODOLOGY AND DATA

A sample of 200 colleges and universities with accounting programs was sent a questionnaire survey with follow up responses via Email. Each Email memo included a survey instrument giving the respondents one week to return the survey. The sample of 200 was taken from Prentice Hall's Accounting Faculty Directories (Hasselback, 2000). The questionnaire was sent to department program directors, department chairs, or faculty members listed as being the contact individual for the business or accounting program.

A pilot study was initially conducted in order to enhance validity and reliability of the study. The pilot study outcome resulted in several changes to the survey tool such as expanding one of the questions to offer respondents an opportunity to describe what media they utilized in their classes. Even though limited respondents chose to offer details to this question in the pilot study, the format offered respondents to expand their answers if they wished to do so.

The survey tool included questions on the institution's classification, size of the institution, current graduate or undergraduate accounting information systems courses, media presently used in both traditional and distance learning AIS courses, number of students enrolled in AIS courses per year and if applicable, number of current AIS majors in the respondents' respective colleges or universities. The study resulted in one hundred and twenty-five completed questionnaires with one hundred eighteen usable responses.

RESULTS

The purpose of the study was to discover whether standardization exists in the teaching of AIS courses in colleges and universities. Survey questions included inquiries as to the media utilized in AIS courses, i.e., whether faculty members enhance their AIS classes with practice sets, simulations, computerized sets, cases or other endeavors.

The study included 2 hypotheses of which both were proven. Hypothesis 1 stated that there is a lack of standardization in teaching AIS courses. As noted in Table 1, the study results demonstrate that faculty members teaching AIS courses utilize diverse teaching methodologies and a lack of standardization still exists in teaching AIS courses (Davis & Leitch, 1988; Groomer & Murthy, 1996).

Table 1: Results of Preferred Media Utilized in AIS Courses

Media	Percentage
Access	17.8%
Papers/Presentation	15.3%
Excel, Internet/Research/Projects, & Peachtree	14.4%
Written Cases	12.7%
QuickBooks	9.3%
Simulations	8.5%
Great Plains	6.8%
Case	1.7%
Real World, Simply Accounting & Other	.8%
DacEasy, MAS/90, Lotus, One Write Plus, Oracle, People Soft, SPSS, Solomon	0%

Although 17.8% of the respondents utilized Access in their AIS classes, faculty continue to assign papers, presentations, research projects and other assignments. Faculty use other media in their AIS classes including Excel, Peachtree, and QuickBooks media at 14.4%, 12.7%, and 9.3% respectively in their classes as well. In addition, 8.5% of faculty members utilized AIS simulations and 6.8% of faculty members offered Great Plains software with 1.7% of faculty members teaching AIS classes with Case software.

The study results also indicated that the media chosen by faculty members teaching traditional AIS classes did not differ when teaching in a distance learning setting. It was interesting

to note that the survey respondents utilized the same media types whether teaching AIS courses in traditional or distance-learning classes. Distance learning researchers indicated that distance learning classes should be adapted rather than directly copied from traditional courses and that what media works in a traditional class, may not be successful in a distance-learning format (Au & Chong, 1993; Hogan, 1997; Webster & Hackley, 1997).

Hypothesis 2 which stated that more than one software package will be utilized when teaching AIS courses was proven. The study indicated that 19% of the faculty members surveyed utilized only one media and 31% of the faculty members surveyed offered two different media and 50% used three or more different media in their AIS classes.

As indicated in Table 2, Most of the survey respondents taught at colleges and universities above the junior or community college level with the largest percentage of institutions being the category of baccalaureate college designation.

Table 2

Institution Category	Percentage
Doctoral/Research University	10%
Masters College and University	26%
Baccalaureate College	42%
Junior/Community College	22%

In addition, respondents of the study (Table 3) indicated that 60% of AIS courses were offered through business colleges or business departments. Accounting Departments offered 25% of the respondents' AIS courses with Economics and Computer Information Systems offering 13% and 2% of the college's AIS courses respectively.

Table 3

Department	Percentage
Business	60%
Accounting	25%
Economics	13%
Computer Information Systems	2%
Other	0%

OTHER FINDINGS

The respondents noted a few different media choices when asked what media was used in their AIS courses. Some of these other media choices included: Word for flowcharting exercises, SAP, Quattro-Pro, Net Meeting, Blackboard, J.D. Edwards and (ERP).

The AIS course name most noted by respondents was Accounting Information Systems. The respondents listed other AIS courses as well including: Accounting Concepts with Application, Advanced Accounting Information Systems, Financial Accounting Systems, Financial Management Information Systems, Management Information Systems, Computerized Accounting Applications, Microcomputer Accounting and Advanced Microcomputer Accounting, Basic Peachtree, QuickBooks, Enterprise Process Analysis, and Application Solutions in the Connected Economy.

Forty-five percent of the respondents stated that their institutions did not offer AIS courses. Of these respondents not offering AIS classes, it was interesting to note that 65% stated that they did not offer AIS courses because they could not find qualified adjuncts or were not able to hire full-time faculty members to teach AIS.

SUMMARY AND CONCLUSION

There can be many different formats to offer AIS courses. AIS courses can be taught via distance learning or in a traditional setting or as a combination of both. In addition, automated or manual practice sets could be used to enhance student learning. There still exists a lack of standardization in AIS course media. It might be interesting to note if there is a correlation as to this wide variation of AIS teaching media and the lack of qualified AIS faculty available to teach these classes. In addition, a future study might be to compare what AIS software packages businesses would like their prospective employees to know and if those skills are the similar skills that students are learning in AIS classes today. Although, the results of this study may assist faculty members structure new AIS courses or enhance existing ones to better meet the needs of their accounting students, future studies might be able to aid faculty, students and employers who look to hire adequately skilled graduating students.

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PUBLIC SECTOR ACCOUNTING PRACTICES IN AUSTRALIA - AN OVERVIEW OF RADICAL REFORM IN ACTION

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ABSTRACT

In Australia, major reforms to public sector financial management practices have been implemented over the past decade in a bid to improve value extraction in relation to those resources devoted to the public sector. This has transformed the role played by accounting and accountants in the public sector away from a primarily stewardship / monitoring based role, to a position where accounting plays a privileged, perhaps even dominant role in the formation of many far reaching resource allocation and prioritisation decisions within the Australian public sector. Although Australia is a relatively small jurisdiction in terms of absolute population and total GDP, an examination of Australia's public sector accounting practices and the impact brought about by the adoption of these practices is instructive to a wider audience, because the accounting reform path travelled in Australia has been simultaneously radical and broadly focused compared to most other economically developed jurisdictions, with the possible exception of New Zealand and, in some limited respects, the United Kingdom. This paper reviews the basic elements of the accounting reform process undertaken in Australia over the past decade, and comments briefly on their impact to date.

INTRODUCTION

Over the past decade, managers within budget funded public sector agencies throughout Australia have been placed under consistent and growing pressure to constrain expenditure growth, find savings and improve the efficiency with which goods and services are produced and delivered. One means through which public sector agencies have attempted to achieve these outcomes has been the adoption of a range of accounting practices which have replaced the cash based financial reporting and budgeting model traditionally used in Australian government, and by the public sector in many jurisdictions. This has fundamentally transformed the role of accounting as a contributor to decision making processes within the Australian public sector (Guthrie & Parker, 1998). This paper concentrates on four related aspects of accounting and financial management reform as implemented in the state of Victoria, Australia's second largest jurisdiction in terms of population and contribution to total national gross domestic product. While the reform processes which have been adopted in Victoria have also been put into practice in other Australian jurisdictions, Victoria provides a useful framework for study because of its role as an early adopter. This allows a more considered analysis of the impact and implications of the adoption of the accounting and financial management reforms the subject of this paper.

THE MOVE TO ACCRUAL ACCOUNTING

The first element of the overall accounting transformation described in this paper to be adopted in Victoria, and other similar jurisdictions, was the replacement of cash based accounting and financial reporting systems with accrual based systems. There were several key motivations for this move, but the primary rationale was the desire to move towards a financial accounting and reporting system which encompassed not just period receipts and payments, but also measures relating to assets, liabilities and equity. Historically, very little balance sheet based information, apart from crude internal asset register systems, was maintained by Victorian public sector agencies. This caused several difficulties, the foremost of which was that agencies typically had little incentive to expend effort in appropriately identifying, valuing and reporting on assets under their control, as a result of a lack of a need to issue audited financial statements encompassing assets liabilities and equity (Guthrie, 1998).

This fundamental gap in the financial management and control practices of most Victorian public sector agencies meant that when the requirement to adopt accrual accounting was announced, many agencies were forced to expend considerable effort and resources working through the task of identifying which assets were actually under their control, and the value of those assets. That such a basic task needed to be carried out by most agencies prior to the adoption of accrual based financial reporting suggests that there was at least some weight in the arguments put forward by supporters of this reform, that in the absence of an accrual financial reporting framework, most agencies were not even able to identify the magnitude and value of resources under their control, with obvious implications for resource allocation decisions. Thus there were two key rationales for adopting accrual based financial reporting within the Victorian public sector (and in other Australian jurisdictions). The first was that such an initiative would force agencies to fully inventory their asset bases, allowing identification of surplus assets for possible resale or redeployment. The second was that the identification and valuation of assets would allow a better measure of the full cost of agency production of goods and services to be constructed, via the inclusion of depreciation charges which had been ignored under traditional cash based modes of financial reporting, as well as the modified expense recognition procedures associated with the adoption of an accrual framework vis a vis a cash based accounting system. Implementation of accrual based financial reporting systems for individual Victorian government agencies commenced in approximately 1992, and was largely complete by 1995.

THE ASSET VALUATION QUESTION

Given the substantial gaps which existed in asset control practices prior to the adoption of accrual accounting in Victoria, it was often the case that even where assets had been tracked in some form, there was little or no accompanying cost or valuation data. This meant that an intense asset identification and valuation exercise was required to be carried out alongside the other tasks necessary to the adoption of accrual based financial reporting. In some cases, valuation questions posed as agencies worked through this exercise became quickly intractable, particularly where the assets involved were in the nature of heritage and natural resources assets, or collections such as those maintained by libraries or museums. However, even in the case of more conventional property

plant and equipment assets, questions arose as to the appropriate attributable value, especially since in many cases (particularly in relation to land controlled by government agencies - which had often been part of the asset portfolio for an extended period), no historical cost records existed to support the adoption of a valuation according to that methodology. Partly as a result of profound gaps in the pre accrual world asset databases, the most common asset valuation methodology adopted by Victorian public sector agencies was some variation on replacement cost. This is a pattern which has been maintained to the present time, and is replicated in other Australian jurisdictions which have followed similar reform paths (Carlin, 2000).

This approach to asset valuation has resulted in the opening of a considerable gap between the asset valuation practices of public sector entities and those adopted by private sector entities, which in Australia largely report assets on the basis of their written down historical cost. As explained below, this has direct implications for the assessment of the output production cost functions faced by public sector entities when compared against potential private sector competitors.

CAPITAL CHARGING REGIMES

The systematic preparation of balance sheets and measurement of asset values described above facilitated a further, and quite radical, transformation of public sector financial management practice in Australia. The systematic identification and valuation of assets employed and controlled by public sector agencies allowed an appraisal of the total amount of capital invested in any given agency by the government. This in turn facilitated the estimation of the opportunity cost associated with the level of capital invested by central government in its controlled operating agencies.

The possibility of creating such an estimate of opportunity cost is distinct from the application of the estimate within the context of the financial management practices of government agencies. Hence, in order to enforce recognition of capital as well as period costs in agencies' overall output production cost functions, a mechanism whose function was to transform an implicit cost into an explicit cost was required. This is the function fulfilled by capital charging systems implemented in the public sectors of a variety of Australian jurisdictions (Robinson, 1998).

In the case of Victoria, a system known as the Capital Asset Charge (CAC) was introduced from 1998 onwards. This system resulted in a charge being levied against all government departments at a fixed percentage (8% real in the Victorian model) of the written down value of non current assets controlled by public sector agencies. As such, the CAC system does not reflect the full cost of capital for any given agency, since this would be more meaningfully calculated as a percentage of the net assets of the agency rather than the base currently specified. Nonetheless, the fact of the existence of the CAC means that the opportunity cost of capital is now included in the total explicit cost function for each public sector agency in Victoria. This aggregate amount can in turn be internally allocated (via costing systems) to the cost of production of any group of outputs or indeed individual outputs produced by each Victorian public sector agency (Heald, 1996).

The adoption of this system arguably has two key effects. Firstly, since each agency must annually pay a capital charge to the treasury equal to the notional opportunity cost of capital for the agency for that period of time, capital is no longer treated as an economically free resource by managers. Secondly, total agency cost functions now include a measure of both the period and capital costs associated with the production of goods and services, allowing more accurate

estimation of efficient market prices for these goods and services, and smoothing the path to the implementation of a broad range of market and quasi market based approaches to the delivery of goods and services (Heald, 1996).

A key motivation for the implementation of the system was therefore to provide managers with explicit, price based stimuli to incentivise them to be more frugal in their requests for capital, and more efficient in their utilisation of existing stocks of assets, identifying and liquidating assets surplus to needs (and returning the proceeds to the treasury for redistribution for other purposes), and pursuing less capital intensive solutions to production problems.

ACCRUAL OUTPUT BASED BUDGETING

Whereas traditional government budgeting systems have been focused on the management and reporting of cash inputs, Accrual Output Based Budgeting (AOBB), also introduced in Victoria in 1998, focuses on the cost and quantity of individual outputs produced by government agencies. The intellectual origins of AOBB systems is able to be traced back to the internal market model introduced into the British National Health Service in the early 1990s. AOBB extends that concept, which applied in the British model only to the provision of one type of government service, over the whole of government, allowing the estimation of a "full" market price for all goods and services (outputs) produced by government agencies.

Under the AOBB system, agencies are funded on the basis of a price paid for their outputs. Funding therefore becomes a function of the quantities of outputs purchased by government from agencies on behalf of taxpayers, as well as the prices negotiated between purchasing agencies (e.g the Treasury) and providing agencies (for example the department of education). On this approach, budgeting is conceptualised on the same basis as the commission of simple, market based transactions. Purchasers order a quantity of outputs from provider agencies, at prices which reflect the cost of production. This "sale" of outputs by providers is the means through which funding is obtained under the AOBB model, rather than the traditional, line item by line item cash based appropriation associated with more conventional public sector budgeting systems (Carlin & Guthrie, 2001).

IMPACT OF THE REFORMS

The implementation of the set of accounting and financial management reforms set out above has had a material impact on the manner in which the public sector in Victoria functions. Certain of these impacts may not have been intended by the architects of the financial management reform process implemented in that jurisdiction.

Recall that the core motivation for the adoption of novel accounting and financial management techniques was the facilitation of a public sector which consumed resources more efficiently, and therefore provided better value for money than had been the case prior to the adoption of the reforms discussed in this paper. At a surface level, it is possible to envisage how each of the techniques discussed above, both individually and collectively, might have been theorised, ex ante, to have such an effect. The adoption of accrual accounting can be rationalised as a means of ensuring that a full accounting for the resources employed by government agencies takes

place, with a commensurately broader, though more accurate view of the cost of production of goods and services. The adoption of standardised asset valuation techniques can be rationalised as a necessarily adjunct to the adoption of accrual based systems of financial accounting and reporting. Capital asset charging systems appear to fall neatly within the logic of attempting to construct financial management systems which capture all aspects of output cost, while accrual output based budgeting systems represent a capstone methodology, drawing directly on the enhanced costing estimation facilitated by the other three reforms in order to allow detailed costing (and hence funding) at an individual output level.

In theory therefore, reforms of the nature set out above should make agencies more aware of the true full cost of production of goods and services, provide incentives to maximise the efficiency of production, and facilitate direct comparison between "in house" bids made by incumbent public sector producers and competing bids from (presumably) private sector competitors.

In practice however, results such as those set out above are only likely to be achieved where the base accounting assumptions made by public sector agencies the subject of the requirements described in this paper match closely with those applied by potential private sector providers of goods and services. This is unlikely to be the case (Carlin, 2000). The growing discrepancy between asset valuation practices in the Victorian public sector, and those typically adopted by private sector entities, is cause for particular concern. The practical effect of a replacement cost approach to asset valuation is to inflate asset values over and above values reported on a historical cost basis. This in turn increases depreciation charges, and increases capital charges assessed via the CAC system, thus inflating the total output production cost function as viewed through the gaze of the accrual output based budgeting system. There is a strong possibility therefore, that estimates of the cost of production of goods and services within the public sector are being biased upwards, vis a vis the cost estimates developed by potential private sector based alternative providers. Ironically therefore, a chain of reforms designed to facilitate more comprehensive and accurate estimates of cost, hence allowing improved management of both the resource and cost base of public sector agencies, may in fact be providing materially biased estimates, with potentially adverse consequences for the overall public sector service provision value equation.

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AN EMPIRICAL EXAMINATION OF THE DETERMINANTS OF COVENANTS IN PUBLIC DEBT CONTRACTS: AN EXAMINATION OF ACCOUNTING AND NON-ACCOUNTING FACTORS

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ABSTRACT

How are debt covenants selected? Given the many covenants available for use either independently or packaged in groups, how are the appropriate covenants selected for each issue. Previous research by the current authors, examined individual debt covenants to determine if identifiable patterns existed and whether there is a difference in debt covenant utilization among industry classifications. The evidence suggested that not only are there identifiable patterns, but that debt covenants are systematically grouped into packages. A theory of debt covenant utilization was offered to explain the theoretical significance of each of the independent variables that appear to influence selection. This paper develops a model to test the significance of those independent variables and the patterns and predictability of use. It seeks to identify both accounting and non-accounting factors that may be used to test the model herein developed to test debt covenant selection theory.

BACKGROUND

Previous research by the authors (2000) examined the type and incidence of restrictive covenants used in debt contracts. The sample surveyed consisted of 327 public debt issues for 28 different companies. The issues were chosen from the time period of the early 1920s to 1993. Five industries were represented in the sample: petroleum, food, steel, paper and plastics. These industries were chosen because they represent companies in existence during the time period studied. The time period and industry factor were included in the survey to later analyze whether these were variables in the determination of debt covenant selection. Only companies with at least three public issues of non-convertible, senior debt in at least three decades over the period of study were included.

Also noted was that very few debt agreements contained a covenant for merger restriction, a covenant requirement for maintenance of assets, a covenant for a restriction on investments, a covenant for a restriction on disposition of assets, or a covenant for an indirect investment restriction. The results support the premise that some covenants are more efficient in controlling sources of conflict than others.

Incidence of Individual Covenant Use	
Individual Restrictive Covenant	%Issues Containing
Rights on Default	85.9%
Callable Covenant	76.1%
Sinking Fund Requirement	59.3%
Security Requirement	17.1%
Dividend Restriction	22.6%
Debt/Priority Restriction	26.9%
Sales/Lease Restriction	53.2%

The survey of 327 packages of covenants from the study supports the theory that the covenants are ordered. Of the 208 issues including covenants in their debt contracts, all but 21 include a sinking fund covenant. Of the 65 issues including a dividend covenant, only nine issues include this covenant without a related sinking fund and security or debt priority covenant. Of the 93 issues including either a security covenant or debt covenant, only four issues do not include a sinking fund covenant.

A THEORY OF DEBT COVENANT UTILIZATION

A 2000 study by the current authors' 2000 identified patterns of individual and packaged covenant use. In an effort to further develop the field of research in this area, Carter, Hadley and Thomson (2001) developed a model to explain both the existence and ordering (ranking) of patterns of debt covenant packages. Toward this end, a model was developed to identify independent variables that have been observed to influence debt covenant package selection. These include, the size of the firm, the financial leverage of the firm, the bond rating of the issue, the firm's trend in profitability, the economic time period, the industry of the firm, and the length of the debt contract.

The Variables

Size of the firm. The literature in this area suggests that larger, well-established firms have reputations in the market and hence are subject to more analysis than smaller firms. Their investment opportunity set is considered to be available public information. The market has shown trust in the firm by allowing it to grow. If the firm had caused any of the sources of conflict to be realized in the past, the firm's ability to raise funds in the future would be altered (Malitz, 1986).

Financial leverage of the firm. It is hypothesized that the closer a firm is to bankruptcy, the more likely the bondholders will include a covenant to protect against claim dilution (i.e. secured debt covenant). Therefore, firms with higher financial leverage are theorized to have a greater probability of issuing bond packages with higher levels of protection than firms with lower financial leverage.

Bond rating of the issue. The higher the rating, the lower the perceived risk. Firms issuing bond with higher ratings are likely to have a higher probability of issuing packages with lower levels of protection than firms issuing bonds with lower bond ratings.

Profitability trend. In the event of declining earnings, the firm has an incentive to maintain dividend payouts at the expense of new investment, thus creating an underinvestment conflict. Firms with higher levels of earnings are not impacted by this conflict because the earnings are available for dividends. Firms with positive profitability trends have a greater probability of issuing bonds with covenant packages that have lower levels of protection than firms with lower average rates of return.

Economic Condition. Previous research in this area has not included aggregate economic performance as a variable in covenant selection. This study predicts that there is a greater probability that bond covenant packages with lower levels of protection are issued in periods of economic expansion and bond covenants packages with higher levels of protection are issued in periods of economic contraction.

Length of the debt contract. This is predicted to be a significant factor in debt covenant selection. The longer the contract, the greater the need will be to control possible sources of conflict. Therefore, the longer the contract, the greater the probability of including a debt covenant package with a higher level of protection.

Industry of the issuing firm. While it is not clear which covenant packages will be attractive to particular industries, it is clear that industry is likely to be a significant variable due to the nature and desirability of the firm's assets. The industry of the firm is particularly related to the need to control the conflict related to asset substitution. The more specialized a firm's resources, the less likely the firm will benefit from asset substitution (Smith and Warner).

METHODOLOGY

After initial descriptive statistics were obtained, the issues in the sample were segregated into four groups to test the theoretical model. The issues were segregated into PACK A, those issues that did not contain any of the covenants in questions; PACK B, those issues with only a sinking fund covenant; PACK C, those issues with the sinking fund covenant, a direct debt/priority covenant and/or a direct security covenant; PACK D, a sinking fund covenant, a dividend covenant, and either a direct debt priority covenant or a direct security covenant.

The model estimated to test the hypotheses was originally specified by the equation that follows. The significance of the individual independent variables was measured by the p statistic.

$$\text{Package of Covenants} = b_1(\text{SIZE}) + b_2(\text{LEV}) + b_5(\text{ROR}) + b_6(\text{MAT}) + b_7(\text{RAT}) + b_8(\text{EC}) + b_9(\text{IND})$$

The dependent variable is a dummy variable representing the levels of covenant packages and was coded "0" for PACK A, "1" for PACK B, "2" for PACK C, and "3" for PACK D. Alternatively, the model can be stated in terms of probability with PACK A, where y=0 going to PACK D, where y = 3.

The general form of the model is as follows:

$\Phi^1(p_1) = \alpha_1 + \beta'x$
$\Phi^1(p_1 + p_2) = \alpha_2 + \beta'x$
.
.
$\Phi^1(p_1 + p_2 ... +p_k) = \alpha_k + \beta'x$
and $p_1 + p_2 ... +p_{k+1} =1$

THE RESULTS

The industry variables, the type of issue (based on maturity) variable, the leverage variable (LEV4), and the size variable were significant at the .05 level. The first hypothesis predicted that packages of covenants with higher levels of protection are more likely the smaller the size of the issuing firm. This hypothesis was supported by the model. The coefficient for size (the log of total assets) was significant at the 0.000 level. Also, the coefficient was negative indicating that as the size of the firm increases, the probability of including a package of covenants with higher levels of protection decreases.

The second hypothesis predicted that the packages of covenants with higher levels of protection are more likely the higher the leverage ratio of the issuing firm. The leverage ratio did not behave act as predicted. This may be the result of having used actual debt ratios. Long-term debt to total capitalization and total debt to total assets may not have appropriately captured the leverage of the firm. A better ratio may have been long-term debt to the market value of the equity of the firm. The contrary performance may also have been the result of the other variables for size, industry, and maturity of the debt being more significant predictive factors, thus outweighing the leverage factor.

The third hypothesis predicted that packages of covenants with higher levels of protection are more likely the lower the prior average rate of return of the issuing firm. The independent variables measuring the average three prior year rate of return (ROR) was significant at the .10 level in the revised model (as measured by the p statistic). However, this variable also acted in the opposite direction predicted. It was predicted that as the average prior rate of return increases, the probability of selecting a package of covenants with a higher level of protection should decrease producing a negative coefficient. Additionally, based on correlation analysis, this variable was significantly correlated with the LEV4 variable. When the LEV4 variable was dropped from analysis, this variable (ROR) was no longer significant. The effect of this variable on the hypothesis is inconclusive.

There are several possible reasons that the prior three year average rate of return did not behave as predicted. First of all it is an average number and may not necessarily represent a trend in the rate of return. A better measure of the effect of rate of return on probability of default on the debt may be a variable measuring the volatility of earnings rather than the average rate of return. Additionally, the variable for size may be a better indicator of the probability of default on debt since it is a significant variable in the model. Also, the factors for industry and length to maturity were significant variables for the four packages of debt covenants.

The fourth hypothesis predicted that covenants with higher levels of protection were more likely for issues with longer maturities than issues with medium or short-term issues. This hypothesis was supported by the model. The coefficient for maturity of the debt was dummy coded based on long term (coded 0), medium term (coded 1), and short term (coded 2). The coefficient was negative in the model supporting the theory that medium term and short -term issues are less likely to include covenant packages with a higher level of protection.

The fifth hypothesis predicted that packages with higher levels of covenant protection were more likely for issues with lower bond ratings than issues with higher bond ratings. Bond rating was utilized in the model as an indicator of the level of risk of the debt at the time of debt issuance. The premise was the lower the bond rating the higher the probability of default on the debt and the greater the likelihood of a bond issue including a package of covenants offering a higher degree of protection to the bond holder. One reason that the bond rating was not a significant variable in this analysis is that only a small percentage of the sample issues contained a low bond rating. Of the sample issues, only 15 issues or 4.6% of the sample contained a low rating. The insignificance may also be the result of the variable being outweighed by other variables in the model.

The sixth hypothesis predicted that packages of covenants with higher levels of protection were more likely the lower the economic index of the issuing firm. The first economic index was computed based on the number of months of economic contraction and economic expansion in the year of issuance. Debt issued during a year with all twelve months in an economic expansion had the highest index and debt issuing during a year with all twelve months in an economic contraction had the lowest index. This economic index was not significant and was dropped from the final model. An alternative economic index (EC2) was included in the analysis. This index was coded "0" if the issue was issued during an economic contraction period and "1" if the issue was issued during an economic expansion period. This alternative economic index also proved insignificant. The insignificance of both economic variables may be the result of impact of other factors effecting the time period of issuance that weren't captured in the model. Examples include the effect of accounting standards and the popularity of a given covenant at a point in time.

The final hypothesis predicted that the industry of the issuing firm was a significant factor in the selection of debt covenant packages. The industry factors were significant in the model. The coefficient for petroleum was zero indicating that this industry was not as likely to issue packages with higher levels of covenants. The coefficients for paper and plastic were less than 1.0 indicating also that these industries were not as likely to issue packages with higher protection. The coefficients for the food industry and the steel industry were greater than the petroleum coefficient indicating that these industries were more likely to include covenant packages with higher levels of protection than the other industries.

CONCLUSION

Overall, the model provided a good fit for the data. The log likelihood ratio statistic supports the model's significance. The Chi2 was 312.227 at the .0000 significance level. Additionally, the results comparing predicted and actual outcomes indicated a correct classification percentage of 68.75%.

The study extends previous literature related to debt covenant existence by offering that debt covenants are part of a package and the packages are ordered in their degree of preference and protection. The study also provides insight into how accounting-based variables as well as non-accounting variables are used in the selection of debt covenant packages. The significance of the accounting-based variables found to exist in this model suggests that further research may be performed to determine how debt covenant selection impacts accounting choices made by firms.

Please contact authors for complete empirical results and references.

THE 1986 TAX REFORM ACT AND CORPORATE DIVIDEND POLICY

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INTRODUCTION

The 1986 Tax Reform Act (TRA) represented the greatest change in United States tax laws in recent years, both for corporations and individuals. One of the major changes was to eliminate much of the preferential treatment afforded capital gains. With the passage of TRA, the tax treatment of private investor income, whether from capital gains or dividends, became more balanced. Assuming that investors maximize after-tax, risk-adjusted portfolio returns, investment preferences should have changed.

Capital gains can be deferred indefinitely because income does not have to be realized until the sale of the asset. Taxes on capital gains can also be offset by capital losses. Dividend income, on the other hand, is treated as ordinary income. The relationship between dividends and capital gains changed with the passage of the 1986 TRA. A consequence of this change should have been a reallocation of investor preference for dividend income versus capital gains.

An additional change made by TRA was to repeal the investment tax credit (ITC). Eliminating the ITC brought the potential for a decrease in new investment. Without the ITC, potential investment projects would be required to generate higher cash flows before being considered feasible. As a result firms would have the ability to increase dividend payout by utilizing funds formerly designated for investment.

The changes discussed in the preceding paragraphs lead to the expectation of significant increases in dividend payout ratios subsequent to passage of the 1986 TRA. In order for dividend payout ratios to adjust to the passage of the 1986 TRA, management must treat dividend payouts as an active policy variable. Management appears to favor dividend stability and gradual changes consistent with Lintner's (1956) partial adjustment results.

DATA AND METHODOLOGY

The sample used in the current study consists of 470 observations; one set of pre-1986 and one set of post-1986 observations for 235 firms. The study includes only firms that have positive earnings in every year and have data available in Value Line Investment Surveys during the entire time period of 1982 through 1992. The fact that 1987 was a transition year for changes in the tax laws requires omission of data from 1987 .

To test the impact of TRA on corporate dividend policy, the present research estimates a modification of Rozeff's (1982) model using data obtained from Value Line Investment Surveys. This revised model incorporates variables that allow testing for possible changes in dividend payout

policy subsequent to the passage of the 1986 TRA. The model also introduces other variables to test the impact of investment spending and beta stability on dividend payout policy.

One basic premise of this study is that firms not changing dividend policy in response to the 1986 TRA exhibit significant changes in representative firm betas. Testing for this change requires regressing a series of twelve annual betas for each individual firm against time and dummy variables to detect for structural shifts. Estimation of the following model permits classification of firms as having either stable or unstable betas.

$$Beta_T = \beta_0 + \beta_1 T + \beta_2 DV + \beta_3 DV*T$$

where:

$Beta_T$ = Individual firm beta in year T.

T = years 1-12, 1981 through 1993 with 1987 omitted.

DV = dummy variable coded 0 for years 1-6, and 1 for years 7-12.

Detection of either a change in slope (3   0) or a discontinuity (2   0) classifies a firm as having an unstable beta and it receives a dummy variable coding of zero for the STABLE variable in the following model. Stable beta firms receive a dummy variable coding of one for the variable STABLE. After classification of firms into stable or unstable categories this study estimates the following modification of Rozeff's Beta Stability Model:

$$PAY_i = \beta_0 - \beta_1 INS - \beta_2 GROW1 - \beta_3 GROW2 - \beta_4 STABLE + \beta_5 STOCK - \beta_6 CSP \pm \beta_7 DV \pm \beta_{17} INS*DV \pm \beta_{27} GROW1*DV \pm \beta_{37} GROW2*DV \pm \beta_{47} STABLE*DV \pm \beta_{57} STOCK*DV \pm \beta_{67} CSP*DV + \epsilon_i$$

where:

PAYi = Average dividend payout ratio of firm i over a five year period calculated as a percentage of cash flow and as a percentage of EPS. The two separate five year periods are 1982-1986 and 1988-1992.

INS = Percentage of common stock held by insiders at the end of each five year period.

GROW1 = Realized five year average growth rate of revenues over each five year period.

GROW2 = Forecasted future five year average growth rate of revenues using Value Line's estimates. Forecast period includes the years 1987-1991 for firms in pre-1986 sample and 1993-1997 for firms in post-1986 sample.

STABLE = Dummy variable coded 1 for firms classified as having stable betas over the period 1981 through 1993 with the year 1987 omitted, and 0 otherwise.

STOCK = Natural log of number of common stockholders at end of each five year period.

CSP = The ratio of total capital spending per share over each five year period (1982-1986 and 1988-1992) divided by total cash flow per share over each five year period (can exceed 1.0).

DV = Dummy variable coded 1 for the years 1988-1992, 0 for the years 1982-1986.

INS*DV, GROW1*DV, GROW2*DV, STABLE*DV, STOCK*DV, and CSP*DV
= interaction terms between the terms defined above and the dummy variable, DV.

ϵ_i = error term distributed as N(0, 2).

Note that the operational signs indicate the hypothesized direction of impact each variable should have on dividend payout policy. According to Rozeff (1982), the higher the percentage of stock held by insiders (INS), the lower the dividend payout ratio. Dividend payment functions as a bonding cost by decreasing the time and effort expended by outside ownership to monitor the corporation. If insiders hold a significant portion of the shares, the demand for higher dividend payout declines. Conversely, if insiders own very little of the firm's stock, then higher dividend payouts function to lower monitoring costs.

Rozeff also expected the previous five year average growth rate of revenues (GROW1) to have a negative impact on dividend payout policy. Rozeff considered the forecasted five year revenue growth (GROW2) to be a proxy for future investment capital needs. The expected relationship is also negative. Rozeff used beta to proxy a firm's operating and financial leverage. Dividend payout should then be negatively related to beta. This paper investigates whether beta stability is impacted by the dividend decision. A firm not increasing dividend payout ratio should see a greater instability in firm beta subsequent to TRA's passage. STABLE is a dummy variable included to address this issue.

Rozeff hypothesized the dispersion of ownership, as measured by the total number of stockholders, should affect dividend payout ratios. The distribution of dividends functions to reduce monitoring costs. The natural log of the number of shareholders (STOCK) corrects for scale effects. Rozeff found the original variables to be significant in explaining dividend payout.

An additional variable suggested by the literature includes some measure of investment. This study introduces a new variable, capital spending per share (CSP), as a proxy for investment. The variable CSP should be a more accurate measurement of investment needs.

The current study includes a dummy variable representing the impact of the change in tax laws. A dummy variable DV, coded as zero, represents the time period 1982 through 1986, and coded as one, represents the second period, 1988 through 1992.

Calculation of Rozeff's original variable of PAY uses a five year period instead of a seven year period. Data for the variables INS and STOCK come from the end of the two five year periods,

1986 and 1992. Selecting the end of the period maintains consistency with all previous studies employing variations of Rozeff's model.

RESULTS

Table l contains a presentation of the regression results. Calculation of the Durbin-Watson statistic indicates that serial correlation is not a problem. However, further analysis of the residuals using Breusch and Pagan's (1979) Lagrange multiplier test and White's (1980) test reveals that the model suffers from the presence of heteroskedasticity. The fourth column reports P-values based on White's (1980) procedure for the correction of heteroskedasticity.

Calculation of the correlation matrix and variance inflation factors indicates that this model suffers from multicollinearity. The use of a stepwise regression procedure can correct the problem of multicollinearity by retaining only one variable from a set of highly correlated regressors. Table 2 contains a presentation of the results using the SAS stepwise procedure with an = 0.10. All the variables present in Rozeff's original study have the expected signs. Both models are overall significant at the .0001 level or better. The Durbin-Watson statistic indicated no serial correlation. Visual inspection of the residuals of the reduced model indicated no discernable patterns, but analysis of residuals consistent with White (1980) and Breusch and Pagan (1979) indicated heteroskedasticity. Consequently, column four in Table 2 also contains White's (1980) p-values after the correction for heteroskedasticity.

CONCLUSIONS

The results presented in Table 2 indicate both growth variables are significant in the overall model. In addition, firms with higher historical growth rates increased dividend payouts subsequent to TRA's passage. Possibly firms that had previously retained earnings for growth elected to distribute a higher percentage of earnings in a more favorable tax environment.

The results support the hypothesis that firms not increasing their dividend payouts subsequent to the passage of the 1986 TRA consistently had structurally unstable betas. The firms with structurally stable betas have significantly higher dividend payout ratios, with a coefficient of 0.075, than firms with structurally unstable betas.

The results of the study indicate that TRA's passage affected corporate dividend policy. This study provides additional evidence for the relevance of dividend policy in changing tax environments. Since firms alter dividend payout in response to tax changes, managers potentially should adopt a more active posture regarding dividend decisions. Assuming changes in dividend payout policy result from investor demand pressures, firms adjusting more rapidly to changes in tax treatment of capital gains versus ordinary income might conceivably benefit from rapid adoption of new policies.

Possible public policy implications exist regarding the impact of tax changes on corporate America. These results indicate that lowering taxes on ordinary income relative to capital gains could change the aggregate level of dividends, thus affecting the income subjected to double taxation.

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TABLE 1: Regression Results for EPS Dividend Payout on Capital Spending and Beta Stability

Variable	Parameter Estimate	Prob. > |T|
INTERCEPT	0.486038	0.0171
INS	-0.000393	0.8058
GROW1	-0.017087	0.0002
GROW2	-0.013358	0.0272
STOCK	0.011582	0.5760
CSP	0.131384	0.0978
STABLE	0.089331	0.0527
DV	0.349929	0.2099
INS*DV	-0.000293	0.8938
GROW1*DV	-0.014435	0.0258
GROW2*DV	-0.000511	0.9603
STOCK*DV	-0.011458	0.6797
CSP*DV	-0.020087	0.8509
STABLE*DV	-0.034759	0.5934
R2 = 0.2247 Adjusted R2 = 0.2026	F Value = 10.163 (Significant at the 0.0001 level) N = 470	

TABLE 2: Stepwise Regression Results for EPS Dividend Payout on Capital Spending and Beta Stability

Variable	Parameter Estimate	Prob. > |T|	White's Prob. > |T|
INTERCEPT	0.603403	0.0001	0.0001
GROW1	-0.017455	0.0001	0.0001
GROW2	-0.013784	0.0045	0.0078
CSP	0.129039	0.0119	0.0026
STABLE	0.075115	0.0119	0.0162
DV	0.204855	0.0003	0.0089
GROW1*DV	0.014135	0.0134	0.0337

R^2 = 0.2225 N = 470
Adjusted R^2 = 0.2124 Durbin-Watson = 1.801
F Value = 22.080 (Significant at the 0.0001 level)

ACCOUNTING PERFORMANCE MEASURES AND COMPENSATION OF CHIEF EXECUTIVE OFFICERS: THE EMPIRICAL EVIDENCE FROM PUBLICLY HELD TECHNOLOGY COMPANIES

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ABSTRACT

The paper investigates whether the accounting performance measures would help protect the cash compensation of chief executive officers from the market-wide noise in equity value. The study selects companies in the technology industry as its subject. The accounting performance measures usually include the changes in return on assets and the changes in basic earnings per share excluding extraordinary items. The market-based performance measure refers to the stock returns. Stock returns usually contain the firm-specific noise and the market-wide noise. The study assumes that the market-wide noise is a major source of noise in stock returns. Then, two additional hypotheses are generated. The hypothesis (H2) predicts that CEO cash compensation would be more sensitive to accounting-based performance measures than to stock returns as stock return is a noisier measure of executive performance. The hypothesis (H3) predicts that CEO cash compensation would be relatively more sensitive to the accounting-based performance measures when the correlation between the noise in stock return and the noise in accounting-based measures is less positive. The results are consistent with the hypothesis (H1) and the hypothesis (H2). But, the results for the hypothesis (H3) are mixed.

BEYOND IMPROVING CPA EXAM PASS RATES: A LOOK AT THE 150-HOUR REQUIREMENT

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ABSTRACT

Most states have now implemented the requirement that candidates have completed a minimum of 150 semester hours of post-secondary education in order to take the Certified Public Accountant (CPA) exam. While some research has been published regarding the effect of the requirement on pass rates for the CPA exam, little significant research has been reported about accomplishment of other objectives of this requirement. This paper examines historically the objectives that were originally envisioned for the 150-hour requirement, emphasizing that these objectives are much broader than simply increasing CPA exam pass rates.

INTRODUCTION

In August 2001, a paper was presented at the national meeting of the American Accounting Association (AAA) titled, "The 150-Hour Rule: Are There Benefits?" (Brown, Read, & Raghunandan, 2001). This paper's content and conclusions are also largely summarized in a recent article in The CPA Journal (Read, Raghunandan, & Brown, 2001). These research results indicate that first-time CPA exam candidates having a minimum of 150 semester hours of post-secondary education outperformed those with less education during 1996-98. These authors "interpret these results as indicating that there are benefits to students, CPA firms, and their audit clients from the higher education standard."

However, in the discussion of the paper at the AAA meeting, a chief critical point was made that the question of "Are There Benefits?" was the wrong question, or at best too imprecise of a question, for the research done and results presented. A key point was made that perhaps too much emphasis was being placed on success with the CPA exam as the test of success for the 150-hour requirement. In this discussion, the point was emphatically articulated that the "benefits" originally envisioned for the 150-hour requirement were never so narrow as CPA exam passage and that the paper did little to address that broader and perhaps more pertinent question of "benefits" of the 150-hour requirement. Having observed this discussion, we began to re-examine the objectives that were originally proposed by proponents of the 150-hour requirement. Our ultimate research goal is to examine the success of the requirement in meeting these objectives.

BROAD EDUCATIONAL OBJECTIVES OF THE REQUIREMENT

As early as 1988, as reported in The Journal of Accountancy (Anonymous, 1988), the American Institute of Certified Public Accountants (AICPA) began recommending that state boards of accountancy implement a 150-hour rule for entrance into the profession. The AICPA president

stated that significant changes in accounting and services demanded of a Certified Public Accountant (CPA) had led to a body of knowledge that could not be adequately handled by a typical undergraduate program. Examples that were offered of these changes include a growth in management advisory services, increased specialization, and computer and telecommunication technology. In addition, increased complexity in financial practices, the growing international aspect of business, and the increased importance of accounting for governmental units and not-for-profit organizations were also cited as reasons supporting an expanded curriculum for those preparing to become CPAs.

In 1989, in an interview with the vice-president for education for the AICPA, the need for additional education for entering CPAs was discussed. The call for, "more broadly educated professionals who are technically knowledgeable and have analytical and communication skills and a greater cultural awareness" was stated (Collins, 1989). In this interview, the AICPA's vice-president noted that attracting the brightest students into the accounting profession was another reason for requiring more education. He pointed out that the very best students decide in high school to go to graduate school and choose professions that will require graduate education. This position is interesting both because of its link of the requirement for additional education with expectations about attracting accounting majors and because of its reference to the required additional education being graduate in nature.

The decline in recent years in the number of students majoring in accounting is extremely well recognized throughout the profession. For example, the number of accounting majors dropped nationwide 23 percent from 1996 to 1999 (Elliot, 2000). The number of accounting graduates annually dropped from approximately 60,000 in 1995 to approximately 47,600 in 1998-99 (Albrecht, 2000). This decline has occurred during years in which the additional education requirement has been in place in many states-an interesting phenomenon to consider when reviewing that the AICPA considered in 1989 the requirement to be helpful in attracting students into the profession. The question of whether the 150-hour education requirement has contributed to the decline in the number of accounting majors, significantly, somewhat, or not at all, continues to be debated today (Vangermeersch & Craig, 2000).

On the other hand, the AICPA vice-president reiterated in 1992 that the 150-hour requirement "should help the profession attract brighter, better-trained accounting graduates (Anonymous, 1992). In an article titled, "AICPA and NASBA Presidents Set The Record Straight On 150-Hour Education Requirement," these individuals spoke out in rebutting the work of a group who had opposed the 150-hour requirement (Anonymous, 1995). They stated that, contrary to this opponent's predictions, there had been no drop in the number of people desiring to study accounting in those few states that had already implemented the 150-hour requirement. Instead, they pointed to Florida being forced to raise entrance requirements to offset the growth of applicants majoring in accounting.

Regarding any understanding that the additional required education be graduate in nature, the AICPA and the National Association of State Boards of Accountancy, Inc. (NASBA) noted in 1991 in their implementation guide for the 150-hour education requirement that two of the four conditions by which a candidate will be deemed to have met the education requirement do not necessarily involve a graduate degree (AICPA/NASBA, 1991). However, the AICPA stated the next year in a statement of policy regarding pre-licensure education of CPAs that, "the scope and

content of the pre-certification education…should…lead to the awarding of a graduate degree (AICPA, 1992). In 1991, the accounting profession was characterized by one writer publishing in the Journal of Accountancy as "changing from an undergraduate to a graduate entry-level profession" (Previts, 1991). It was stated at this time that, "By the next decade, the changeover should be complete." The AICPA's vice-president stated in 1992 that the quality of accounting students was as high as, or higher than, ever before, but that he expected that quality to rise still higher as "many students at prestigious schools that don't offer undergraduate accounting degrees may be attracted to accounting at the graduate level" (Anonymous, 1992). It was also noted in 1992 that the most vocal proponent of the 150-hour requirement had been the AICPA, and that "the ideal would be to raise accounting to a graduate level course, similar to getting a law degree" (Clolery, 1992). It seems that debate about the necessity for the additional education to entail graduate hours and/or a graduate degree was significant and not without the profession's regulatory support.

The AICPA's vice-president noted in 1989 that, while the AICPA advocated more education, it did not mean more accounting education (Collins, 1989). He stated that a good education should lay groundwork for a career that will extend many years into the future-years during which many changes will undoubtedly occur in the profession. Because of this, the AICPA's aim was to prepare accounting graduates to cope with a fast-changing environment; it strongly advocated that CPA candidates will have taken more liberal arts courses, stating that those with a broad education will be more likely to have long-term success. The AICPA vice-president emphasized this point by stating that schools that focus on their graduates passing the CPA exam may not be preparing their students for long-term successful careers. The CPA exam was never intended to be the major focus for classroom instruction for accounting students (Monahan, 1989).

In contrast, two surveys of accounting educators and practitioners regarding what constitutes the best education for preparing CPAs and the relationship that should exist between curricula and the CPA exam produced results that tell a different story (Lentilhon & Krzystofik, 1984). The main recommendation coming from these survey results was that the CPA exam should continue to influence college curricula. Admittedly, the word "influence" does not say "dictate;" however, educators and practitioners clearly did not believe in the early 1980's that the education for accounting students should be largely separated from CPA exam preparation. Also, CPA exam passage seemed to never be too far out of the minds of even those who spoke in favor of a broad nature of the additional education requirement. In 1992, the AICPA's vice-president supported the requirement by referencing the Florida experience, and concluded that, because the number of new CPAs had remained level during the 10-year period while the number taking the exam had fallen sharply, the "simple" truth was that more, better-educated people were passing it than before the requirement (Anonymous, 1992)

In a very thorough article examining the history that preceded the accounting education change movement, Nelson (1995) noted "an impassioned" call for increased emphasis in the education of accountants on developing communication, interpersonal, and intellectual skills. He also noted the responses to this call that had been made by the various professional organizations and labeled these efforts as "something of a buzz phrase in the last five years." However, his position was that this emphasis was not new, but only the most recent manifestation of issues that had existed in the accounting profession for many years. He cited accounting historians who traced from early in the 20th century the development of formal accounting education and its acceptance

into university curriculums. Most practitioners, believing in a broad, general, and liberal education, considered the achievement of technical procedures for the profession to be most effectively learned through practical experience. It was, he stated, university accounting educators who moved the education of accountants from the theoretical approach to a procedural orientation.

Nelson (1995) placed the blame for this at least partially on the emphasis in university education on preparing students for the CPA exam. He stated that passing the CPA exam should not be the goal of accounting education, but rather that goal should be developing analytical and conceptual thinking. The focus should not be on memorizing rapidly expanding professional standards or rules, but on the theoretical concepts upon which these standards were based. He discussed the 150-hour requirement and warned that it may not help if the additional education is narrow and technical rather than broad and liberal.

SUMMARY

A historical look at background to the 150-hour requirement reveals somewhat of an evolutionary movement toward the requirement's objectives that the profession now embraces. Earlier calls for additional education of CPA candidates seemed to more readily allow for and even in some cases urge additional accounting education, while the focus of these calls seemed to shift in the late 1980s to a broader education. Nevertheless, some have argued that this represents a "shift back" as much as anything, stating that accounting education in its early university context concentrated on many of the broad skills that the last decade or so has seen calls for in the education of new professionals.

A review of the literature that addressed the development of the 150-hour requirement reveals objectives for the requirement besides improved exam pass rates. Indeed, some argued during the time that the requirement was being considered and legislated that improved exam pass rates should be completely unlinked to the required additional education for CPA candidates. As the 150-hour requirement becomes completely implemented nationwide, a prudent accounting profession's own "accountability" calls for it to reconsider the objectives of the requirement-exactly what it is that it was trying to accomplish with the additional education, and to then evaluate its success in accomplishing these objectives.

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THE VALUE RELEVANCE OF PRO FORMA NET INCOME UNDER SFAS 123: OLD ECONOMY VERSUS NEW ECONOMY FIRMS

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ABSTRACT

This study investigates the value relevance of pro forma net income disclosed under SFAS 123 Accounting for Stock-Based Compensation. Value relevance is defined as a significant correlation between earnings and security return. Additionally, it compares the value relevance between companies classified as Old Economy versus those under the New Economy. It is motivated by the controversy surrounding the usefulness of pro forma net income disclosures using the fair value method to account for employee stock options. Under SFAS 123, companies have the option to account for employee stock options using the fair value method or to disclose in the notes to financial statements pro forma earnings and pro forma EPS as if the fair value method were used.

The study surveyed initially the financial statements during 1996 - 2000 of forty companies; twenty companies under each of the two categories of Old Economy stocks and New Economy security prices. Twenty firms are from the thirty DJIA stock listing, and another twenty companies from the forty Dow-Jones Internet Index Constituents listing. In addition, stock prices were collected three months after each fiscal year end during 1997 through 2000 for each firm in the two samples.

The survey results indicate that all firms applied the intrinsic value method in accounting for employee stock option costs and prepared the pro forma net income in accordance with SFAS 123. The correlation between pro forma net income and security returns is negative. This could be attributed to the tardiness of the disclosure of the SFAS 123 pro forma net income. Companies are about to announce their first-quarter result by the time the 10-K or the annual report is published.

In addition, the results suggest that there is a significant difference in value relevance between Old Economy stocks and New Economy stocks. Investors in the New Economy stocks appear to ignore the basic principles of valuation and investment analysis. The belief that the New Economy companies have new technology that has rapid growth potential and captures consumer and investor interest could have contributed to this market euphoria.

UTILIZING COLLEGE SAVINGS PLANS IN RETIREMENT PLANNING

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ABSTRACT

People currently planning for retirement face a constant barrage of news articles full of gloomy financial forecasts: baby boomers aren't saving enough to retire, unless you save millions your dreams of travel and leisure are not attainable, and you need to save as much as possible in tax-deferred accounts to maximize your retirement resources. The Tax Relief Act of 2001 included provisions which greatly expanded the amounts which could be contributed to tax-deferred retirement plans. However, for all but the Roth IRA, distributions from those retirement plans are usually taxable to the extent they represent earnings. One provision of the new tax law which was not intended mainly for retirement planning but might provide additional tax-free income is the new version of the college savings plan.

Anyone, regardless of income, can open a college savings plan for themselves or a relative. The investments in the plan are not tax deductible but the earnings are tax-deferred and withdrawals from the plan are tax-free if used for qualified educational expenses. If a retiree is interested in traveling to a different part of the country and taking some college courses for fun, the new college savings plan may allow them to use tax-free funds to pay tuition, fees, books, and in some cases even room and board. This paper will explore the limited potential for utilizing college savings accounts in retirement planning.

DETERMINANTS OF THE CROSS-SECTION OF STOCK RETURNS IN THE AMMAN FINANCIAL MARKET

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ABSTRACT

This paper examines the determinants of cross-section stock returns at the Amman Financial market. First it tests the CAPM model by tracing the effect of beta (systematic risk) on stock expected return. The result is consistent with Fama's (1992) finding of weak effect of systematic risk on returns. Furthermore, this paper studies the effect of other factors such as size, book-market equity ratio, and volatility on the expected excess returns at the Amman Financial market. Contrary to the theory, which predicts a negative relationship between size and expected return, but, consistent with recent findings, size of firms has a positive significant effect on returns. In addition, there is an insignificant positive effect of volatility on expected returns. Finally, book-market equity is the only factor that has a significant positive effect on expected returns.

ACCOUNTING PAY-PERFORMANCE MEASURES AND LONG-TERM FIRM RETURNS

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ABSTRACT

Recently there has been a great deal of interest into the appropriate level to set for a CEO's compensation level given his current performance. However, there is surprisingly little empirical evidence linking company CEO pay structures with long-term firm stock returns. In this paper, I explore whether contemporaneous accounting performance measures serve as useful predictors of long-term stock performance.

INTRODUCTION

This paper's research question is distinct from the current compensation literature in that I begin with the premise that shareholders hire executives through their investment choices. From this basic assumption, a framework is formulated that differentiates low quality and high quality management who basically differ in their ability to create value. Specifically, I will examine an important unanswered question: do high short-term performance measures act as a leading indicator for superior long-term stock returns?

DATA AND METHODOLOGY

The database used to extract Chief Executive Officer (CEO) remuneration is Standard and Poor's ExecuComp. This dataset has information on all aspects of compensation for the top five executives at each of the firms in the S&P 500, S&P Midcap 400 and S&P Small Cap 600. My data also consists of monthly observations of stock returns on the AMEX, NYSE and NASDAQ exchanges. The sample period is from January 1, 1993 to January 1, 1995. Stocks that are not on CRSP over the entire period or do not have CEO data are discarded.

I estimate current period accounting returns as pay-to-performance ratios for each firm i in year t as

$$(1) \quad PP_{it} = TCC_{it} / [ROA_{it} - ROA_{i,t-1}]$$

where TCC it represents a firm's total executive compensation contract (including value of options and deferred compensation) at time t and ROAit is return of assets at time t for firm i.

To specifically evaluate a firm's long-run performance, two measures are used: (1) three-year cumulative abnormal returns (CAR) are calculated based on market adjusted returns with monthly portfolio rebalancing, and (2) three-year buy and hold returns for both event firms (high and low accounting performance companies) and their matching firms. The matching methodology

employed in this paper is similar to that used in other studies of long-term returns (Barbara & Lyon, 1997; Loughran & Ritter, 1995).

RESULTS

Preliminary results are reported in Table 1. Low pay-performance firms underperform in all but 3 months out of the 36 months of seasoning. In addition, high pay-performance firms consistently outperform matching firms in all but 5 of the 36 months of seasoning. These CAR results support the view that accounting pay-performance measures are useful proxies for predicting a firm's long-term stock returns.

Table 1: Abnormal Returns of Offerings in 1993-1995

Month of Seasoning	Low PP Firms	Low PP Firms	High PP Firms	High PP Firms
	AR%	CAR%	AR%	CAR%
1	-.04	-.04	.08	.07
2	-.09	-.14	.13	.21
3	-.11	-.24	.08	.29
4	.79	.54	.27	.56
5	-.41	.13	.45	1.02
6	-.03	.11	.23	1.25
7	-.81	-.70	-.36	0.89
8	-.69	-1.39	.12	1.01
9	-.65	-2.04	.29	1.30
10	-.59	-2.63	.28	1.58
11	-.54	-3.18	.28	1.86
12	-.58	-3.75	-.23	1.63
13	-.28	-4.03	.17	1.80
14	-.23	-4.26	.25	2.06
15	-.59	-4.84	.11	2.17
16	-.60	-5.44	.25	2.42
17	.31	-5.13	.08	2.50
18	-.59	-5.72	.20	2.70
19	-.64	-6.35	.22	2.92
20	.03	-6.05	.32	3.23
21	-.63	-6.68	.29	3.52
22	-.46	-7.14	.19	3.72

Table 1: Abnormal Returns of Offerings in 1993-1995				
Month of Seasoning	Low PP Firms	Low PP Firms	High PP Firms	High PP Firms
	AR%	CAR%	AR%	CAR%
23	-.01	-7.15	.17	3.88
24	-.09	-7.24	.32	4.20
25	-.53	-7.78	.17	4.37
26	-.61	-8.39	.42	4.78
27	-.65	-9.04	.39	5.17
28	-.64	-9.68	.09	5.26
29	-.65	-10.33	.09	5.35
30	-.73	-11.05	.20	5.55
31	-.83	-11.88	.26	5.80
32	-.33	-12.22	.42	6.22
33	.49	-11.73	.47	6.70
34	.08	-11.64	-.57	6.12
35	-.34	-11.99	-.04	6.08
36	-.34	-12.33	-.04	6.04
Average matching firm-adjusted returns (AR) and cumulative average returns (CAR), in percent, for 36 months after January 1, 1993. AR is the total return on each firm in event month t.				

ENVIRONMENTAL HEALTH, POLLUTION AND INDUSTRIES: THE ASSOCIATION OF AUDIT PRIVILEGE AND IMMUNITY LAWS

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ABSTRACT

Research indicates that a large number of companies' real environmental, health and safety costs are 300 to 400 percent higher than recorded in their accounting records. An investigation of environmental, health issues and compliance initiatives should be valuable to regulated companies and the general public. In 1995, the Environmental Protection Agency (EPA) issued a policy to motivate companies to take an active role in monitoring their own pollution abatement processes by encouraging these regulated entities to self-audit, disclose, and correct any discovered violations. States further passed "environmental audit privilege laws" that in essence protect the information contained in environmental audits of firms. The objective of this exploratory study was to investigate whether emission levels of five "criteria air pollutants" and specific sectors of State's economies are affected by the passage of state environmental audit privilege and immunity laws. The results indicate that most of the states increased emission of the pollutants after enacting audit statutes. The study also finds that after the enactments chemical and allied products industries significantly increased output, on average, as measured in real GSP dollars.

INTERNET STOCK VALUATION: THE IMPACT OF RELATIONAL VALUE ON MARKET VALUE OF EQUITY

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ABSTRACT

This study focuses on the impact of accounting and nonfinancial information on the valuation of internet-related stocks during the years 1996-1999, at the inception of the internet industry. Only nonfinancial information is found to be consistently positively related to the market value of equity of internet companies, using both traditional and Ohlson residual income valuation approaches over this time period. The unaudited nonfinancial information, including number of customers, used in this study was self-identified by the internet firms for voluntary disclosure in their annual reports, and this type of nonfinancial information has not previously been studied in the context of the internet industry.

Accounting information was not yet consistently positively related to market value of equity in this new industry during the years 1996-1999. Overall, nonfinancial information is found to be more value relevant than accounting information in the infancy (1996-1999) of the internet industry. These findings are of interest to both accounting researchers and investors in emerging industries.

INTRODUCTION

This study investigates the value relevance of accounting information and non-audited self-selected nonfinancial information found in the annual reports of internet companies. While other studies have investigated nonfinancial information in an emerging industry, the nonfinancial information in this study was self-selected by the companies as information that may be useful to investors and potential investors in a time period before accounting information becomes relevant. In addition, the nonfinancial information is unaudited and may allow the companies to signal their explanation of the reason for the growth in the firm's value.

Both traditional and Ohlson (1995) valuation models are implemented for 82 firm-years from 1996-1999. The firms were selected from Internet stock indexes on the basis of the availability of additional nonfinancial measures in the annual report. The unaudited, self-selected nonfinancial information is found to be more value relevant than financial information during this time period.

The second section of the paper reviews relevant prior results of studies focusing on internet stock valuation, the third section discusses the methodological approach used in this paper, and the fourth section describes the empirical results. Section five concludes.

LITERATURE REVIEW

Several studies have previously examined internet stock valuation. This study is unique in its use of a variety of nonfinancial measures that are reported by the internet firms themselves in their annual reports. These self-selected nonfinancial measures would not have been disclosed by the firms if they were not perceived as being useful to the investor or potential investor. The most common self-selected nonfinancial measure that firms chose to disclose was the number of customers/subscribers/registered users (75% of the 32 firms). Some nonfinancial measures, such as pageviews (16% of the 32 firms), were incorporated in prior studies, while others, such as number of registered customers, have not previously been investigated. Nonfinancial measures have been found to be value relevant in other emerging industries (Amir and Lev, 1996; Hirschey, Richardson, Scholz, 1998).

Gross profits, unique visitors, and pageviews were positively correlated with price in Trueman, Wong, and Zhang (2000). That paper also found differential effects for different types of internet firms; net income was negatively associated with internet retailer valuation but positively associated with portal and content firms. Pageviews were also found to be relatively more important for internet retail firms than for portal and content firms. Similarly, Rajgopal, Kotha, and Venkatachalam (2000) found that the proportion of unique visitors to a site was incrementally value relevant beyond book value and earnings.

METHODOLOGY

The first valuation model studied is a traditional linear model of the form:

$$MVE_t = a_0 + a_1 SHEQ_t + a_2 IBED_t + e_t \quad (1)$$

where MVE is the firm's market value of equity, SHEQ is the firm's book value of shareholders' equity, and IBED is the firm's income before extraordinary items and discontinued operations for the period ended at time t. This model and variations upon it have been used to study the value relevance of accounting information over time (Collins, Maydew, and Weiss, 1997).

In addition to contemporaneous accounting variables, anticipation of future earnings also is expected to affect firm valuation. However, many internet firms were not yet profitable during the study time period. Since it was difficult to use past net losses to project future profits in the internet industry of the late 1990s, some other information must have provided the basis for predicting future earnings. As discussed previously, many internet industry investors believed that nonfinancial measures such as pageviews, unique visitors, and number of subscribers were useful in predicting future market share, earnings, and ultimately prices. To incorporate nonfinancial information, in the spirit of this parsimonious model, a nonfinancial information variable may be simply added in along with the accounting variables. Thus,

$$MVE_t = a_0 + a_1 SHEQ_t + a_2 IBED_t + a_3 NONFIN_t + e_t \quad (2)$$

where NONFIN is the nonfinancial variable measured during period t. Several studies have examined particular nonfinancial variables such as pageviews and unique visitors.

These traditional approaches are helpful as initial investigations, but the residual income valuation model combined with linear information dynamics is the ideal setting in which to integrate both types of information, because it sets market value equal to the discounted future cash flows of the firm. The empirical analysis that follows is based on the residual income valuation model with linear information dynamics in Ohlson (1995), which is more internally consistent than traditional models. From the assumptions of market value of equity being equal to the present value of future dividends, the clean surplus relation, and autoregressive abnormal earnings behavior, the following value relation is derived in Ohlson (1995):

$$MVE_t = SHEQ_{t-1} + b_1 ABIBED_t + b_2 v_t \qquad (3)$$

or

$$MVE_t = SHEQ_{t-1} + b_1 ABIBED_t + b_2 NONFIN_t \qquad (3a)$$

where ABIBED is the earnings of the firm before extraordinary items and discontinued operations minus a reasonable return on the book value of equity (abnormal earnings) and n is nonfinancial information, in this case assumed to be the nonfinancial information taken from firm annual reports (NONFIN). For the empirical implementation inspired by Myers (1999), the formula includes an intercept and a coefficient on SHEQ:

$$MVE_t = c_0 + c_1 SHEQ_{t-1} + c_2 ABIBED_t + c_3 \, NONFIN_t + e_t \qquad (4)$$

and the reasonable return rate used to calculate normal earnings is 15% (average return on equity over time) for firms in the sample over five years old and 20% for the newer firms that are assumed to be more risky. Again, NONFIN is expected to have a positive coefficient while the coefficients on SHEQ and ABIBED, usually expected to be positive, are not necessarily expected to have a significantly positive sign due to the lifecycle stage of the internet industry.

RESULTS

The sample was selected from 161 companies listed on Internet stock indexes in June 1999. After eliminating duplicates and firms with recent initial public offerings, annual reports for 1997 and 1998 were requested from 50 companies. Not all annual reports contained quantitative nonfinancial disclosures, reducing the sample to 32 firms. Additional information for the 1999 fiscal year was gathered when available for the sample firms, bringing total firm-years to 82.

Table 1 reports the results of the regression of market value of equity against the accounting and nonaccounting variables of interest based on equation (2). The first regression in the table regresses market value of equity against the nonfinancial measure while controlling for size with the lagged market value of equity. Even with the inclusion of this size control, the relation of the nonfinancial measure to the market value of equity remains significantly positive.

Table 1 : Traditional Accounting Valuation Regression Results for Internet Firm-Years 1996-1999						
$MVE_t = a_0 + a_1SHEQ_t + a_2IBED_t + a_3NONFIN_t + e_t$ (2)						
Regression	Constant	SHEQ	IBED	NONFIN	LAGMVE	Ad. R^2
	-2,235,246			347.574**	1.764**	.87
	(-1.252)			(13.795)	(9.466)	
	-2,197,039	5.361*	-5.781	404.065**		.80
	(-1.328)	(2.522)	(-.889)	(16.125)		
** - Significantly positive at the 0.01 level (two-tailed)						
* - Significantly positive at the 0.05 level (two-tailed)						
MVE = Market value of equity at yearend						
SHEQ = Book value of shareholders' equity at yearend						
IBED = Income before extraordinary items and discontinued operations for the year						
NONFIN = Nonfinancial measure reported at yearend						
LAGMVE = Market value of equity, beginning of year						

The nonfinancial measure is introduced in addition to the accounting variables in Table 1, and its coefficients are consistently positively related to market value of equity as expected. The accounting variables are inconsistently related to market value of equity, also as expected. These results are consistent with the popular impression that accounting measures are less value relevant for new industries, including the internet, while nonfinancial measures are more value relevant for new industries.

The results from the residual income perspective based on equation (4) are similar to the Table 1 results in that the nonfinancial measure is consistently positively related to the market value of equity, and the book value of equity and the residual income measures are generally not significant. Thus, the results remain similar to the traditional valuation framework even in the more internally consistent residual valuation setting.

CONCLUSION

This study has focused on the impact of both accounting and nonfinancial information on internet stock valuation in the late 1990s. Only nonfinancial information was found to be consistently positively related to the market value of equity of internet companies, using both traditional and Ohlson residual income valuation approaches. The nonfinancial information used in this study was self-identified by the internet firms in their annual reports, differentiating it from prior studies where homogeneous nonfinancial measures were used. Allowing for the use of different nonfinancial information is analogous to allowing for different methods of accounting from firm to firm that are self-selected. Presumably firms will report the nonfinancial information that is most relevant to their investors, and the value relevance evidence supports this conjecture.

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A REEXAMINATION OF THE ACCOUNTING FOR RESEARCH AND DEVELOPMENT COSTS: EVIDENCE FROM COMPAQ'S ACQUISITION OF ACQUIRED IN-PROGRESS RESEARCH AND DEVELOPMENT

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INTRODUCTION

Investors are interested in the future earning potential of entities they consider for investment. Various measurements are used to assess future earnings potential: net income, cash flows, EBITDA, solvency and liquidity ratios, etc. An entity's innovative ability and flexibility to adjust to changes in the economy is an equally, if not more, important measurement of future earnings potential. Companies that fail to invest in R&D limit their future success and therefore reduce their current value (MacQuitty 1992).

One measure of the innovative capacity of an entity would be successful R&D projects and the revenues generated by innovations. Current accounting standards do not require companies to provide this kind of information. We believe improved information would give investors more useful measures in assessing an entity's future earnings potential. Changes in accounting could further provide incentives for entities with successful R&D projects, and encourage in-house R&D. Compaq spent approximately 3% of sales on research and R&D in 2000 and 1999. By comparison Hewlett Packet spent approximately 6% in these years. Capitalizing the successful R&D projects therefore has a significant impact on the bottom line. But more importantly, it can provide investors and creditors with useful information aiding them in assessing a company's future earning potential. In a recent study, Survey of High Tech Firms, a survey of small businesses in the high-tech sector, (Cordes et al. 1999) reported the R&D expenditures of respondents as a percentage of sales. Of the respondents 69% spent 3% or more of sales on R&D while 29% of the respondents spent 11% or more of sales on R&D. We therefore anticipate that capitalizing and amortizing R&D cost will have a significant effect on small businesses' financial statements. Recent research suggests that capitalizing R&D costs may be helpful to investors. One study found a significant relationship between R&D expenditures and subsequent benefits of increased productivity, earnings, and shareholders value for R&D intensive companies (Lev and Sougiannis, 1996). Another study found a significant decline in earnings usefulness for companies that were forced to switch from capitalizing to expensing R&D costs (Loudder and Behn, 1995)

CAPITALIZING RESEARCH AND DEVELOPMENT COST AND TESTING FOR IMPAIRMENT

The successful implementation of R&D after a successful invention takes an average 4.3 years (Edwards and Gordon, 1984). We therefore propose capitalizing R&D costs and deferring the amortization until the successful implementation has occurred. This period should not exceed 5 years. This approach has the advantage that costs and revenues will be matched. It is consistent with the FASB's treatment of capitalized software cost. In SFAS No. 86 (1985b) the board states:

Amortization shall start when the product is available for general release to customers.

To ensure that only the successful projects will be capitalized, all the projects could be individually tested for impairment on an annual basis. The testing of assets for impairment is consistent with current accounting practice as reflected by FAS No. 121 (FASB 1995) "Accounting for the Impairment of Long-Lived Assets and for Long-Lived Assets to Be Disposed Of" and FAS No. 142 "Accounting for Goodwill and Intangible Assets" (FASB 2001). We further suggest that in the annual report a disclosure be made for the R&D cost written off because of impairment and the R&D cost capitalized, and the R&D cost amortized. This information will aid investors and creditors in their assessment of future earnings potential.

MEASURING THE IMPAIRMENT

An entity bases its decision whether to engage in R&D on the expected profitability of the project. This profitability analyses is based on pro forma incremental analysis which includes the estimated costs, revenues and the resulting net cash flows of the project. Many intermediate accounting textbooks describe the net present value (NPV) method, which relies on discounted cash flow techniques (DCF). Discounted cash flows are easy to use, and have a wide acceptance.

SFAS No. 121 and its successor SFAS No. 144 can serve as platforms for R&D accounting. SFAS No. 121 uses an impairment test that adds the nominal (undiscounted) cash flows. If the book value of the asset exceeds the sum of the nominal net cash flows (NCF), impairment has incurred. If an asset is impaired, the DCF is used to measure the amount that to be written down. Recent statement SFAS No. 144 uses the probability-weighted cash flow estimation approach to calculate the expected present value (EPV) which was introduced in CON No. 7 "Using Cash Flow Information and Present Value in Accounting Measurements."

Application of CON No. 7 will provide consistent guidelines for the measurement of net present values of each R&D project. Unlike the more traditional "best estimate" approach, the statement provides for the usage of the expected present value if the amounts of the cash flows, their timing, or both are uncertain. Since this uncertainty is likely to be the present with R&D projects, this statement will serve as a framework for a better and a more consistent measurement than NPV. Due to the higher degree of uncertainty associated with R&D, we suggest using the EPV for the impairment test. Hence, we treat the R&D assets more conservatively than other assets. The weighted cost of capital (WACC) could serve as the appropriate discount rate.

As a consequence, all R&D costs will be initially capitalized, their value will be based on future benefit and the matching principle will be satisfied. If a project is unsuccessful or only partially successful it will have no, or only small, projected net cash flows. Therefore, the amount of capitalized R&D cost will have to be written down so that the present value of expected future benefits equals the R&D cost capitalized. Hence, the amount of R&D capitalized is less than or equal to its probable future benefit. Because of the difficulty of projecting future cash flows, we suggest forecasting net cash flows for a limited period of time, five years or less.

PRACTICAL IMPLICATIONS

One of the areas in which our proposal makes a significant difference is purchased in-process R&D. In 1998, as a result of the acquisition of Digital, Compaq reported an expense of $3.2 billion for purchased in-process R&D in accordance with EITF 86-14. Compaq justifies the amount in their 10-K report as follows:

> *The value was determined by estimating the costs to develop the purchased in-process technology into commercially viable products, estimating the resulting net cash flows from such projects and discounting the net cash flows back to their present values.*

The disclosure made in the 1998 10-K report states that the purchased in-process R&D has an expected future benefit of $3.2 billion dollars. Compaq expects that the revenue growth rate ranges from 8% to 39% for the various products as a result of the purchased in-process R&D and expects the revenues from purchased in-process R&D to peak in 2001 and to rapidly decline from 2002 till 2005 due to new products. Selected numbers from the 10-K filing are presented in Table 1.

Table 1: Selected Data From Compaq's 10 K Filing

Numbers in Millions except EPS	2000	1999	1998
Total Revenue	$42,383	$38,525	$31,169
Total Cost of Sales	32,417	29,798	23,980
Research and Development	1,469	1,660	1,353
In-process R&D			3,196
Other Expenses	7,622	6,133	5,302
Income(loss) before tax	$875	$934	($2,662)
Basic Earnings per Share (after cumulative effect)	$0.33	$0.35	($1.71)

The expense recorded for purchased in-process R&D in 1998 leads to a distortion of the net income figures. Net income in 1998 is understated, while the net income figures for 1999 and 2000 are overstated.

Application of capitalizing and amortizing R&D would have led to the following results:

Table 2: Pro-forma Statements based on Compaq's 10-K Filing			
Numbers in Millions Except EPS	2000	1999	1998
Total Revenue	$42,383	$38,525	$31,169
Total Cost of Sales	32,417	29,798	23,980
Research and Development (1)	1,175	1,328	1,082
Amortization of In-process R&D (2)	639	639	0
Other Expenses	7,622	6,133	5,302
Income(loss) before tax	$530	$627	805
Basic Earnings per Share (after cumulative effect) (3)	$0.08	$0.10	$0.32

1) Assuming that 80% of the R&D is expensed in the year incurred and 20% of the R&D is capitalized.
2) Assuming that the in-process R&D is complete at the beginning of 1999 and is being amortized over a 5-year period.
3) With application of the same tax-rate as used in table 1

These numbers better measure the performance of Compaq in the years reported. The increase in earnings per share and income before tax is not as large as could have been expected from a $3.2 billion investment that will lose most of its value in 2001 and the succeeding years. Hence the financial statements should reflect this. For comparison we have included these numbers in Table 3.

Table 3: Accounting Treatment Comparison			
Numbers in Millions Except EPS	2000	1999	1998
Total Revenue	$42,383	$38,525	$31,169
Purchased in-process R&D	-	-	$3,196
Income(loss) before tax (10-K filing)	$875	$934	($2,662)
Income(loss) before tax (Proposal)	$530	$627	$805
Basic Earnings per Share(after cumulative effect)			
10-K filing	$0.33	$0.35	($1.71)
Proposal	$0.08	$0.10	$0.32

CONCLUSION

Capitalizing R&D costs and testing for impairment is conceptually better accounting. The discounted cash flow method is a widely used approach and management typically has the numbers

already available, satisfying the cost benefit requirement. Due to the uncertainty associated with R&D, the application of the probability-weighted cash flow estimation approach seems appropriate. The proposed accounting treatment will aid investors in their assessment of an entity's future earnings potential and help them to confirm or correct prior expectations.

Due to the deferred amortization of R&D costs, a better matching of revenues and costs will be achieved. Finally, our proposal will encourage rather than discourage entities to invest in R&D, because it will provide a more representationally faithful accounting of the firm's financial position and results of operations.

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NEW DEVELOPMENTS IN REAL ESTATE TAX FREE EXCHANGES

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ABSTRACT

One of the last remaining tax shelters for real estate investments is contained in Section 1031 of the Internal Revenue Code. The primary reason that has been given for deferring recognition of gain under section 1031 on exchanges of like-kind property is that the exchange does not materially alter the taxpayer's economic position. The property received in the exchange is considered a continuation of the old property. Taxpayers and tax planners must be very careful in structuring an exchange if tax deferral is to be attained. This paper provides an overview of Section 1031, discusses the requirements for a valid exchange, and discusses tax planning strategies to optimize real estate exchanges. It also traces several recent developments in the technique called "reverse like-kind exchanges."

INTRODUCTION

Section 1001 of the Internal Revenue Code requires the recognition of realized gains and losses on the sale or disposition of property. However, Code Section 1031 provides for the non-recognition of gain or loss on the exchange of certain property for other property of like- kind. To fall within the provision, both the property given up and the property received must meet certain requirements. These are commonly referred to as "like-kind" exchanges.

There are three general requirements for non-recognition of gain treatment under Code Section 1031. First, there must be an actual exchange and not a sale. Second, the properties exchanged must be of like-kind. Third, the property transferred and the property received must be held for productive use in a trade or business or for investment If these three requirements are not met, gain or loss must be recognized on the exchange. There may be instances where a taxpayer may actually prefer that a gain or loss be recognized. For example, it may be desirable to recognize gain to obtain a stepped-up basis, to offset a loss, or to recognize a loss already realized. In these cases, the transaction has to be intentionally structured to fall outside of the requirements of Code Section 1031 because the like-kind rules are mandatory, not elective.

THE LIKE-KIND REQUIREMENT

To qualify for nonrecognition treatment, there must be an exchange of property. In Halpern v. U. S., the exchange requirement was not met when a cash sale of property was immediately followed by a cash purchase of like-kind property. An exchange will be treated as a sale if a step-transaction analysis indicates that the substance over the form of the transaction indicates a sale.

It is therefore important that all documents used at closing be exchange documents and not the typical purchase and sale agreements commonly associated with real estate.

In a "like-kind exchange" the property being acquired must be similar in nature and character to the property being relinquished. The Internal Revenue Service is quite liberal in its interpretation and views almost all real estate as similar in nature or character. Virtually all real property is thus like-kind property and can usually qualify for the "like-kind exchange" rules. The fact that real estate is improved, unimproved, productive or nonproductive is not material. Any mixture of office buildings, apartment buildings, factory buildings, shopping centers, stores, hotels, motels, farms, ranches and parking lots is permitted.

If nonqualifying property is included, §1031 may be partially or totally unavailable. For example, a taxpayer cannot exchange property for services, including brokerage fees or production services. The exchange of land for a building to be constructed on presently owned property is not a qualified exchange. In one case, the Bloomington Coca-Cola Bottling Co. transferred property to a contractor in exchange for the construction of a building on some other Coca-Cola land. The Court ruled that this was not a like-kind exchange as it was considered to have received building services and materials and not qualifying property.

The exchange of land for a building to be constructed on a site not presently owned however is a qualified exchange. In J.H. Baird Publishing Co., the taxpayer "sold" high-basis property to a contractor, then hired the contractor to build a building, and subsequently "traded" some low-basis property back to the same contractor. This was deemed tax-free under §1031. These two cases illustrate that a taxpayer can exchange existing property for property to be constructed on their own property but definitely not for future services.

In Starker vs. U.S., the court ruled that property constituting the taxpayer's principal residence did not qualify as investment property even when the taxpayer argues that the residence is being held for appreciation. Certain vacation homes also do not qualify as a like-kind exchange. A vacation home not held for investment is not qualified use property because it is being used for personal reasons and not for business or investment purposes.

In Revenue Ruling 57-244, the IRS addressed the issue of taxpayers who purchase property for the construction of a residence and then abandon that purpose for clearly established reasons and then hold the property for investment purposes. A subsequent exchange is held to qualify under §1031. Converting a personal residence into a rental unit would also change the use to qualified property. The burden of proving conversion is on the taxpayer and the success of this tactic depends on such efforts as how long the property is rented before the exchange, the documentation of rental efforts, and the substance of the transaction.

Property received in a like-kind exchange and immediately resold can create a problem for the taxpayer. The purpose the taxpayer establishes for acquiring the property is important because property acquired in an exchange for the purpose of immediate resale is not held for business or investment. This is especially true when the taxpayer has entered into a binding contract before the exchange to sell the property after the exchange. There is no specified length of time the property must be held before sale or liquidation. In Regals Realty Co. v. Commissioner, a taxpayer exchanged property for a commercial building and one month later initiated a plan of liquidation under which it would sell the building. The court held that the commercial building was not held for

business or investment but was held for trading or resale and therefore the exchange did not qualify under §1031

TIMING OF THE EXCHANGE

During the 1970's, aggressive taxpayers and tax practitioners began structuring like-kind exchanges of real estate in which the replacement property was not received simultaneously with the relinquishment of the taxpayer's exchange property. In Starker v. United States, the court addressed the issue of the applicability of Code Section 1031 where the exchange of properties did not occur simultaneously. In the case, property was relinquished in exchange for property that was to be identified and conveyed within the following five years. The IRS argued that Code Section 1031 did not apply because the exchange was not simultaneous and further that what was received in exchange for the property was merely a contract and not property of like-kind. The Ninth Circuit disagreed and concluded that Code Section 1031 did not require that the exchange occur simultaneously and that contract rights were sufficient as long as like-kind property was ultimately received. The Tax Reform Act of 1984 subsequently enacted time limits governing the identification and receipt of property received in an exchange.

The first timing requirement is that the property to be received in the exchange must be specifically identified within 45 days of closing on the relinquished property. To prove that identification has occurred, the taxpayer must designate the property in writing and must have proof that this writing was received within the time period. Property is properly identified only if it is specifically designated as replacement property and specifically described. This requirement may be met by referring to a legal description, a street address, or a distinguishable name.

The second timing requirement that must be met is that the identified replacement property must be actually received before the end of the exchange period. The exchange period begins on the date the property is transferred and ends on the date that is the earlier of 180 days after the date of the transfer or the due date of the income tax return for the taxable year. The timing requirements must be strictly observed.

In Christensen v. Commissioner, replacement property was received within 180 days of the transfer of the relinquished property but after the due date of the tax return of the party relinquishing the property. The Ninth Circuit held that the exchange did not qualify for non-recognition of gain or loss. The party argued that the due date of the return should be determined by including the time of an automatic extension since the statute allows for the inclusion of extensions. The Court, however, pointed out that the party had not requested nor had been granted an extension, which placed the actual due date of the return prior to the time that the replacement property was received. The result in Christensen could have been avoided simply by requesting an automatic extension of the due date for the income tax return.

The Regulations state that replacement property can still qualify as like-kind property even if it is not in existence or if it is being produced at the time it is identified. For such property to be substantially the same as identified when it is received, however, there must have been no substantial changes made in the property.

STRUCTURE OF LIKE-KIND EXCHANGES TO DEFER GAIN

In structuring a like-kind exchange, it is important to identify that objective as early as possible. At a minimum, one must decide prior to the closing date of the sale of the property. When structuring a like-kind exchange, it is important to observe the two previously mentioned time requirements. After a taxpayer has transferred the relinquished property, he or she has 45 days to identify the replacement property. The taxpayer is required to take possession of the replacement property by the 180th day after the date of transfer of the relinquished property.

Two parties do not always hold like-kind property that they wish to exchange. Therefore, one of the difficulties in setting up a like-kind exchange transaction is finding two parties who have suitable property they want to exchange. When the buyer of the relinquished property does not have suitable replacement property, one option is to have the buyer purchase replacement property so the exchange can then occur. A buyer is often unwilling to go through the inconvenience of accommodating the seller, and a transaction that has the taxpayer selling property to one party and buying suitable replacement property from another does not qualify as a like-kind exchange transaction. In this instance, using a qualified intermediary to complete the exchange will satisfy the IRS's requirements to be classified as a like-kind exchange.

In a four-party exchange, the four parties are the taxpayer, the buyer of the taxpayer's property, the seller of replacement property, and a qualified intermediary. The qualified intermediary has a written agreement with the taxpayer to participate in the transaction. The intermediary acquires the relinquished property from the taxpayer and then transfers the property to the buyer. The intermediary then purchases suitable replacement property from the seller and transfers the property to the taxpayer. In this type of transaction the use of written contract assignments allows the transaction to occur without the fear that the taxpayer may lose title to the assets being sold and purchased.

It is important to remember that when a taxpayer sells relinquished property and later acquires replacement property, the sales proceeds must be kept outside of the taxpayer's control. Generally, the taxpayer should not have the right to receive, pledge, borrow or obtain benefit from the sales proceeds. This is because the IRS requires that gain be recognized in like-kind transaction to the extent of "boot," or cash received. By keeping the cash outside of the taxpayer's control, the taxpayer avoids the actual receipt or constructive receipt of boot. A qualified escrow account may be used in this instance.

RECENT DEVELOPMENTS

In recent years, many taxpayers have used a strategy called "the reverse like-kind exchange." Essentially, an intermediary acquires and holds the new property until the taxpayer finds a buyer for his or her property. In 1991, the IRS issued regulations that stated that these transactions did not qualify for like-kind treatment. Many taxpayers disagreed with the IRS position on this issue. In 1998, the IRS issued Letter Ruling 9814019 and permitted a two-party reverse exchange. In 2000, the IRS issued Revenue Procedure 2000-37 and established a safe-harbor for certain reverse like-kind exchanges. In this procedure, the taxpayer is allowed only 45 days between the time the property being exchanged is identified and the time the intermediary takes legal title to the new

property. This procedure also states that a total of 180 days is the maximum time period allowed for the sale of the property being exchanged. This procedure states that the exchange will lose like-kind treatment if the 180-day time period is not met.

In the case DeCleene v. Commissioner, which was settled in late 2000, a taxpayer tried a like-kind exchange without using an intermediary. The taxpayer acquired some property called the Lawrence property in 1992. Approximately one year later, the taxpayer transferred the Lawrence property to Western Lime and Cement Co. (WLC) in exchange for a nonrecourse note. Then, three months later, reacquired the Lawrence property in exchange for a new property called the McDonald property. The court held that WLC did not acquire any of the benefits and burdens of ownership of the Lawrence property and, therefore, the Lawrence property was never transferred to WLC. If the Lawrence property was never transferred to WLC, then the only way in which the transaction could qualify for nonrecognition under section 1031 would be if the acquisition of the Lawrence property in 1992 was treated as part of an integrated plan to exchange it for the McDonald property. However, the taxpayer had not taken any steps to evidence intent to enter into an exchange.

In the case, the court pointed out that the taxpayer purchased the Lawrence property without the participation of an intermediary or exchange facilitator. The structure of the transaction created an inherently ambiguous position about whether an exchange would ever take place. The court thus ruled that transaction was a taxable sale and not a tax-free exchange.

CONCLUSION

Like-kind exchanges are a popular method of deferring taxes on the disposition of business or investment property, especially real estate. While real estate exchanges offer excellent tax advantages, it is important that they be structured in accordance with I.R.S. Regulations to realize tax deferment.

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CPAs' AWARENESS OF LITIGATION RISK

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ABSTRACT

This study examines CPAs' awareness of the litigation risk imposed by audit services. Using CPAs from selected states, I compare perceptions of litigation risk to three objective measures of litigation risk. The first measure is an important legal provision of audit litigation which is assumed to influence litigation risk. Litigation activity reported by the Department of Justice are used for the other two objective measures: frequency of litigation and the level of damages.

Based on these comparisons, I find that the CPAs are not well informed about the litigation risk they face for audit services. Although CPAs provided perceptions consistent with the allegedly important legal standard, a strong majority of CPAs had perceptions that were inconsistent with the Department of Justice statistics about litigation frequency and damage awards. In each case, the misperceptions followed a systematic pattern.

This finding suggests that CPAs may be facing more risk than they thought or incurring more costs than necessary. The finding calls into question the effectiveness of the civil liability system to deter audit improprieties and leads to several questions for future research.

THE VIABILITY OF DOLLARIZATION IN LATIN AMERICA

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ABSTRACT

Positive and negative aspects of Dollarization of Latin America are explored and many examples are provided for both positions. Dollarization is a substitution of currency, but there are different aspects of the practice and Dollarization is by no means simple. Support for this goes to the fact that globalization is a reality and that Latin American nations have been more aligned with the U.S. in recent years. The idea is compared with the advent of the euro and while they are admittedly two different ideas, in two very different regions, some support comes from the idea of a united currency as a general concept. The conclusion emphasizes that Latin American nations will do well with full Dollarization and the countries should not let pride or fear get in the way of going forth with the idea.

IMPACT OF THE STRONG DOLLAR ON THE U.S. ECONOMY

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ABSTRACT

This paper discusses the strength of the U.S. dollar and how it affects the nations economy. Foreign currencies are analyzed as well due the fact that their strength helps establish the U.S. dollars strength. The characteristics of the strong dollar are closely discussed and the affects they play on the U.S. economy and specific industries are analyzed. The negative effects of a strong dollar are discussed and the question is asked and answered whether they are enough to back weakening the dollar. Finally, economic effects of the recent terrorist attacks are discussed.

401(k) RETIREMENT ACCOUNTS AND AGE RESTRICTIONS

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ABSTRACT

The business world is increasingly concerned with discrimination issues between different groups of employees. Interestingly, age discrimination is legal under the provisions of the 401(k) retirement benefits statute. Current law requires that all employees be covered under a company's 401(k) program at the age of 21; however, benefit coverage for employees younger than 21 remains at the employer's discretion.

INTRODUCTION

At the heart of most individual investment is a desire to secure economic or financial security. Traditionally family members and relatives have felt some degree of responsibility to one another. To the extent that the family had resources to draw upon, this was often a source of economic security, especially for the aged or infirm. Long before financial assets, land itself was the key asset and at the center of economic security for those who owned it or who lived on farms (Social Security Administration, 2000). Thus the traditional sources of economic security are assets, labor, family, and finally, if necessary, charity. As society changes individuals must consider new ways to address their own economic security. This security, for the individual and for the family, concerns itself primarily with three factors: people want decent homes to live in, they want to locate their homes where they can engage in productive work; and they want some safeguard against misfortunes, which cannot be wholly eliminated. The key concern of this paper is the role of the 401(k) law in limiting individuals in their ability to provide for their own economic futures.

LITERATURE

The Law

The government plays a central role in the design and regulation of any benefit package. While controlling the cost of benefits in a competitive labor market is a major concern of employers, the social and economic welfare of citizens is a major concern of government as evidenced by the Social Security Act (1935), Federal Unemployment Tax Act (1935), state Workers' Compensation laws and the Employee Retirement Income Security Act (1974) (Cascio, 1995).

Named after an obscure section of the IRS code [Internal Revenue Code of 1986, Section 410(a)], 401(k) plans, for corporations, and 403(b) plans, for government and tax exempt

organizations, are often considered the blue ribbon of retirement plans. These plans allow the investor (employee) to defer taxes on part of his or her salary by contributing to a special account set up by the employer. Employees do not pay taxes on the earnings until the money is withdrawn, usually at retirement. However, the IRS sets age and service conditions under which an organization with such a plan must offer the plan to its employees. Section 410(a)(I) of the Internal Revenue Code provides that

> *A trust shall not constitute a qualified trust under section 401(a) if the plan of which it is a part requires, as a condition of participation in the plan, that an employee complete a period of service with the employer or employers maintaining the plan extending beyond the later of the following dates (i) the date on which the employee attains the age of 21; or (ii) the date on which he completes 1 year of service.*

This law allows employers to exclude 18-year-old employees (or any employee under the age of 21) from participation in a company's retirement program. Furthermore, the employee is excluded from any matching funds provided by the employer.

Compensation Decision

According to Lewin and Mitchell (1995), when employers address decisions on compensation whether direct or indirect, they face four basic problems. For jobs for which there are comparable workers outside the firm, they must decide how much to pay relative to the external market. For jobs for which it is difficult to find comparable workers externally, employers must determine pay levels relative to other occupations in the firm. For all jobs a decision must be made concerning the mix of pay versus benefits. Finally, employers must comply with federal, state and local statutes and regulatory restrictions.

The U.S. Social and Political Perspective: Personal & Retirement Savings

Federal Reserve Board Chairman, Alan Greenspan, at The 2002 National Summit on Retirement Savings on February 28, 2002, said,

> *One of the most complex economic calculations that most workers will ever undertake is, without doubt, deciding how much to save for retirement. At every stage of life, individuals ought to make judgments about their likely earnings before retirement and their desired lifestyle in retirement. Also implicit in such decisions are assumptions about prospective rates of return, life expectancy, and the possible accumulation of a nest egg for one's children. The difficulty that individuals face in making these projections and choices is compounded by the need to forecast personal and economic events many years into the future.*

President George W. Bush also addressed The Summit and warned "Americans are saving too little -- often, dangerously too little. The average 50-year-old in America has less than $40,000 in personal financial wealth. The average American retires with only enough savings to provide 60 percent of his former annual income. The problem is especially acute for women and minorities"

(The 2002 National Summit on Retirement Savings, 2002). This is further compounded in single parent households, through divorce, or by the death of a spouse.

Social Security

Social Security has become the main source of many people's retirement income with 38 percent of retirees' income coming from Social Security. Of concern to Congress is the disproportionate dependency on Social Security among income groups. Unsurprisingly, the dependency is greatest among those in the lowest quintile of total income, where Social Security benefits supply 82% of income. For the highest quintile, Social Security contributes only 18 percent of the income of retirees (The 2002 National Summit on Retirement Savings, 2002).

The future of the current system of contributions and payments in the Social Security program is the subject of much public policy debate. Of major concern are the increased longevity and the size of the aging Baby Boom generation, combined with lower fertility rates for the generations that follow. These factors will seriously impact the Social Security system. The Social Security Board of Trustees estimates that the number of people aged 65 and older will double by 2075, to 23% of the population. More importantly, on the contribution side, the ratio of workers to beneficiaries will decrease from 3.4 today to 2.1 in 2030. It is forecasted that Social Security faces cash deficits in 2016, when payments are projected to be larger than revenue.

Congress is currently considering proposals to ensure Social Security's financial viability. One proposal is to allow the investment of the fund's assets in equities rather than Treasury bonds. Of key concern in this paper are proposals to allow individuals to manage a portion of their contributions. This is exactly what happens with 401(k) retirement programs where individuals manage their own money including corporate matches.

SURVEY FOCUS AND ADMINISTRATION

The questions posed in this survey were designed to determine when an employee is eligible for enrollment in a company's 401(k) program. The sample of companies surveyed was drawn from the S&P 500 companies included as of January 2002. The S&P 500 classifies each of the 500 companies into one of 11 defined categories. A stratified sample of 100 respondents was surveyed. A telephone survey was conducted during the month of February 2002. For each organization, the benefits director or benefits officer was interviewed. The following tables summarize the results of the 100 responding companies.

SURVEY RESULTS

Table 1: 401(k) Retirement Plans		
Characteristic	Number	percent of respondents
Companies offering 401(k) retirement plans	100	100%
Companies not offering 401(k) retirement plans	0	0%
Total respondents	100	100%

Table 2: Employee 401(k) Contribution Matching Programs		
Characteristic	Number	percent of respondents
Companies offering 401(k) employee contribution matching programs	93	93%
Companies not offering 401(k) employee contribution matching programs	7	7%
Total respondents	100	100%

Table 3: Employment Status Contingency of 401(k) Retirement Plans		
Characteristic	Number	percent of respondents
Companies offering 401(k) retirement plans to both full-and part-time employees	88	88%
Companies offering 401(k) retirement plans strictly to full-time employees	12	12%
Total respondents which offer 401(k) retirement plans	100	100%

Table 4: Age Contingency of Retirement Plans		
Characteristic	Number	percent of respondents
Companies offering 401(k) retirement plans to employees younger than 21	52	52%
Companies not offering 401(k) retirement plans to employees younger than 21	48	48%
Total respondents which offer 401(k) retirement plans	100	100%

DISCUSSION AND OBSERVATIONS

The data shows that 52 percent of responding employers provide retirement benefits to all employees, regardless of age, though Federal Law does not require them to offer such plans. In contrast to these optional retirement benefits, these same employees pay, and their employers match,

Social Security taxes. Social Security taxes, which companies match, are required for all employees beginning with the first dollar earned regardless of age.

A comfortable retirement requires an estimated income of approximately 70% of what an employee earned while working. However, low wage earners receive approximately 60%, average wage earners about 42%, and high wage earners about 26% of pre-retirement income through projected Social Security benefits. Social Security plays a role in retirement planning, but the employee who wishes a comfortable retirement needs to plan to supplement Social Security retirement payments. Social Security was not originally intended to provide full financial support for retirement; it was intended to supplement the employee's pension, savings, and investments, particularly for the individual who far exceeded the life expectancy estimates.

The data also indicate that for 48 percent of the surveyed organizations which offered 401(k) plans, access to the employer sponsored retirement programs is only available to those employees which current IRS code mandated. However, 52 percent of employers voluntarily extend non-mandated retirement benefits to employees under the code-specified age of 21. Employers taking the equivalent of the "ethical or moral high ground" with respect to their employees could optimistically explain this behavior. Alternatively, it might be argued that companies expect a change in regulations and that private initiative has merely preceded governmental intervention and/or regulation. Another rationale might be that a competitive work environment has provided employers with an incentive to make such benefits available in order to compete for the best talent and to reduce turnover in the labor market. Finally, it might be argued that the expense incurred to differentiate between employees and to modify benefits as under-age employees mature may exceed the savings to organizations of withholding this benefit from the small proportion of their labor force, who typically have the lowest pay levels and whose benefits would thus cost the least.

SUGGESTION FOR REFORM

Age requirements for participation in 401(k) programs should be eliminated. This would then be consistent with current Social Security taxation. At the least, probationary periods, where they exist, relating to employer 401(k) matching, should be consistent for all eligible employees. Any limitations on program participation should be consistent and without respect to age.

CONCLUSION

Where powerful demographic, federal and state fiscal policy, economic and social forces are placing increasingly severe financial and solvency strains on the social security system, employee access to company sponsored retirement plans, regardless of age, is essential. The financial realities of money compounding over long periods of time make it essential that all employees have access to retirement plans and be encouraged to participate and plan for retirement, beginning with their first job. As the United States faces an aging population, fewer workers to support retirees, governmental budget deficits and increasing political pressure for social security reform and/or privatization, there should be a corresponding shift to more individual responsibility and involvement in retirement planning and saving.

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ENRON-THE LARGEST PUBLIC REPORTING FAILURE?

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ABSTRACT

Once a Wall Street favorite with a stock price as high as $90.75 per share, Enron shocked the financial world by reporting that its financial statements were misstated. Enron's stock price plummeted below $1 per share! Enron filed for bankruptcy December 2, 2001. All media forms report daily stories on Enron's financial debacle. The SEC initiated an investigation and various Congressional oversight committees scheduled hearings that undoubtedly will last for years. The auditing firm, Arthur Anderson, confirmed that Enron documents were shredded. A former Enron executive committed suicide. Many employees lost the entire value in their retirement accounts when the stock price collapsed. Executives, cashing out before the stock price collapsed, reportedly made millions. How could this happen in an environment with so much regulation requiring periodic and timely reporting to the SEC as well as periodic independent audits?

Did the information available to the public provide any signs of the impending financial collapse? Would a careful analysis of the financial statements and a thorough reading of the accompanying footnotes have revealed troubling questions? If such an analysis and study of the financial statements and footnotes and other disclosures did not provide warning signs, what would have?

This paper presents the results of a review and analysis of the 1997 - 2000 10-Ks filed with the SEC for indications of possible financial trouble. This analysis includes both the actual reported financial amounts and the restated financial amounts. The full impact on the profession will likely require years of investigation and analysis and likely will result in significant changes in the accounting profession.

M&M: A NEW PARADIGM FOR TEACHING BEGINNING ACCOUNTING COURSES

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ABSTRACT

Today's accounting teachers are encouraged to explore innovative and non-traditional ways of educating students. The new classroom model changes from the passive classroom into an interactive environment. Instructors must discover and use teaching methods that will motivate and encourage learning. M&M (Motivation using Mnemonic) has been demonstrated to be an useful technique that will stimulate learning success. Students can use mnemonics for quick recall. This memory process will motivate students to learn the subject matter and provide instant satisfaction. The purpose of this paper is to introduce an effective teaching technique using mnemonics, which would enable students to grasp and recall important concepts. Motivation is the key catalyst in assisting students to become energetic in grasping and recalling important concepts. The use of mnemonics will motivate students to acquire information needed to be successful. An example of a mnemonic would be "The Grateful D.E.A.D." This mnemonic is used when teaching debits and credits. The letters in DEAD stand for: D--debit, E--expenses, A--assets, D--drawings or dividends. These accounts are debited when their balances are increased. All other accounts that are not in the DEAD are credited for increased balances. This curriculum includes role playing, teacher demonstration using proven mnemonics for introductory level accounting courses. This paper will focus on providing an effective teaching technique that will motivate, stimulate, and improve the learning process for accounting students. Accounting is not the favorite class for a majority of students. Hence, instructors must try to make these classes fun, exciting, and manageable for all students.

INTRODUCTION

Each semester a majority of students will enroll in accounting classes with a preconceived fear of "this will be another math class." Many students openly communicate their lack of confidence in their ability to do good in accounting, "I'm not good with math, therefore, don't expect me to do well in accounting." The ability to stimulate the learning process and motivate students to learn is critical in today's teaching profession.

LITERATURE REVIEW

Sparked by the publication of "A Nation at Risk: The Imperative for Educational Reform" (National Commission, 1983) which reported that many abilities related to classroom structuring, motivation, relationship development, and student learning have come to be expected of teachers (Kerssen-Griep 2001). Motivation is the force of energy that propels one to seek a goal and/or to satisfy a need; striving, incentive, purpose (Campbell, 1981). Exemplary university teachers are

well prepared and organized; present the material clearly; stimulate students' interest; engage and motivate students to studying the material through their enthusiasm/ expressiveness; have a positive rapport with students; show high expectations of students; encourage them, and generally maintain a positive classroom environment (Hativa et al., 2001). Learning happens when a correct response is demonstrated following the presentation of a specific environmental stimulus. Knowledge acquisition is described as a mental activity that entails internal coding and structuring by the learner. The goal of teachers is to communicate or transfer knowledge in the most efficient, effective manner. The focus on instruction is to create learning, which involves a change, by encouraging the learner to use appropriate learning strategies. Learning results, when information is stored in memory in an organized, meaningful way. Teachers are responsible for assisting learners in organizing information in an optimal way so that it can be readily assimilated. Mnemonics is a teaching technique that can bridge the gap between motivation and learning success.

According to N.H. Leonard (1995), individuals primarily motivated by intrinsic process will only engage in activities which they consider fun. These individuals are often diverted from tasks that are relevant to goal attainment in order to pursue tasks which are intrinsically more enjoyable. Thus, as long as, tasks are enjoyable these individuals will be motivated to continue working effectively and may see accounting as an enjoyable learning experience. College educators value students' intrinsic motivation to learn. Intrinsically motivated learners use more sophisticated reasoning skills, have feelings of academic competence and sustained motivation to learn utilize more helpful learning strategies, display deeper text processing and higher levels of conceptual learning, have more and longer-term retention of learning ,demonstrate better recall, and have increased ability to link new learning with already held knowledge. (Kerssen-Griep, 2001)

MNEMOICS: THE OBSERVATIONS

The subject of mnemonics and its use as a motivational strategy in the classroom setting is rarely discussed in professional journals. Many teachers believe that memory methods are obsolete, while others have a strong sense of mnemonics being something intellectually unrespectable, a feeling of cheap mental tricks.

Mnemonics are formal techniques used for organizing information in a way that makes it more likely to be remembered. According to research, forgetting is a natural process, with the greatest losses occurring within the first 24 hours of learning. After one day you will forget 46% of what you read, 79% after 14 days, and 81% after 28 days. Many individuals have used mnemonics to remember details of their speeches. The use of mnemonics is not considered to be just the skill of simple memorization, but rather a true, rigorous art which requires imagination, effort, and a good thinking mind. Mnemonics are most useful for memorizing terminology and list of facts, rather than concepts. Studies of mnemonic devices has found that students who used them can raised their test scores by 77%.

When creating a mnemonic it is important to use positive, pleasant images. The brain often blocks out unpleasant ones. You should learn to exaggerate the size of important parts of the image. Humorous or peculiar mnemonic tools are easier to remember than static images. With College students rude or sexual rhymes are very difficult to forget and are not usually considered offensive. You may also use symbols, vivid or colorful images.

Utilize all of the senses to code information or dress up an image. Remember that your mnemonic can contain sounds, smells, tastes, touch, movements and feelings as well as pictures. Bringing three dimensions and movement to an image makes it more vivid. Movement can be used either to maintain the flow of association, or can help to remember actions. Locate similar mnemonics in different places with backgrounds of those places. This will help keep similar images distinct and unconfused.

The most important thing is that the mnemonic should clearly relate to the thing being remembered, and that it should be vivid enough to be clearly remembered whenever you think about it (http://www.mindtools.com). The use of mnemonics is a fun experience for accounting students. The direct advantages of using mnemonics to motivate students are: (1) mnemonics helps them to organize, define and retrieve information; and (2) mnemonics imposes order, associations, context, meaning, and retrieval clues. I have used mnemonics extensively in my Principles Of Accounting I Classes as a motivational tool for students.

EXAMPLES OF MNEMONCIS

Some of the examples of mnemonics used in Principles of Accounting I are included. The first relates to the types of accounting statements. For this I use the Four BASIC Statements

BA - Balance Sheet
S - Statement of Changes in Owner's Equity or Retained Earnings
I - Income Statement
C - Cash Flows Statement

Further students can remember the components of a balance sheet using Mr. BALOE .

B - Balance Sheet Items
A - Assets
L - Liabilities
OE - Owner' Equity

Another example is Statement of Owner's Equity Mr. BECANIWEC

BEC Beginning Capital
A + Additional Investment
NI + Net Income
W - Withdrawals
EC =Ending Capital

For Income Statements I use Mrs. IRENI.

I - Income Statement Items
R - Revenues
E - Expenses
N - Net Income (Loss)

Statement of Changes in Retained Equity is Mrs. BRENIDERE.

BRE Beginning Retained Earnings
NI + Net Income
D - Dividends
ERE = Ending Retained Earnings

Statement of Cash Flows (Oh, I Forgot)

O - Operating Activities
I - Investing Activities
F - Financing Activities

Current Assets (CAR Sip)

C - Cash
AR - Accounts Receivable
S - Supplies or Short-term Investments
I - Inventories
P - Prepaid expenses

Current Liabilities (Lambs Are Pretty Nice Unless Rover Attacks Lambs)

L - Liabilities
AP - Accounts Payable
N - Notes Payable
UR - Unearned Revenues
AL - Accrued Liabilities

Bank Reconciliation (Bad Dog Out Tonight)

B Balance for Bank
D + Deposits in Transit
O - Outstanding Checks
T = Total

Interest on Notes (paying Interest is the PIT)s

P Principal
I * Interest Rate
T * Time

Employer Payroll Taxes

Employers cry and need (PUFFS)tissue when its time to pay Payroll taxes

P - Payroll Taxes
U - Unemployment Taxes
F - FUTA
F - FICA
S - SUTA

Each of these examples demonstrates ways that mnemonics can be used to help students remember all of the elements of some important basic accounting procedures. I have found that this is the biggest problem for most students in the accounting 1 experience.

When classes were polled with the question, "How do I motivate You ?" over 90 percent reported the use of mnemonics as a significant motivational tool. Students frequently reported: "professor uses mnemonics to help us memorize important groupings of information;" Another student reported " using mnemonics is an easy way for me to remember a lot of things for accounting;". "The use of mnemonics is very good because it helps me remember things that I would otherwise have trouble remembering." reported one student.

Student comments demonstrate that mnemonics can have a direct control over the way they learn and remember. Students find that there are alternatives to simple rote memorization. It helps contribute to the feeling that students are active participants in the learning process, which makes learning more intense and less forgettable. They are forced to think about the meaning and the nature of the material to be learned. Most important mnemonics is one method that teaches students how to organize data efficiently.

CONCLUSION

More studies are needed on the use of mnemonics in the classroom. More literature must be generated so that general apprehensions, suspicions, and misinformation about mnemonics can be overcome. My classroom experiences using mnemonics strongly supports its use as a way to motivate students to learn accounting. Through the use of mnemonics professors can effectively motivate students to accomplish their learning goals in Accounting.

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ARE PRELIMINARY ESTIMATES OF GDP AND CORPORATE PROFITS RATIONAL?

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ABSTRACT

Prior studies using traditional regression or standard co-integration methodology to test rational expectations hypothesis (REH) for time-series data characterized by unit root processes could be suspect and lead to incorrect inferences. I test REH involving preliminary macro-economic time series data using a three-stage modeling strategy, which accounts for non-stationarity in time-series data, non-normality in co-integrating regression, and serial correlation of error terms. I find that preliminary estimates of GDP and corporate profits are rational in the sense that they are optimal forecasts of their respective final estimates. These results have important implications for economic, financial, and investment decisions made by many economic agents such as policy makers, money managers, and security analysts who employ preliminary data in their econometric models to predict future growth of the GDP and corporate profits.

Keywords: Rational expectations, cointegration, preliminary announcements.

JEL classifications: C22, C52

THE DUAL ROLE OF AUDIT EVIDENCE

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ABSTRACT

The expression of an audit opinion is an implicit reflection of two conclusions based on evidence collected during the audit: (1) that the risk of undetected material misstatement in the client's financial statements is appropriately low, (i.e. the opinion is accurate), and (2) that the evidence collected provides sufficient support for the opinion rendered (i.e. the opinion is justified). Audit evidence may thus be viewed as having a dual role - an "opinion-forming" role and an "opinion-justifying" role.

This paper analyzes the distinction between these two roles. Specifically, the paper proposes that the usefulness of audit evidence in forming an opinion is, as a practical matter, subject to less stringent standards than those for determining whether the opinion is justified. Applying this argument to an internal control setting, differences in evidence usefulness across its two roles may lead auditors to form beliefs that control risk is below the maximum level before they have sufficient evidential matter to justify such an assessment.

This proposition was tested in an experiment involving practicing auditors. Consistent with the theory, subjects expressed beliefs that control risk was below the maximum level but indicated that the evidence provided was not sufficient to justify such an assessment.

THE DETERMINANTS OF CORPORATE DIVIDEND POLICY

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ABSTRACT

What are the factors that determine a corporation's dividend policy? The literature (Gitman 2002, Ross 2002) suggests a number of possible factors to include: price to earnings ratio, payout ratio, return on equity, profit margin, debt to equity ratio, current ratio, and five-year estimated growth rates for both earnings per share and sales. This study uses the payout ratio as the proxy for the dividend decision. Of the variables tested on a sample of 69 firms selected from the Compustat Database, the price to earnings ratio proved to be the most significant in determining dividend policy. The debt to equity ratio was also shown to have some importance in the determination of whether or not a corporation pays a dividend.

INTRODUCTION

The purpose of this study is to investigate the factors that motivate the dividend decision. Payout ratio is the dependent variable in the regression. The independent variables include: price to earnings ratio, return on equity, profit margin, debt to equity ratio, current ratio, and the estimated five-year growth rates for earnings per share and sales growth.

Dividend policy is one of the most controversial subjects in finance. Finance scholars have engaged in extensive research to explain why companies should pay or not pay dividends. Many researchers (Baker and Powell, 1999) have developed and empirically tested various models to explain dividend behavior. Some researchers (Baker, Veit, and Powell 2001) have surveyed corporate mangers and institutional investors to determine their views about dividends. Despite extensive debate and research, the actual motivation for paying dividends remains a puzzle (Baker and Powell, 1999).

Dividends play a central role in traditional models of stock valuation. In such models, stocks have value because they hold the promise of future cash payouts. Dividends constitute the primary cash payment to stockholders-the greater the expected future stream of dividends, the greater the value of the stockholder's share (Carlson 2001).

Some researchers believe that dividends increase shareholder wealth (Gordon, 1959), others believe that dividends are irrelevant (Miller and Scholes, 1978), and still others believe that dividends decrease shareholder wealth (Litzenberger and Ramaswamy, 1979). Recent research (Cornell and Shapiro, 1987; Peterson and Benesh, 1983; Prezas, 1988; and Ravid, 1988) suggests that there are interactions between investment and financing decisions. Cornell and Shapiro (1987) suggest that non-investor stakeholders (customers, employees, suppliers, distributors, and other firms providing complementary goods and services) influence this interaction of investment and financing decisions.

Lintner (1966) developed a hypothesis that dividends are based primarily on net income levels and are adjusted slowly in response to income changes. This hypothesis was tested and offered convincing results. He also posed a second hypothesis stating that a rise in individual tax rates encourages stockholders to prefer corporate savings over a dividend payment in order to shelter their money.

Baker and Powell (1999) did a study on dividend policy and drew several conclusions. Most respondents to their survey believed that dividend policy did affect firm value. The respondents also had the highest level of agreement with statements involving signaling. Cash dividends announcements convey valuable information about management's assessment of a firm's future profitability that other means cannot fully communicate (Baker and Powell 1999). Investors may use dividend announcements as information to assess a firm's stock price (Baker and Powell 1999). Respondents were most uncertain about statements involving the tax-preference and the bird-in-hand explanations of dividend relevance. The bird in hand theory says a high dividend yield will maximize a firm's value. Dividends represent a sure thing relative to share price appreciation because dividends are less risky than capital gains (Baker and Powell 1999). The study also showed that managers are highly concerned about the continuity of dividends. Continuity shows stability in the firm's earnings and constant growth. This gives investors confidence that they will get a constant and almost guaranteed rate of return on their investments.

Holder, Langrehr, and Hexter (1998) completed a study of dividend policy determinants. They concluded that corporate focus is negatively related to dividend payout ratios. The authors define a corporation as being focused when the firm's sales are attributable to a distinct business line. The more focused firms tended to have lower dividend payout ratios. Larger firms tended to have higher payout ratios than smaller firms. Also, the greater the degree of insider ownership, the lower the payout; the larger the number of shareholders, the higher the dividend-payout; and the greater the free cash flow, the higher the payout ratio.

From his survey, Lazo (1999) revealed that 87% of dividend paying companies believe that dividends do signal information regarding future earnings of the company. 110 senior financial officers from S&P 500 companies responded to the survey, representing a sample size of 22%. Results show that of corporations having a buyback program in place in the last two years, 72% increased their dividend payout. 25% used other uses of cash flow, other than dividend payments, to fund repurchase programs. 93% of the responding officers felt that, "initiating a stock-buyback program is believed to be more effective than raising dividends in providing downside stock-price protection in a falling market." 79% of respondents stated that, "stock repurchase programs do not receive a higher priority use of corporate cash flow then dividends, even if corporate profitability were to come under pressure." This study shows the importance dividends have on a company.

Carlson (2001) discusses the factors that affect the dividend decision. He concludes that stock repurchases explain a small part of the decline in dividend yield. He concludes that the decline might also reflect a continuation of the postwar trend in dividend policy, that is to increase retained earnings and invest productively. In the postwar period, lower dividend yields have been more than offset by higher earnings growth and hence higher stock price appreciation. A third reason for declining dividend yield could be related to the swift acceleration of stock prices. The dividend yield is the ratio between the dividend and the stock price. So as stock prices appreciate faster than dividends, dividend yield must decline.

Kumar and Lee (2001) did a study on dividend policy by exploring the determinants of dividend smoothing. Dividend smoothing is the method of maneuvering the time profile of earnings or earnings reports to make the reported income stream less variable. By making the stream of dividend payments constant, shareholders are not disappointed or upset by changes in dividend payout. Kumar and Lee used earnings variance, financial distress or bankruptcy risk, and return on firm capital investment as determinants of dividend policy.

METHODOLOGY

This study employs Ordinary Lease Squares (OLS) Regression on a sample of firms from the Compustat Database to empirically test the impact of certain financial variables on the firm's dividend payout ratio. The payout ratio is the dependent variable and the independent variables include: price to earnings ratio, return on equity, profit margin, the debt to equity ratio, the current ratio, and the estimated five-year growth rates for earnings per share and sales. The regression included data for sixty-nine companies from the Compustat database. The Compustat Database uses the 100 most researched companies in the Market Insight database. The data for each of these companies was retrieved from the Market Guide database in October of 2001. Table 1 defines the variables.

TABLE 1: VARIABLE DEFINITIONS

	Variable	Definition	Coefficient	T Stat	P-Value
Dependent Variable	Payout ratio	Dividends per share/earnings per share for the trailing 12 months	24.779	1.536	0.129
Independent Variables	PE ratio	Market price of common stock at month's end/EPS for the trailing 12 months	0.317	2.316	0.043
	ROE	Net income after taxes/equity for the 5 most recent quarters averaged	-.0497	-0.881	0.381
	Profit Margin	Net income after taxes/sales for the trailing 12 months	0.003	0.002	0.997
	Debt to equity	Total debt/total equity for the most recent quarter	12.69	2.064	0.043
	Current ratio	Current assets/current liabilities for the most recent quarter	-2.362	-0.478	0.633
	EPS 5 yr growth rate	Compound annual growth rate for the last 5 years	-0.206	-0.721	0.473
	5 yr sales growth	Compound annual growth rate for the last 5 years	-0.077	-0.459	0.647

QUANTITATIVE TESTS AND RESULTS

The regression results are shown in Table 1. The price to earnings ratio is positively correlated to the payout ratio and it meets the 95% significance level. Higher price to earnings ratios usually translate into higher future stock prices and better returns to stockholders through growth. As the overall company earns more, they pass these earnings onto the stockholders through the form of dividends.

Return on equity represents overall profitability of the firm and results show negative and insignificant correlation with the payout ratio. Profit margin relates positively with the payout ratio but is insignificant in explaining the dividend behavior of the firms studied. The net profit margin reflects the firm's ability to produce a good or service at a high or low cost. It indicates the rate of profit being earned from sales and other revenues. High profit margin suggests higher profits and could relate to higher dividends.

The debt to equity ratio is positively correlated with the dividend yield, and is significant at the 95% level. This finding strongly supports the finance literature. "Debt ratios tend to be very low in high growth industries with ample future investment opportunities such as the drugs and electronics industries. Industries such as primary metals and paper, with relatively few investment opportunities and slow growth, tend to use the most debt" (Ross, 451). This again goes back to the theory that companies with high growth pay little or no dividends and that companies with lower growth will need to pay higher dividends in order to keep its stockholders happy since they are not receiving returns through high capital gains in the stock price. When the debt to equity ratio is high it usually correlates with a slow growth company, and that company is forced to pay out a higher dividend. A low debt to equity ratio is associated with a high growth company. A high growth company gives its return to investors through rising share price and has no need to pay a dividend. It needs the dividend money to reinvest in the company in order to keep the high growth level up.

Similar to Darling (1957) and Baker, Veit, and Powell (1999), the study findings show a negative and insignificant relationship between the current ratio and the dividend payout for the firms tested. To increase liquidity, firms might lower dividend payouts requiring less outside financing. Finally, both the estimated five-year growth of earnings per share and sales growth independent variable related negatively to the payout ratio and were statistically insignificant. This supports for the link between a firm's growth and the dividend decision. Higher growth in sales and earnings requires greater capital retention to support such growth and thus explains the lower dividend payout ration of such firms. Apparently, the companies in this study made the decision to withhold the earnings to finance growth. More working capital is needed for companies with more growth.

CONCLUSION

This study empirically examined the data for a sample of Compustat Database firms to assess the impact of selected financial variables on the dividend decision using OLS Regression. The study used the firm's dividend payout ratio as the dependent variable to represent the dividend decision. Independent variables tested include price to earnings ratio, return on equity, profit margin, the debt

to equity ratio, the current ratio, and the estimated five-year growth rates for earnings per share and sales. Of the variables analyzed, the price to earnings and debt to equity ratios related positively to the dividend payout ratio and were significant at the 95% level for the firms in the sample. That is, for the firms studied, the higher the PE and DE ratios, the higher is the dividend payout ratio. The finding with respect to the debt to equity variable offers strong support for growth explanation of the dividend decision "Debt ratios tend to be very low in high growth industries with ample future investment opportunities such as the drugs and electronics industries. Industries such as primary metals and paper, with relatively few investment opportunities and slow growth, tend to use the most debt" (Ross, 451). And low debt correlates with high growth since these firms tend to pay little or no dividends in order to retain the capital to finance growth. Likewise, the firms with higher price to earnings ratios posted higher dividend payout ratios. Apparently, the success of firms with higher PE ratios is shared with stockholders through higher dividends. Clearly, more research is needed to explain these phenomena.

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IN SEARCH OF QUALITY EARNINGS MEASUREMENTS: THE ACCOUNTING PROFESSION IN JEOPARDY

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ABSTRACT

Financial ratios and other measurements have been used for many years as indicators of investment potential and financial solvency of businesses. Traditionally, various ratios and other financial indicators were derived primarily from earnings (Income Statement) and solvency (Balance Sheet) data. Recently, arguments have surfaced indicating those traditional earnings and solvency indicators fall short in determining the quality of earnings reported on Income Statements. Development of financial measurements that indicate cash flow and cash position has been slow. This is due to the relatively recent significance of Cash Flow Statements as part of the financial reporting package.

In this paper, the researcher concludes that quality of earnings reported by company income statements can be determined through appropriate articulation of the three major financial statements and the development of financial performance measurements that involve data from each financial statement.

INTRODUCTION

Beginning in the early 1900s, the corporate form of business developed into the foremost method of capital formation this country has ever experienced. Obtaining small investments from multitudes of diverse investors accumulates large amounts of capital. Naturally, the corporate form generates many absentee owners who maintain interest in the progress of their respective investments. Since the rise of the corporate form of doing business, accounting standards setting organizations have used the income statement in various forms as the primary external reporting document for equity investor decisions. Likewise, the balance sheet is used essentially for creditor decisions.

There has been a great deal of pressure from investment circles for accounting standards setting organizations to alter income statement formats. At one time organizations could choose between the All Inclusive and the Current Operating Performance Income Statement formats. This reporting standard was superceded by a requirement that practically all types of income be reported in the income statement. In 1997 the Financial Accounting Standards Board (FASB) issued Standard Number 130 requiring all corporations to report using a comprehensive income format. Thus, all types of income are now reported as income, either as income statement items or equity adjustments. Through all of these changes, investors continued to rely almost entirely on reported bottom line earnings to make investment decisions.

The purpose of this paper is to propose some financial measurements that should be helpful in differentiating quality earnings from bottom line reported earnings. The remainder of the paper is arranged as follows. First, the writer will present current interpretations of what is included under the purview of quality earnings. Next, four quality earnings measurement models will be presented and defended. Finally, the writer will apply the measurements to the most recent three-year published financial statements of ten selected companies. Averages for the five companies with increasing stock prices to the five that experienced declining stock prices during the period from February 2001 to February 2002 are then compared.

QUALITY EARNINGS

Historically, corporate earnings have driven stock price projections for investment purposes. For example, earnings per share, price-earnings ratios, and return on investment measurements each use some segment of earnings as shown on income statements as part of the calculation. However, inordinate use of earnings as a primary driver of investment potential decisions has recently been subjected to skepticism (Morgenson, 1999). Some prominent companies such as Cisco, Tyco International, Dollar General, and Global Crossing, Ltd. have indicated intentions to restate earnings. These announcements tend to shake the public's confidence in the validity and quality of earnings reported on contemporary income statements. The recent demise of Enron (Krantz, 2002) provides additional fuel to the fire. Enron reported revenue increase of 250% and net income increase of 10% in 2000. Yet its stock prices plummeted during the latter part of 2001.

When one speaks of quality earnings the use of the term "quality" assumes the same meaning as when used to describe products or services. The implied meaning is that the product or service meets or exceeds customer expectations for its intended use. The customers, in the case of quality earnings, are users of income statement information primarily as a basis for equity investment decisions. Quality earnings exist when earnings reported result in true increases in value of the companies reporting the earnings. Currently, the accounting profession is receiving much pressure to differentiate quality earnings from traditionally reported earnings (Brown, 1999; Branner, 2001).

One way the profession can improve earnings statements is through articulation of all of the financial statements (Bahnson, 1996). A second area of improvement addressed in this paper is to place equal reliance on each of the three major financial statements in assessing a company's generation of its earnings instead of relying solely on data from income statements. Financial analysts are beginning to realize that dressing up the earnings report of a company has consequences on cash flow and subsequent debt structure and, accordingly, future fixed payment burdens. Companies that generate the window dressed earnings reports, in turn, experience resulting declines in value.

PROPOSED QUALITY EARNINGS MEASUREMENT MODELS

Balance sheets and income statements have been a part of the financial reporting package for many years. Accordingly, financial analysis for investment and credit decisions relied on ratios and other measurements derived from data extracted from these two financial statements. The

FASB issued Statement of Financial Accounting Standards Number 95 in 1987, which requires the inclusion of a third major financial statement, the cash flow statement, to be included in the financial reporting package. Some writers (Tergesen, 2001) applaud the integration and articulation of cash flow statement data into financial analysis in quest of more definitive measurements of quality earnings.

The ability of businesses to generate efficient cash flows from operating activities is an important sign of quality earnings. Giacomino and Mielke (1993) were among the first to propose helpful cash flow ratios as compliments to traditional financial analysis repertoire. The writers proposed operations index (cash flow from operating activities/ net income) as a measurement of cash generating efficiency of businesses. In their analysis they included depreciation add back to net income to arrive at cash flow from operating activities. This writer surmises that an adjusted CFO (CFO-depreciation expense) to net operating income is more meaningful since depreciation expense does not actually increase cash flow. For companies generating quality earnings, this ratio should approximate one (1).

A second ratio proposed is a ratio of net operating income to total net income. Ideally, one would expect companies with quality earnings to generate about 80-90% of total earnings as net income from operations. Non-quality earnings such as unrealized gains and losses should be identified through this ratio. A third ratio used in this study is identified as a debt payback (Mills and Yamamura, 1998) ratio. This is the ratio of total liabilities to cash flow from operating activities and presents the number of years that would be required to pay off all debt assuming a continuation of current year cash flow from operating activities.

A final measurement is the ratio of cash flow from operating activities/ cash invested in capital expenditures. Future generation of quality earnings requires consistent capital expenditure investments to keep up with technology. However, companies should not invest more than its cash flow from operating activities. This ratio should always be greater than one (1).

THE STUDY

The researcher used financial statements from the most recent three years of ten selected publicly held companies (See Table 1) and applied the four ratios mentioned above. This procedure should reinforce the idea that companies with quality earnings add value for its investors as indicated by stock price increases. Stock price movement from February 2001 to February 2002 of each company was observed and the companies were then categorized as five gainers and five losers in stock price movement over the period.

The four ratios were then applied to the companies' most recent three-year financial statements. Current year is identified as CY; first preceding year as CY-1; second preceding year as CY-2. Results are presented in Table 2.

Table 1: Companies Studied and Changes in Stock Prices				
Company	Price 02-01	Price 02-02	Increase (Decrease)	%
Home Depot	42.34	50.09	7.75	18%
Concord EFS	23.13	29.15	6.02	26%
Ebay	38.33	59.02	20.69	54%
IBM	99.39	107.75	8.36	8%
Waste Management	25.36	28.82	3.46	14%
K-Mart	9.35	1.33	(8.02)	(86%)
Tyco, International	54.65	29.90	(24.75)	(45%)
Dollar General	18.45	15.80	(2.65)	(14%)
Enron	67.54	.42	(67.12)	(99%)
Nokia	24.90	19.80	(5.10)	(20%)
Source: Yahoo Finance				

Table 2: Comparison of Mean Results: Gainers and Losers			
Type Measurement	CY	CY - 1	CY - 2
Adjusted CFO/NOI			
Gainers	1.244	0.711	0.561
Losers	0.879	0.661	0.861
Operating NI/NI			
Gainers	0.891	0.786	0.869
Losers	1.497	0.908	1.470
Debt Payback			
Gainers	3.814	4.602	5.091
Losers	8.564	8.207	6.511
CFO/Capital Expenditures			
Gainers	2.005	1.591	1.270
Losers	1.243	1.006	1.245
Source: Moneycentral.msn.com			

DISCUSSION

Results of this study indicate that extensive reliance on bottom line earnings figures exclusively as primary determinants of investment potential is unwise. Average net income figures

for the five stock price gainers did not vary dramatically from the five losers. However, the five gainers showed more consistent improvement in earnings over the three-year period than did the losers.

The use of measurements suggested by the writer or other similar analyses is helpful in assessing the quality of earnings reported by companies. First, it is important to determine if companies generate cash from operating activities efficiently. This involves control of receivables and inventories to the extent that cash is not tied up at length in financing these assets. Application of the cash flow from operating activities (CFO) / net operating income ratio indicates that gainers showed consistent improvement over the three years while losers were somewhat sporadic, never reaching the desired ratio level of one (1).

The debt payback ratio generated the widest gap of difference between gainers and losers. Gainers generated consistently higher CFO to total liabilities than the losers. Average gainer companies improved from 5.091 to 4.602 to 3.814 from CY-2 to CY-1 to CY respectively. Loser companies deteriorated from 6.511 to 8.207 to 8.564 in the same time frame. Improvement in the debt payback ratios over the three-year period was also more consistent for gainers. This indicates that the quality of earnings generated by gainer companies was better than that of the loser companies, thereby providing for reasonable pay down of debt. Cash flow from operating activities was also more adequate to invest in capital expenditures for the gainer companies than for the loser companies.

Finally, the use of an operating net income/net income ratio was inconclusive, although it can be considered to have produced food for thought. One would surmise that companies that generate higher percentages of operating net income to total net income produce higher quality of earnings. Gainer companies were consistent with approximately 85% net operating income/net income over the three-year period. However, losers fluctuated from 1.47 to .908 to 1.497 during the same time. This indicates that a major portion of earnings in CY and CY-2 was from of non-operating income items such as cumulative adjustments from changes in accounting principles and unrealized gains and losses. Such earnings cannot be considered within the definition of quality earnings.

CONCLUSIONS

Articulating information from the balance sheet and cash flow statement with the income statement enhances the determination of quality earnings. This can be accomplished with the development and use of financial ratios and other measurements that use data from the three major financial statements concurrently.

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EXPORTS AND EXCHANGE RATES AT SUB-NATIONAL LEVEL: AN EMPIRICAL STUDY OF KENTUCKY'S EXPORTS

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ABSTRACT

This paper investigates the impact of exchange rates and national incomes of the importing countries on Kentucky's exports. Preliminary results show that exchange rates and national incomes have significant impact on Kentucky's exports.

INTRODUCTION

There are many studies on the impact of exchange rate changes on exports at the national level. A review of literature, however, reveals that no such studies at the STATE level have appeared in the literature to date. The objective of this study is to analyze the impact of exchange rate changes on Kentucky's exports.

Kentucky exported over $10 billion worth of goods worldwide in 2000 and ranked 22nd among the 50 states in the U.S. This represents about 10% of Kentucky Gross State Product. Average annual growth rate of Kentucky exports from 1990 to 1999 was 10.5% compared to growth rate of 7.1% for the U.S.

With exports accounting for almost 10% of the Gross State Product, any increase or decrease in exports will have significant impact on the state's economy. There are many factors that affect exports such as export prices, economy of the importing countries, competition in the market and the fluctuation in the foreign exchange rates. Kentucky exports to almost 80 different countries worldwide and the exporters have to deal with many different currencies. With freely floating exchange rates, the value of these currencies are constantly changing and this plays havoc with exporters. When dollar appreciates relative to these currencies, it will take more of the foreign currencies to buy Kentucky goods and vice-versa. Conceptually, the impact seems straight forward, but the degree of the impact may be lessened by factors such as, price elasticity of exports, availability of substitutes goods and the degree to which exporters are willing to absorb the exchange rate related price increases. So, whether the impact of exchange rate changes on exports is significant or not is an empirical question.

RESEARCH METHODOLOGY AND DATA

Following past studies, we specify exports as being a function of importing country's GDP and the Exchange rate. The following model is estimated using multivariate regression analysis:

$$EXP_{it} = \alpha + \beta_1 ER_{it} + \beta_2 ER_{i(t-1)} + \beta_3 GDP_{it}$$

Where,

EXP_{it} = Kentucky's exports to country i in year t
ER_{it} = Exchange rate of country i in year t
$ER_{i(t-1)}$ = One period lag of the exchange rate
GDP_{it} = GDP of country i in year t

Kentucky exports data was provided by the Department of Economic Research, Kentucky State Government. GDP and Exchange rates were obtained from International Financial Statistics published by International Monetary Fund. GDP is represented by the index of GDP volume (1995=100); Exchange rates used are in terms of National Currency per unit of SDR. We create indexes for Exports and Exchange rates dividing the series by the value of 1990.

We use pooled cross-sectional and time-series data. Our sample includes only the top ten importing countries of Kentucky's goods. The data set spans 1990 to 1998. The model is estimated by using Newey and West heteroscedasticity and autocorrelation consistent (Newey and West (1987)) method. This procedure allows for a general covariance matrix estimator that is consistent in the presence of both heteroscedasticity and autocorrelation of unknown form in the data

PRELIMINARY RESULTS

Table 1 reports the preliminary results of our estimation. The NWHAC adjusted results suggests that foreign incomes contribute significantly and positively to exports growth of Kentucky. The impact of exchange rate on export is also significant and positive for the same period but is significant and negative for one-year period lag. This indicates that the long run impact of exchange rates on exports is negative even in the regional level. The larger value of adjusted R2 and statistically significant F-statistics indicates the robustness of the estimated result.

Table 1: Estimation Results	
$EXP_{it} = \alpha + \beta_1 ER_{it} + \beta_2 ER_{i(t-1)} + \beta_3 GDP_{it}$	
α	-566.80
β1	+0.000228 (4.7024)*
β2	+ 0.000081 (1.75)***
β3	+7.186 (4.91)*
Adj. R^2 = 0.706 F-statistic = 71.63 # of obs.: 89 * Indicates 1% significance level *** indicates 10% significance level	

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AMBIGUITY WITHIN THE RE-ENGINEERED ACCOUNTING CURRICULUM

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ABSTRACT

Accounting educators in partnership with accounting practitioners have taken a number of steps toward addressing meaningful curricular changes. The purpose of this paper is to facilitate the successful introduction of the re-engineered accounting curriculum and increase its effectiveness. This is accomplished by providing a better understanding of student responses to the re-engineered curriculum by focusing on the consequences of ambiguity. By making accounting faculty aware of the potential negative student responses to increased ambiguity and strategies that they may undertake to mitigate these adverse responses, the effectiveness of the re-engineered curriculum in achieving its stated goals is facilitated.

INTRODUCTION

The desire for change in accounting education comes from both inside and outside academia. In 1986 the Bedford Committee Report (American Accounting Association, 1986) recommended curricular revision emphasizing the development of analysis, problem solving, communications, and synthesis skills in addition to technical subject matter. In 1989 the chief executives of the then Big Eight public accounting firms issued a white paper entitled Perspectives in Accounting Education: Capabilities for Success in the Accounting Profession that expressed concern about the quality of contemporary accounting graduates and called for the American Accounting Association (AAA) to establish "[a] coordinating committee of all major constituencies ... to address issues that impact the educational process and to guide the academic community in re-engineering the curriculum" (Kullberg et. al., 1989, p. 3). The AAA responded by creating the Accounting Education Change Committee (AECC) to lead the effort to make meaningful changes in accounting education and issued Objectives of Education for Accountants: Statement No. One (AECC 1990) that outlined the non-technical skills necessary for professional success. In 1988, the AICPA issued Educational Requirements for Entry into the Accounting Profession (AICPA, 1988), providing guidelines for developing accounting curricula, including communication, intellectual, and interpersonal skills needed for entry into the accounting profession. More recently in 1999, the AICPA developed The AICPA Core Competency Framework for Entry into the Accounting Profession, an online competency framework for academic use that sets the foundation for progressive curriculum change.

Given this desire to re-engineer the accounting curricula and recognizing that this change will require the support of accounting educators, to what extent do accounting educators agree with the nature and degree of change in the accounting curricula? May, et. al., (1995) report that 56.0% and 50.6% of a random sample of accounting educators agreed that fundamental curricular change is needed and that fundamental teaching method change is needed, respectively. However, they also

report a significant disagreement over both the extent and form of that change, with the greatest disagreement in the area of teaching methods.

The purpose of this research is to facilitate the successful introduction of the re-engineered accounting curriculum by considering the other side of the curriculum/teaching equation--the students. When switching from the more traditional, structured approach of teaching accounting to the re-engineered curriculum, accounting instructors may experience difficulty in achieving the stated goals of the new curriculum. This difficulty may be the result of some students experiencing dysfunctional role ambiguity due to an intolerance of ambiguity. By making accounting faculty aware of the potential consequences of increased ambiguity within the re-engineered curriculum, they can anticipate and take steps to mitigate adverse responses on the part of some students. In this way, the success of the re-engineered curriculum in achieving its stated goals will be facilitated.

METHODOLOGY

Employing the delineation described by Weston and Cranton (1986), the twenty instructional strategies used in this paper are grouped into four general categories. They are: instructor-centered strategies (lectures-in-general, theory lectures & applied lectures); interactive strategies (argumentative discussion, large-class discussion, small-group discussion, group projects, cooperative learning & seminars); individualized-learning strategies (programmed instruction, exams-in-general, problem exams, term papers, homework & required readings); and experiential-learning strategies (management simulation, field projects, role playing, experiential exercises & case analyses). The instructional strategies used in this research, while not all-inclusive, do represent some of the more popular methods found in higher education. Weston and Cranton (1986) provide an overall perspective of instructional methods and factors important in their selection.

When a panel of accounting educators rated each of these educational strategies on its helpfulness in developing the necessary professional accounting skills, the interactive-instructional strategies and experiential-learning strategies fared better than the more traditional instructor-centered strategies and individualized-learning strategies. Accordingly, the interactive-instructional and experiential-learning strategies are more representative of the re-engineered accounting curriculum, while the instructor-centered and individualized-learning strategies are more consistent with the traditional approach.

Psychologists define tolerance of ambiguity as the ability to deal effectively, i.e., without experiencing psychological discomfort or threat, with situations or information that are vague, incomplete, unstructured, uncertain or unclear (Norton, 1975). An ambiguous situation is defined as one that cannot be adequately structured or categorized by the individual because of the lack of sufficient cues (Budner, 1962). Intolerance of ambiguity is the perception of ambiguous situations as sources of threat, while tolerance of ambiguity is defined as the perception of ambiguous situations as desirable. Budner (1962) developed a 16-item, Likert-type scale of tolerance-intolerance of ambiguity shown to be free of such artifacts as acquiescence and social desirability. The scale reports an over-all measure of the tolerance of ambiguity, with lower scores indicating greater tolerance.

Subjects employed in this research were senior undergraduate accounting students (n=94) from AACSB accredited institutions. The students completed Budner's Intolerance of Ambiguity Scale (Budner, 1962). In addition, they indicated how each of twenty different instructional strategies employed in this research facilitated their learning accounting by selecting a response ranging from "5" being most helpful to "1" being unhelpful. It is hypothesized that the personality trait tolerance-intolerance of ambiguity will have an impact on the students' helpfulness ratings of the various instructional strategies of the re-engineered accounting curriculum. Students with an intolerance of ambiguity will rate the instructional strategies of the new re-engineered accounting curriculum as being less helpful, and students with a tolerance of ambiguity will rate these same instructional strategies as being more helpful. To assess the potential consequences of increased ambiguity within the re-engineered accounting curriculum, individual student scores on Budner's Intolerance of Ambiguity Scale (1962) are correlated with the individual student helpfulness ratings of the twenty different instructional strategies used in this research. Note that the lower the score on the tolerance of ambiguity scale the greater is the tolerance of ambiguity, and the higher the score the more intolerant the student is of ambiguity. Thus, negative correlations indicate that students with a greater tolerance of ambiguity find the instructional strategy more helpful while students with a lower tolerance of ambiguity find them less helpful.

DISCUSSION

The tolerance-intolerance of ambiguity appears to have relatively little impact on the traditional instructional strategies. Only term paper showed a significant negative correlation indicating that students with a greater tolerance of ambiguity find this instructional strategy more helpful while students with a lower tolerance of ambiguity find them less helpful. However, for the strategies compatible with the re-engineered accounting curriculum, tolerance-intolerance of ambiguity appears to exhibit a rather strong impact on students' perceptions of the helpfulness. There are significant negative correlations for three of the six interactive instructional strategies: argumentative discussion, cooperative learning, and group projects. There are significant negative correlations for four of the five experiential-learning instructional strategies: field projects, case analyses, management simulation, and experiential exercises. Again, these results indicate that students with a greater tolerance of ambiguity find these instructional strategies more helpful while students with a lower tolerance of ambiguity find them less helpful.

From the above observations it appears that the students who will be least receptive to the re-engineered accounting curriculum will be those who have a low tolerance of ambiguity. And, those students with a high tolerance for ambiguity will be the most receptive. It is with this former group that we are concerned as they are the students that will be helped the least by the new accounting curriculum. Role ambiguity is likely to be a particular problem with these students when accounting educators start adopting the re-engineered accounting curriculum. Role ambiguity has two dimensions. The first, task ambiguity, is uncertainty about what a person should do. The second, social-emotional ambiguity, occurs when a person in uncertain about how one is evaluated. The effects of role ambiguity are increased tension, dissatisfaction with school, increased distrust, and poor relationships with others. Thus, some of the very skills that the new accounting curriculum is

trying to develop could be devastated for some students if appropriate actions to mitigate role ambiguity are not recognized and undertaken.

Task ambiguity is less of a problem in the traditional curriculum. The traditional curriculum has more precise task definition due to the narrowness of the assignments and the student's familiarity with what is required. In the re-engineered accounting curriculum, on the other hand, the configuration of activities (tasks) required to achieve an objective or complete a project are much less precisely defined. In short, ambiguity may develop because students do not know the goals to which their activities should be directed.

Social-emotional ambiguity stems from a lack of awareness of the criteria used in evaluation. Under the regular semester system, there is the traditional requirement that a student's performance be evaluated within the period of a few months. Students carry such expectations with them to their first class, and nontraditional instructional strategies do engender more uncertainty on the part of the student through the use of nontraditional performance standards. Thus, in the more nontraditional instructional strategies, it is to be expected that students will initially be concerned with the subjective appearance of their performance evaluation. The presence of social ambiguity means that the signals about how to be successful are unclear.

There are a number of strategies accounting instructors can undertake to reduce role ambiguity when employing the re-engineered accounting curriculum. First, the instructor has the responsibility of insuring clarity of the relationship between the goal (expected results) and the path to achieving those results, i.e., how it should be done. Second, the instructor should define expected work behavior on the part of the student so he knows what he should be doing. Third, the instructor should reach agreement with the students on how their performance is going to be measured. In their initial stages, the nontraditional strategies take a considerable amount of an instructor's time, primarily in dealing with performance evaluation expectations. Continual feedback to the student is an integral part of these learning processes. The instructor's challenge is in establishing the validity of the performance evaluation process. Instituting a management-by-objectives program is one approach for clarifying performance expectations.

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INDEPENDENT CONTRACTOR OR EMPLOYEE: THE ROLE OF THE BIG 5 IN THIS DECISION

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The fundamental, first question an employer must answer is whether the proper classification of an individual is as an employee or an independent contractor. Correctly classifying an individual as an independent contractor can save an employer money in numerous ways. For example, independent contractors typically do not receive benefits (e.g., medical, pension, family leave) from the employer. In addition, the employer does not have to match social security contributions or withhold income taxes for the independent contractor. Moreover, independent contractors do not affect worker's compensation premiums and unemployment compensation premiums. Incorrectly classifying an individual as an independent contractor, however, can result in severe fines from the IRS and possibly jail time.

According to recent statistics, over 8 million individuals were classified as independent contractors in 1999 (Bureau of Labor Statistics, 2001). In addition, intentionally classifying an employee as an independent contractor is considered a form of employment tax evasion. Between 1998 and 2000 the IRS achieved an 85.8% incarceration rate for this offense. As an example, in 1998 the former president of Persona Management Corporation (PMC) was sentenced to 41 months in prison for employment tax evasion pertaining to 6,000 individuals that should have been classified as employees of PMC (Internal Revenue Service, 2001). Taking all of the above into consideration, the classification decision is extremely important for employers.

Taxpayer compliance with the law has been found to be at a higher level when an individual has been over withheld than when individuals are under withheld. (Schepanski & Shearer, 1995). Over withholding occurs when an employee has by payroll deduction paid in advance more in federal income tax than they actually owe on their final tax return, which results in a tax refund. Conversely, under withholding by payroll deduction results in the taxpayer having a balance due to the federal government on their federal tax return and then being required to submit a check in payment thereof.

The IRS has developed a 20-factor common law test to help employers properly classify individuals. This test includes such factors as: continuing relationship (An employee has a continuing relationship with an employer on what is hoped would be a long-term basis, whereas independent contractors typically move from assignment to assignment), set hours of work (An employee has set hours of work established by an employer, whereas independent contractors are the masters of their own time; they set their own hours of work), payments (An employee is paid by the hour, week, or month, whereas independent contractors are normally compensated by the flat rate for a project), and works for more than one person or firm (While an employee can have more than one job at a time, employers can demand total loyalty and prohibit one from taking another job, whereas independent contractors usually offer their services to multiple unrelated persons or firms at the same time) (London, 2000).

Due to the importance and the complexity of this decision for employers and the affected individuals, the objective of this research was to uncover which factors predict successful classification decisions. More specifically, differences in the personality of the decision-makers (whether that person is a human resources professional, a controller, or a manager) are examined in relation to this decision.

Research into the role of personality in the workplace goes back to almost the beginning of the 20th century. The first quantitative review of personality research was by Ghiselli and Barthol (1953). In their article they included 113 studies conducted from 1919 to 1953 on the relationship between personality and work performance. More recently, meta-analyses have been conducted on the predictive validity of personality variables for personnel selection (Barrick & Mount, 1991; Tett, Jackson, & Rothstein, 1991).

In addition to the predictive validity of personality for personnel selection, personality has been examined in relation to countless other aspects of work. For example, LePine and Van Dyne (2001) found personality differences were related to voice and cooperative behavior at work. In addition, other studies have examined personality differences in the context of vocational interests (Costa, McCrae, & Holland, 1984), job satisfaction (Perone, DeWaard &Baron, 1979), self-managed work groups (Thoms, Moore & Scott, 1996), customer service performance (Stewart & Carson, 1995), social influence strategies (Caldwell & Burger, 1997), and coping responses (O'Brien & DeLongis, 1996). The breadth and depth of research on personality in the workplace is quite impressive. However, there is no research to date on the relationship between personality and this critical classification issue.

The most professionally accepted approach to studying personality in the workplace is to break personality down into the "big five" personality traits: conscientiousness, extraversion, openness to experience, agreeableness and emotional stability (Barrick & Mount, 1991; McCrae & John, 1992; Smith, Hanges & Dickson, 2001). Barrick and Mount (1991) highlight the emergence of the five-factor model in the literature. They also stress that this model is robust: across different theoretical frameworks, using difference personality measures, across cultures, using various samples, and using various raters of personality. Moreover, they point out that these five aspects of personality are basically unrelated to assessments of cognitive ability.

The big five has been subject to two main criticisms. For one, some researchers have indicated that the majority of the research on the big five used volunteer samples rather than actual applicants or employees (Schmitt & Ryan, 1993). The other criticism of the big five is that social desirability creates an added dimension of the factor structure of virtually any self-report personality instrument (Douglas, McDaniel, & Snell, 1996). Recent research, however, has demonstrated the adequacy of the big five taking into account both of these criticisms (Smith, Hanges & Dickson, 2001).

One dimension of the big five is extraversion, which is often interpreted as sociability. People high on extraversion like to be around others, are often assertive in social gatherings, and are quite talkative (Lindley, & Borgen, 2000). Deciding whether or not an individual should be classified as an employee or an independent contractor is not a task that requires social activity.

Subjects were selected from graduate courses in four very distinct areas: health care administration, finance, quantitative methods, and education. It was conceivable that due to the diversity of these academic areas the individuals from these areas could vary significantly in terms

of personality or classification performance. Therefore, the means on the five personality dimensions and total score on classification scenarios were compared using ANOVA. The ANOVA results did not identify any statistically significant differences ($p < .05$). Thus, all four samples were combined into a total sample size of 37, which was then used for all of the remaining analyses.

Descriptive statistics were computed for all of the variables. To assess the influence of demographic variables, correlations among age and years of work experience with the big five personality dimensions and classification performance were computed. In addition, sex differences in relation to the personality dimensions and classification performance were assessed through independent t-tests.

Correlations were computed to assess the relationship between the big five dimensions and classification performance. Further, all personality dimensions significantly related to classification performance were entered into a regression equation to determine percent of variance in classification performance accounted for. Finally, a stepwise regression analysis was performed to compare the relative usefulness of the personality dimensions in relation to classification performance.

In terms of the demographic variables, years of full-time employment and age were significantly ($p < .05$) related to only one personality dimension: agreeableness. These correlations were .44 and .47. Neither demographic variable was related to classification performance. Similarly, there were not significant mean differences in classification performance based on sex. However, females did score significantly higher ($p < .05$) than males on openness to experience (52.95 vs. 45.69) and conscientiousness (58.32 vs. 51.85).

Only two of the five hypotheses were supported. A significant negative relationship was found between neuroticism and classification performance ® = -.36), whereas a significant positive relationship was found between conscientiousness and classification performance ® = .33). It was also worth noting that none of the five personality dimensions were significantly related to each other. This result provides further evidence that the NEO PI-R taps five distinct aspects of work personality.

Regressing neuroticism and conscientiousness on classification performance yielded a multiple correlation of .49 ($p < .05$). This finding indicates that 24% of the variance in classification performance can be explained by differences in neuroticism and conscientiousness of the decision-makers. Due to the fact that these two personality variables were virtually uncorrelated ® = -.01) in this sample, the standardized beta weights were virtually identical to the zero-order correlations with classification performance (see table 2). Thus, the stepwise regression analysis was equivalent to the regression results above.

The main findings of this study indicate that two of the big five personality dimensions were associated with the employee classification decision: neuroticism and conscientiousness. The other three personality dimensions were unrelated to employee classification performance.

The results of this study can be questioned on three grounds. To begin with sample size was only 37. Secondly, the subjects were all graduate students that had virtually no experience with this decision-making task. A larger sample that included working professionals who have confronted employee classification decisions would be more desirable. Finally, the scenarios selected may not be representative of employee classification decisions. The scenarios were quite involved and the "correct answers" were determined by IRS rulings. It is conceivable that the typical employee

classification decision confronted by a manager, HR professional, or a controller may be more clear-cut and thus the decision may be less likely to be influenced by the personality of the decision-maker.

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DETERMINANTS OF MUNICIPAL BOND CLOSED-END FUND DISCOUNTS

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ABSTRACT

The objective of this study is to investigate the potential determinants of cross-sectional variation of fund discounts/premiums for the two largest closed-end fund types: national and single-state municipal bond closed-end funds. Some researchers argued that municipal bond closed-end funds, due to their tax-exempt status and the resulting short-sale restrictions, should generally be selling at premiums. However, our current samples show that the overwhelming majority of municipal bond closed-end funds were consistently selling at discounts, with the average discounts highly significantly different from zero. However, the average discounts are lower than the average discounts for non-municipal closed-end funds reported in the literature. Our current research results also indicate that the potential determinants of fund discounts/premiums consist of both accounting data and market data. There is striking similarity of the behavior of fund discounts among equity, non-municipal and municipal bond funds. This similarity is at once surprising and encouraging, and could potentially facilitate future theoretical developments.

USING THE BALANCED SCORECARD TO IMPROVE THE EFFECTIVENESS OF AGENCY RELATIONSHIPS

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John Thompson, Eastern Kentucky University
William Davig, Eastern Kentucky University

ABSTRACT

This paper considers the balanced scorecard system as an effective management model for overcoming the problems inherent in agency theory. The agent's pursuit of self-interest often undermines the agency-principal relationship and leads to inferior organizational performance. On the other hand, in the balanced scorecard, principals have a model that brings together a set of coordinated goals and measures that potentially link organizational strategy to individual behavior at all levels of the organization. By means of the four interrelated scorecard perspectives, the links between individual actions, personal rewards, and increased shareholder value become transparent. Decentralization of decision making and empowerment become possible with reduced shirking and improved observability of which employee behaviors contribute to overall strategic performance, and which do not, at all levels of the organization.

INTRODUCTION

The purpose of this paper is to explore the use of the balanced scorecard model as an improved method in the application of agency theory and for the development of better agency relationships in organizations. Agency theory describes the opportunities and pitfalls that arise in efforts to align the interest of employers (principals) and employees (agents). Organizations have addressed the problem of agents' self-serving behavior primarily through the use of financial incentives such as bonuses and/or profit-sharing based on company performance. Rewards are distributed throughout the organization to align and motivate employees to the achievement of organization goals, and employees in turn act on behalf of the principals (owners and stockholders). Problems arise in an agency relationship when there is a divergence of objectives between the principals and the agents. A recently developed framework for organizational planning called the balanced scorecard can be used to effectively address this type of self-serving behavior. We present a method for using this framework to resolve the issues that lead to what is referred to as the shirking problem in agency theory.

AGENCY THEORY

Agency theory is a two-part concept consisting of the principal-agent problem and the agency costs associated with solving the problem (Jensen, 1976). A potential problem arises when a person (the agent) is hired or contracted to conduct business on behalf of another (the principal).

The principal expects that the agents' interests are aligned with its own. But agents are often selfish, and the agent may act in his or her own interest rather than further the interest of the principal. It is this self-serving behavior that can undermine agency relationships (Ross, 1973). A CEO may aim for job security rather than maximizing shareholder wealth. Other actions might include the personal use of corporate assets or the use of creative accounting to ensure performance targets are met (Pratt, 1985). A purchasing manager may prefer to buy supplies of inputs from long time acquaintances rather than search for the lowest-cost or best quality supplier. An extreme example of breakdown in agency relationships is evident in the ongoing Enron debacle.

Principals can attempt to motivate agents to act in the organization's best interest by establishing incentives and by incurring monitoring costs. Incentive compensation has traditionally been based on accounting data, and specific bonuses paid contingent on company performance (Bloom, 1998). An example is the contract between General Motors and workers in its Saturn division. Bonuses are paid out contingent on profits reported in audited accounting returns. The challenge to the principal is to select the appropriate inducements that will ensure that the agent will contribute only in ways which maximize the value of the firm, while minimizing agency costs of monitoring and controlling behavior.

SHIRKING, REWARDS, AND INFORMATION

Generally, the principal provides monetary incentives to ensure efficient actions by the agent that lead to the best opportunity for profit. If the agent chooses not to take efficient actions, we say the agent is shirking. Additional agency costs are incurred in the implementation of monitoring and control systems used to measure the agent's level of efficiency in carrying out his or her tasks. To motivate agents to act efficiently, three conditions must be met (Besanko, et al, 2000):

**First, agents must know that if they act efficiently, they will be rewarded.*
**Secondly, principals must have full and accurate information about how agents' actions affect outcomes.*
**Thirdly, there must be little risk involved for the agents, as long as they do not shirk and they do their jobs efficiently.*

Senior executives understand that their organization's measurement system strongly influences the behavior of managers and employees. They also understand that traditional financial accounting measures such as return on investment and earnings per share can give misleading signals for efforts relating to continuous quality improvement and innovation, customer service, research and development, and other initiatives that have the potential for long-term organization results, but are difficult to evaluate in terms of traditional accounting measures. This is the second problem mentioned above- the lack of information concerning how agents' actions affect outcomes. In addition, initiatives in these areas may impact negatively on the performance measures in the short run. Because of the shortsightedness of these "backward-looking" accounting measures of performance Robert Kaplan and David Norton developed the balanced scorecard model (Kaplan and

Norton, 1992) to improve the development and implementation of strategic planning systems in organizations. This model is discussed below.

THE BALANCED SCORECARD

The balanced scorecard approach to management planning and control has been successfully implemented in a number of large organizations, but only recently have smaller firms begun to consider its potential. For a review of some the applications in the U. S. and the UK see Hepworth (1998). The development of comprehensive, system-wide metrics to monitor key performance indicators promises to provide business managers with a strategic management process that does not overwhelm them with mountains of data. Also important is the creation of clear and easy to understand graphs and charts to monitor the key "drivers" of performance, both at the departmental level as well as for the company's overall competitive performance (Stivers, et al, 1998, Epstein and Manzoni, 1997).. The balanced scorecard divides organizational activities and performance measurements into 4 perspectives. These are financial, customer, internal business and learning and growth. See Figures 1 and 2. The balanced scorecard emphasizes, under the learning and growth perspective, innovation and increasing the organization's ability to explore the unknown and to identify and pursue novel solutions (Garvin, 1993, Sitkin, 1994, and Senge, 1992).

A significant aspect of the balanced scorecard is the emphasis placed on "goal congruence" in the creation and implementation of strategy. This is the belief that goals that are developed in different functional areas and at different levels of the organization should support one another and be compatible. For the balanced scorecard to be successful, the organization's strategic objectives and "key performance indicators" need to be understood and supported by all employees. Employee rewards need to be clearly linked to these performance measures (Kaplan and Norton, 1996a; Partridge and Perren, 1997).

BASIC CHARACTERISTICS OF THE BALANCED SCORECARD SYSTEM

1. Performance measurements are related to the organization's mission and vision. The balanced score card begins by making a preliminary evaluation of the firm's strategy and vision and identifying the key factors for competitive success in each perspective. There is no preconceived set of performance drivers that apply to all businesses. This is because values, mission and vision uniquely belong to a specific firm, and the key strategic performance drivers will often depend on the particular market segments that are being targeted.

2. The number of measurements are limited. The advantage of having a limited number of perspectives and key performance indicators or measures lies in the power of conciseness and clarity for communicating the concepts as a single strategy to company personnel. Many firms that have implemented TQM or ISO programs have encountered similar problems of overload in the sheer quantity data that must be collected and interpreted in order to control the firms processes and meet quality goals (Epstein and Manzoni, 1997, Haksever, 1996). The requirement for detailed information and analysis is a valid concern for small businesses with limited resources for specialized data collection. For a firm with limited resources to allocate to develop the necessary

data, 3 to 5 key performance indicators for each perspective may be adequate. In most cases, many of the performance indicators will have already been identified under a TQM system.

3. Measures of employee development and learning are directly connected to overall performance and the reward system. Although innovation and learning are considered by management to be critical for success, these "softer" measures are used in decision making and planning by a minority of firms.

4.The measurements must be shared. Another requirement of the balanced scorecard approach may be problematic for some small business managers. The balanced scorecard emphasizes an "open book" management approach (Stack, 1994). Complete and honest communication of company performance data is considered crucial. This means that management and workers are working toward the same company goals, and that both groups are provided with complete information about performance on all perspectives, including the financial.

CONCLUSIONS

How can the implementation of the balanced scorecard make a contribution to the effectiveness of agency relationships? The balanced scorecard process is implemented throughout all levels of the organization and empowers agents in the implementation of initiatives that contribute to overall business goals and performance. As the scorecard is cascaded down through the organization, each individual scorecard should be directly related to the overall company scorecard. Lower level employees possess greater information and understanding about what aspects of their jobs, and the jobs of other agents that they work with, eventually contribute to shareholder wealth as well as to their own personal growth and capabilities. The balanced scorecard implementation allows the decentralization of decision making while at the same time maintaining centralized information on performance at all levels.

For employees to willfully accept the balanced scorecard approach, they must be given measure controllability. This means they must have considerable personal control over the development of the scorecard (Abernathy, 1999). They must have substantial authority to make decisions relevant to the key measures of the scorecard. Through empowerment, managers express confidence in the ability and desire of employees to perform at high levels. They are encouraged and rewarded for taking personal responsibility for their work, and gain confidence in their ability to perform their jobs and influence the organization's performance (Byars, 1999, Abernathy, 1999).

Traditional accounting control systems are dominated by a concern for precision. Auditing standards require that financial measures be absolute and objective. However, strategic reporting in the balanced scorecard attempts to integrate the concern for absolute financial measures with the longer term and ever-change perspectives that are the driving forces in financial performance and shareholder value. With the balanced scorecard, strategic control is primarily understood by organization members (agents) to be a communication system, not a control system (Kaplan and Norton, 2000). This approach encourages a cultural shift to take place with an open reporting system. Under the balanced scorecard system, everyone sees everyone else's performance. Integrity becomes self-policing. It is increasingly difficult for an agent to report erroneous information or to selectively interpret data when the principals, and other agents, are similarly aware of the key

performance drivers and have the same information. Finally, the balanced scorecard allow the reward system to be set so that agents are not afraid to report problems, and are not punished for poor performance that is out of their control. As mentioned above, a key function of the balanced scorecard is communication and self-control. This reduces the need for monitoring and control from above, therefore reducing agency costs. This approach also encourages risk-taking in a team environment.

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References will be provided upon request.

Figure 1. The Four Perspectives of the Balanced Scorecard
Adapted from Kaplan and Norton (2001), p. 41

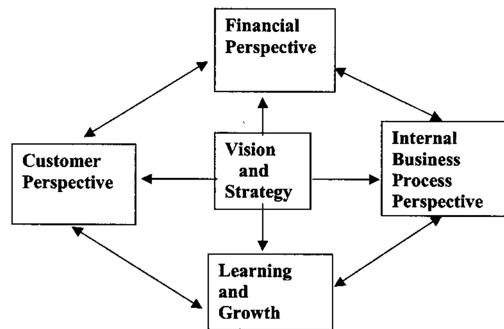
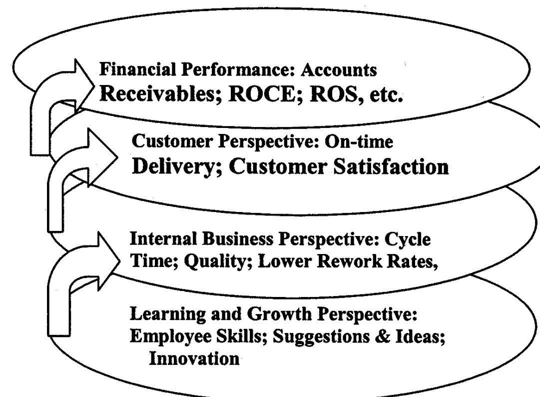


Figure 2. Integrating the Balanced Scorecard with Strategy and Vision
Adapted from Kaplan and Norton (2001), p. 200



ABC ENHANCES NOT REPLACES CVP ANALYSIS

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ABSTRACT

The short-run decision planning model referred to as CVP analysis is based on a set of assumptions which some claim are rather restrictive. Economies of scale and diminishing returns are two economic principles that are eliminated from this analysis.

Furthermore, the CVP model assumes that costs can be divided into two components: those that vary with sales volume (variable costs) and those that do not (fixed costs). Some have suggested that these assumptions make the model too simple and unrealistic. Critics also argue that activity based costing (ABC) is much more realistic and is much more useful in providing management with relevant information. This paper has the modest goal of showing how ABC analysis enriches rather than replaces the CVP model.

In an ABC system , costs are divided into unit and nonunit-based categories. These categories are generally referred to as batch, product, and facility activity levels. ABC acknowledges that some costs vary with units produced and some costs do not.

However, ABC contends that although nonunit-based costs are fixed in relation to production volume changes, many nonunit-based costs vary with respect to other activity cost drivers.

ABC does not mean that CVP analysis is less useful. On the contrary, CVP becomes more useful when applied within an activity-based framework. The following hypothetical case illustrates how more accurate insights into cost behavior are provided by ABC. These insights should, in turn, lead to better management decisions.

AUDITOR INDEPENDENCE AND NON-AUDIT SERVICES: STANDARDS, RULES AND A REVIEW OF RELATED SEC ADMINISTRATIVE DECISIONS

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ABSTRACT

Fundamental to the effective functioning of financial markets is the external auditor's "independent" opinion. In order to diversify services and augment revenues, public accounting firms have increased their provision of non-audit services substantially over the past ten years. With this increased share of non-audit revenues has developed the concomitant concern, by many, that auditor independence has been compromised. Though a long-standing concern of the American Institute of Public Accountants (AICPA), recent attempts by the Securities and Exchange Commission (SEC)to strengthen independence standards and rules by restricting non-audit services have been met with hostility by the accounting profession. In light of recent post-Enron revelations, many external users of financial statement information have questioned the ability of the SEC and AICPA to address the issue satisfactorily, and have called for an overhaul of the current rules and standards. This paper provides an overview of the historical development of pertinent SEC/AICPA rules, standards and pronouncements related to auditor independence and the provision of non-audit services. Current rules and standards are critically examined and related SEC Administrative decisions over the past ten years are analyzed. A less complicated paradigm for auditor independence is proffered in order to minimize any threat, actual or apparent, posed by non-audit services.

FINANCIAL STATEMENTS: ANALYSIS AND INTERPRETATION

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The importance of financial statements as a source of factual data has increased tremendously in recent years. A financial statement is an organized collection of data according to logical and consistent accounting procedure. Its purpose is to convey an understanding of some financial aspects of a business firm. It may show a position at a moment in time in the case of a balance sheet, or may reveal a series of activities over a period of time, as in the case of an Income Statement. In other words, financial statements are prepared for the purpose of presenting a periodical review or report on progress by management and deal with the status of the investment in the business and the results achieved during the period under review.

Financial statements include at least two basic statement: (i) the profit and loss Account, and (ii) the Balance Sheet. Beside these two statements an organization particularly a company may also prepared a statement of retained Earnings which is also termed as profit and loss Appropriation Account. These statements present a mass of complex data in absolute monetary terms and indicate little about the profitability, solvency, liquidity and efficiency of the business.

Effective decision-making calls for the ability to sort out relevant information from a great many facts and to make adjustments for changing conditions. Very often, financial statements in a company's annual report run ten or more pages including foot notes and other disclosure. If these statements are to be useful in making-decisions, decision-makers must be able to find information that shows important relationships and helps them make comparisons from year to year and from company to company. In this paper, the author presents a number of technique in the financial statements.

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RISK MANAGEMENT AND EARNINGS MANAGEMENT: TWO CORPORATE OPTION STRATEGIES

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ABSTRACT

Successful corporations are committed to growth and stability, profit maximization and risk containment, and client (or customer) and stockholder satisfaction. Corporate finance officers are charged with the near impossible task of designing strategies to accomplish these frequently conflicting goals. One of the financial officers' strategy tools is options. Two ways financial officers utilize options are risk management and earnings management.

Utilizing options through a risk management strategy is considered by many to be the prudent technique. This strategy can help the financial officer more accurately predict future gains or losses. Earnings management is attempting to derive a superior gain through the use of option buying and trading. Those who attempt to use these strategies are seeking extra gains rather than hedging business returns.

Both risk management and earning management options strategies can be utilized prudently and profitably. These strategies of investing in options provide benefits that can be obtained through few other methods.

ACCOUNTING DIVERSITY AND THE VALUE RELEVANCE OF ACCOUNTING EARNINGS AND BOOK VALUE IN FOUR COUNTRIES—THE UNITED STATES, THE UNITED KINGDOM, CANADA AND JAPAN

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ABSTRACT

Diversities in accounting standards across different countries are of serious concern to the international investment community. Analysts, investors and security regulators have indicated that accounting differences can affect the usefulness of accounting numbers in assessing firm values (Choi and Mueller 1992). This paper investigates the impact of accounting diversity on the relative value relevance of accounting summary numbers in four countries: the United States, the United Kingdom, Canada and Japan. Accounting systems of these four countries are of interest because of the varying degree of perceived conservatism in accounting measurement practices across these four accounting systems and the size of the capital markets in these four countries.

To assess the differences in value relevance of two accounting summary numbers, earnings and book value, across different countries, we use empirical models and measurements that allow direct comparisons of the weights assigned to accounting earnings and book value by market participants of these four countries. To compare the relative value relevance of accounting earnings with that of accounting book value within each country, we use a standardized procedure to control the scale differences in earnings and book value so that the earnings valuation coefficient and the book value valuation coefficient can be compared. A ratio measure, which scales the valuation coefficients by the overall informativeness of earnings and book value of each country, is used to allow additional cross-country comparisons.

The results show that systematic differences in the importance of earnings and book value do exist across national boundaries. On average, earnings are more important than book value in explaining firm values in the U.S. and the U.K., while book value is more important than earnings in Canada and Japan.

In a model incorporating both earnings and book value to explain market values, accounting earnings and book value both have incremental value relevance over each other for the U.S. and Canadian samples. However, U.K. accounting book value and Japanese earnings do not consistently have incremental value relevance.

Our results also indicate trends of change in the overall, as well as the relative, importance of earnings and book value over the sample period. In particular, the overall value relevance of accounting earnings and book value increases over time for all four countries, and the value

relevance of accounting book value relative to accounting earnings increases in both Canada and the U.K. over the sample period. Neither the U.S. or Japan show significant changes in the relative value relevance of the accounting numbers over the sample period.

ANALYSTS' EVALUATION OF THE INFORMATION CONTENT OF CHANGES IN AUDITOR TYPES

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ABSTRACT

Companies hire auditors to meet legal requirements if they are publicly traded and to provide credibility to their financial statements. However, all auditors may not provide the same level of service to third parties. Prior research has found qualitative differences among big Five and non-Big Five auditors. Companies may, therefore, switch auditors to attain some perceived qualitative difference in the audit engagement. The degree that this auditor change is or is not incorporated by financial analysts into analysts' forecasts has not been fully researched for the benefit of determining if there is any information content associated with the auditor change on security prices. The results of this study show that financial analysts do not fully incorporate information relative to auditor changes in their forecasts.

INTRODUCTION

Financial analysts are one of the primary users of financial information. Analysts analyze publicly available information such as financial statements, and management earnings forecasts as well as non-public information obtained directly from firms they follow in order to make buy and sell recommendations and to make earnings forecasts. Given that the reward structure for analysts provides incentive for analysts to make accurate recommendations/forecasts, analysts expend considerable amounts of time and effort trying to uncover value relevant information about the companies and industries they follow. This study will investigate whether information related to changes in auditor type is completely incorporated into analysts' earnings forecasts.

THEORY

Companies hire auditors to meet legal requirements if they are publicly traded and to provide credibility to their financial statements. However, all auditors may not provide the same level of service and assurance to third parties. Auditing expertise, improved training, enhanced technology, and other client services are more readily available from a Big Five audit firm compared to national or regional audit firms. Previous research regarding other events such as initial public offerings has found that the Big Five are viewed as quality differentiated auditors relative to the non-Big Five firms.

At the time an auditor change occurs, the client can elect to make a "lateral" change by selecting a new auditor of the same type. Depending on the former auditor, the company can also

elect to go "upstream" (regional to national auditor; or a national to international auditor) or "downstream" (international auditor to a national auditor; or a national auditor to a regional auditor) with the new auditor.

We use analysts' earnings forecasts as a proxy for the market's expectation about firm prior to earnings release. The difference between the forecast and the subsequent actual earnings amount (unexpected earnings) represents information about the firm that was not incorporated into the analysts' forecast. Therefore, analysts should rapidly incorporate information about a firm into their forecasts if the information has earnings implications. If analysts fully incorporate the information contained in an auditor switch, differences in unexpected earnings should not exist between firms making upstream and downstream auditor changes.

HYPOTHESIS DEVELOPMENT

A change in auditor type may provide information to analysts and investors. To test the existence of this information and the incorporation of the information into the analysts' forecasts, the following hypotheses (stated in the alternative) are tested:

H1: Positive unexpected earnings are present at the earnings announcement date when a company has changed from a smaller auditor type to a larger auditor type during the fiscal year
H2: Negative unexpected earnings are present at the earnings announcement date when a company has changed from a larger auditor type to a smaller auditor type during the fiscal year

SAMPLE SELECTION

Ordinary Least Squares (OLS) regression is estimated with sample firms obtained from the COMPUSTAT industrial tapes, which include firms listed on the New York Stock Exchange (NYSE), the American Stock Exchange (AMEX), and the National Association of Security Dealers Automated Quotations (NASDAQ). The sample is selected from the files of the 2000 annual industrial tapes and is limited to firms with earnings information in each year of the period 1989-1999. As a measure of unexpected earnings, we use consensus analysts' forecast, therefore, we require the sample firms to be followed by the Institutional Brokers Estimate System (IBES), similar to Baginski, Hassell and Waymire (1994) and Stunda (1996).

METHODOLOGY

The study's sample consists of all publicly traded companies that changed auditor type during the time period 1989 - 1999. In addition, the testing will control for company growth, company size, systematic market risk, and noise.

Stratification of Firms

The sample of audit firms was stratified in order to assess whether changes to/from auditor types other then international auditor possessed information content with respect to a change in the audit firm by the client. Stratification is comprised of four distinct groups. Group one consists of the five largest firms (big- five). These firms averaged more than 2,000 clients as reported on COMPUSTAT for the years 1989-1999. Group two consists of audit firms with an average number of clients between 500 and 2,000 as reported on COMPUSTAT for the years 1989-1999. These firms proxy for national firms. Group three consists of audit firms with an average number of clients between 200 and 500 as reported on COMPUSTAT for the years 1989-1999. These firms proxy for the widespread regional audit firms. Group four consists of audit firms with less than 200 clients as reported on COMPUSTAT for the years 1989-1999. These firms proxy for the localized regional firms. These cut-offs are arbitrary in nature but they are reasonable, based on analysis of the firms contained in the stratification.

In order to assess information content for the stratified firms, the following OLS regression model is employed:

$$UE_{it} = a + b_1D1_{it} + b_2D2_{it} + b_3D3_{it} + b_4D4_{it} + b_5D5_{it} + b_6D6_{it} + b_7D7_{it} + b_8D8_{it} + b_9D9_{it} + b_{10}D10_{it} + b_{11}D11_{it} + b_{12}D12_{it} + b_{13}MB_{it} + b_{14}LMV_{it} + b_{15}N_{it} + b_{16}B_{it} + e_{it} \quad (1)$$

Where:
- D1 = Variable for change from group 1 auditors to group 2 auditors
- D2 = Variable for change from group 1 auditors to group 3 auditors
- D3 = Variable for change from group 1 auditors to group 4 auditors
- D4 = Variable for change from group 2 auditors to group 3 auditors
- D5 = Variable for change from group 2 auditors to group 4 auditors
- D6 = Variable for change from group 3 auditors to group 4 auditors
- D7 = Variable for change from group 2 auditors to group 1 auditors
- D8 = Variable for change from group 3 auditors to group 2 auditors
- D9 = Variable for change from group 3 auditors to group 1 auditors
- D10 = Variable for change from group 4 auditors to group 3 auditors
- D11 = Variable for change from group 4 auditors to group 2 auditors
- D12 = Variable for change from group 4 auditors to group 1 auditors
- MB = Variable for market value to book value as a proxy for growth
- LMV = Variable for natural log of market value as a proxy for firm size
- N = Variable for number of analysts' forecasts included in IBES as a proxy for noise in the pre-disclosure environment
- B = Variable for market value slope coefficient as a proxy for risk
- e = Normally distributed error term

RESULTS

Table 1 provides results from equation 1, the sample of clients switching audit firms by international, national, widespread regional, and localized regional auditor types.

Table 1: Summary of Clients Switching Audit Firms by Audit Firm Grouping
n = 231

$$UE_{it} = a + b_1D1_{it} + b_2D2_{it} + b_3D3_{it} + b_4D4_{it} + b_5D5_{it} + b_6D6_{it} + b_7D7_{it} + b_8D8_{it} + b_9D9_{it} + b_{10}D10_{it} + b_{11}D11_{it} + b_{12}D12_{it} + b_{13}MB_{it} + b_{14}LMV_{it} + b_{15}N_{it} + b_{16}B_{it} + e_{it}$$

Variable	# of Clients	Mean	Median	Coefficient	T-Statistic	p-value
D1	29	-0.1020	-0.1038*	-0.07524	2.2693	0.0357
D2	12	-0.1076	-0.1052*	-0.08157	2.0591	0.0534
D3	3	-0.1389	-0.1244	-0.99257	1.4855	0.2291
D4	8	-0.1181	-0.1067	-0.06217	1.2569	0.3281
D5	0			n/a	n/a	n/a
D6	3	-0.1409	-0.1380	-0.17881	1.0662	0.4229
D7	91	0.1010	0.0994*	0.14278	2.3664	0.0215
D8	11	0.0947	0.0899*	0.09667	2.3109	0.0286
D9	55	0.0835	0.0803*	0.10471	2.8190	0.0124
D10	6	0.0724	0.0685	0.11893	2.0881	0.0656
D11	9	0.1027	0.1013*	0.09288	2.2199	0.0434
D12	4	0.0774	0.0719*	0.12187	2.2211	0.0487

*Significant at the .01 level using the non-parametric sign rank test.

Variable D1, representing changes from Big Five audit firms to national audit firms, has a p-value of 0.0357. This indicates that analysts are not adjusting their forecasts when companies change from a Big Five auditor to a national auditor. Variable D2, representing changes from Big Five audit firms to widespread regional audit firms, has a p-value of 0.0534. This provides weak evidence that analysts are not adjusting their forecasts when companies change from a Big Five auditor to a widespread regional auditor. Variable D3, representing changes from Big Five audit firms to localized regional audit firms, has a p-value of 0.2291. There is no evidence regarding the analysts' adjustment of earnings forecasts when companies change from a Big Five auditor to a localized regional auditor. However, only three companies are in this category and care must be taken on the interpretation of this variable.

Table 1 provides evidence about auditor changes that do not involve Big Five auditors. Variable D4, representing changes from national auditors to widespread regional auditors, has a p-value of 0.3281. There is no evidence regarding the analysts' adjustment of earnings forecasts when companies change from a national auditor to a widespread regional auditor. Variable D5, representing changes from national auditors to localized regional auditors contains no companies

that were identified in our sample as making this switch. Variable D8, representing changes from awidespread regional audit firms to national audit firms, has a p-value of 0.0286. This provides evidence that analysts are not adjusting their forecasts when companies change from a widespread regional auditor to a national auditor. Variable D9, representing changes from localized regional audit firms to national audit firms, has a p-value of 0.0434. This provides evidence that analysts are not adjusting their forecasts when companies change from a localized regional auditor to a national auditor.

Finally, Table 1 provides evidence about auditor changes to and from widespread regional auditors. Variable D6, representing changes from widespread regional auditors to localized regional auditors, has a p-value of 0.4229. There is no evidence regarding the analysts' adjustment of earnings forecasts when companies change from a widespread regional auditor to a localized regional auditor. Again, only three companies are in this category and care must be taken on the interpretation of this variable. Variable D10, representing changes from localized regional auditors to widespread regional auditors, has a p-value of 0.0656. This provides weak evidence that analysts are not adjusting their forecasts when companies change from a localized regional auditor to a widespread regional auditor.

CONCLUSION

The results of this study indicate that analysts do not fully incorporate information contained in changes in auditor type. When non-Big Five firms were partitioned significance was found for changes from Big Five audit firms to national audit firms. No statistical significance at traditional levels was found in the clients making other downstream changes. One reason for non-significance in these groups may be due to the small sample size in these change categories.

Conversely, all clients making upstream changes were found to contain positive unexpected earnings at traditional levels of significance for each group in the sample. These results further suggest that financial analysts do not fully incorporate the auditor change information into earnings forecasts, or that auditor change information is not fully understood by these analysts.

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SURVEY RESPONSES REGARDING THE AWARENESS AND IMPORTANCE OF QUALITY OF EARNINGS VARIABLES

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ABSTRACT

This paper reports the findings of a survey of financial statement professionals, including financial managers of large corporations, security analysts, and accounting professors. The goal of the survey is to provide information about variables that are perceived as being important to earnings quality and the appropriateness of a balance sheet approach to accounting for economic transactions.

The survey instrument provided open-ended questions where respondents described factors they believe are important to assessing earnings quality, as well as structured types of responses to differing scenarios indicating different types of earnings quality and reliability. The classification of scenarios also provides for an interpretation of balance sheet versus income statement categorization for earnings quality.

The manuscript is expected to communicate an interest in qualitative variables that professionals regard as being important in their assessment of earnings quality. Given the current environment of accounting and financial statement reporting, quality of earnings and the contributing factors to it is of high interest to the business community.

INTRODUCTION

This study investigates the topic of earnings quality by obtaining information concerning perceptions of what factors are important for assessing quality of financial statements. A survey was sent to accounting professors, managers of large corporations, and security analysts, requesting feedback on variables useful for assessment of quality.

The survey included questions of whether a balance sheet versus an income statement focus was preferable. This inclusion was prompted by the Financial Accounting Standard Board's (FASB's) Conceptual Framework series of Statement Concepts between 1978 and 2001, designed to provide a theoretical basis for the formation and application of accounting standards. *Statement of Financial Accounting Concepts (SFAC) No. 6* (l985) guided the FASB in the direction of more balance sheet oriented standards, defining revenues and expenses in balance sheet terms.

LITERATURE REVIEW

The definition of earnings quality has varied from correlation of the accrual and cash components of earnings and future cash flows, future stock returns, Securities and Exchange

Commission (SEC) investigations, use of conservative accounting principles, etc. (Sloan 1996, Schwartz and Soo, 1996, Bradshaw, Richardson, and Sloan 1999).

Generally the results have indicated that a larger accrual component of earnings and the use of aggressive accounting principles are related to low earnings quality and the potential for SEC investigation. Others have written about quality of earnings, identifying management of accounting choices that yield a desired effect on income (Ayers 1994). A variety of reasons exist for earnings management, including influencing stock market perceptions, increasing management compensation, avoiding violation of dividend and debt covenants, and regulatory reasons (Healy and Wahlen (1999). Schipper (1989) discusses conditions leading to earnings management; ethical issues and behavioral antecedents are discussed in Rosenzweig and Fischer (1994), and Duncan and Noblest (2000). Dechow and Skinner (2000) addressed the fact that academics, practitioners, and analyst differ on definitions of earnings management; Parfet (2000) discussed the complexities of earning management, indicating that it sometimes is a business decision.

Siegel (1982) surveyed practitioners, analysts, academics, and MBA students, providing useful guidelines for distinguishing good and bad earnings quality situations. Rozenzweig & Fisher (1994) surveyed accountants with differing managerial actions, requesting ethical or unethical rankings; their findings indicated that age and seniority affect earnings management responses. Bricker et al. (1995) surveyed financial analysts; results indicated that analysts considered earnings quality in terms of predictability of near term earnings.

No study has explicitly surveyed financial statement users, such as financial analysts, about their perceptions of the definition of earnings quality with an open-ended format and gathered information on questions about accounting variables classified as having a balance sheet vs. income statement focus.

METHODOLOGY

The survey instrument gathered information concerning the awareness of the respondent by asking about familiarity, use, and experience with the topic of earnings quality and financial statements. An assessment of companies following income minimizing or income maximizing accounting choices, as well as a balance sheet focus vs. an income statement focus is covered. A Likert scale allows respondents to utilize definitions from FASB Concepts Statement No. 6 to evaluate whether or not identifying revenues and expenses in terms of assets and liabilities is preferable, rather than following the matching criteria per se.

A total of 447 surveys were mailed out, with 49 questions. The breakdown of constituencies was: 26 large accounting firms, 15 SEC employees in the Financial Reporting Division, 8 FASB employees, 98 accounting professors from colleges and universities in the United States, selected at random from the Hasselback Accounting Faculty directory, 200 financial statement analysts, and 100 chief financial officers of large corporations in the Standard and Poors 500 Index.

A total of 53 questionnaires were returned (12%). The breakdown by category was 5 chief financial officers from industry, 24 financial analysts, and 24 academicians who returned a completed questionnaire.

RESULTS

Demographic factors are analyzed to identify patterns of experience and usage with earnings quality concepts. The means of familiarity, usage and experience for the three constituency groups was tabulated and an ANOVA technique was conducted. The results indicate that there is a significant difference between groups on the variables of familiarity, use, and experience with financial statement use. The results indicate that analysts and the managers who responded to the survey are familiar with the topic of earnings at a response rate between "very much" and "expert".

The survey asked respondents to rank the positive effect that the FASB Concepts statements have had on earnings quality. In Table 1, the overall result is shown as 3.36, falling between, 3 = "Neutral" and 4 = Agree. The results also indicate neutrality, or even a tending to disagree, that a balance sheet approach should be pursued.

TABLE 1
Questions on FASB Concepts Statements and Balance Sheet Focus

CATEGORY	POSITIVE	ASSETFOC	LIABILIT	VAGUE	STMT6
Analyst Mean N Std. Deviation	3.2632 19 .6534	2.6190 21 .9207	2.6667 21 1.0165	3.2000 20 1/0563	3.0000 19 .7454
Academic Mean N Std. Deviation	3.4545 22 .7385	2.8571 21 1.1526	2.8636 22 1.0821	2.7273 22 .9351	3.0455 22 1.0901
Industry Mean N Std. Deviation	3.3696 5 .5477	2.4 5 1.3416	2.6 5 1.1402	2.4000 5 1.1402	3.400 5 1.1402
Total Mean N St. Deviation	3.3696 46 .6785	2.7021 47 1.0615	2.7500 48 1.0417	2.8936 47 1.0265	3.0652 46 .9522

Definition of Variables:

POSITIVE = FASB Concepts have a positive effect on earnings quality
ASSETFOC = Revenues should be evaluated as inflows or other enhancement of assets or the settlement of liabilities rather than focusing on a matching of revenue and expense
LIABILIT = Expenses should be evaluated as inflows or other enhancement of assets or the settlement of liabilities rather than focusing on a matching of revenue and expense
VAGUE = Even though a transaction may be vague in identity and amount, it should be recognized as an asset or liability under a balance sheet approach
STMT 6 = Underlying approach in financial statements should tend toward a balance sheet approach as discussed in FASB Concepts. No. 6
Scale: 1=Strongly disagree, 2=Disagree 3=Neutral, 4=Agree, 5=Strongly agree

The survey included an open-ended question "How do you assess the quality of earnings for an individual entity? Please list at least three things that you think contribute most to an entity's quality

of earnings." This resulted in a total of 147 responses on what contributed to earnings quality. Table 2 shows the content analysis results.

TABLE 2
Open-Ended Quality of Earnings Factor Question
Number and Percentage of Responses by Group and in Total

Response	Analyst	Academic	Industry	Total
Consistency	8 14%	2 3%	2 13%	12 8%
Completeness	0	2 3%	0	2 1%
Openness	0	4 5%	3 19%	7 5%
Conservatism	0	3 4%	0	3 2%
Underlying Economics	0	0	1 6%	1 1%
Mgmt. Disc. & Analysis	2 4%	2 3%	2 13%	6 4%
Mgmt. Awareness	0	1 1%	0	1 1%
Mgmt. Compensation	0	2 3%	0	2 1%
Internal Control	0	1 1%	0	1 1%
Related Entity	0	1 1%	0	1 1%
GAAP	1 2%	10 14%	1 6%	12 8%
Footnotes	1 2%	4 5%	2 13%	7 5%
Revenue Recognition	7 12%	8 11%	1 6%	16 11%
Inventory Method	0	1 1%	1 6%	2 1%
Depreciation Method	2 4%	1 1%	0	3 2%
Acctg. For Bad Debts	2 4%	0	0	2 1%
Nonrecurring Items	11 19%	6 8%	3 19%	20 14%
Cutoff	1 2%	1 1%	0	2 1%
Matching	0	1 1%	0	1 1%
Other GAAP	8 14%	7 9%	0	15 10%
Earnings Variability	9 16%	2 3%	0	11 7%
Correlation of Earnings & CF	5 9%	7 9%	0	12 8%

Accruals	0	3 4%	0	3 2%
Auditor Reputation	0	2 3%	0	2 1%
Legal & Political Environment	0	1 1%	0	1 1%
Stock Market Response	0	2 3%	0	2 1%
Total	57	74	16	147

Four areas emerged from the analysis: 1) Theoretical factors, such as consistency in reporting, and conservatism; 2) Management and Firm Factors, other than GAAP, such as Management's Discussion and Analysis; 3) Management and generally accepted accounting principle factors, such as revenue recognition, and earnings variability and persistent, and 4) External factors such as stock market response.

Of the 147 responses, nonrecurring items was the earnings quality factor cited by the most respondents, encompassing 14% of the responses and including all three constituency groups. Revenue recognition, general GAAP issues, and specific GAAP issues were also factors that were mentioned by numerous responders from all constituency groups.

Consistency was the theoretical response that was noted most often. Academics and analysts also mentioned earnings variability and the correlation of earnings and cash flows relatively often; together these responses made up 15% of the total comments. Responses from academics were the most numerous and diverse, including theoretical factors, GAAP factors, and external environment factors. Analysts tended to focus on issues of consistency, specific GAAP issues, and earnings variability. Industry responses were clustered in theoretical factors and specific GAAP issues. While constituency groups seem to agree on the factors that were described most often, there were also differences in the range of factors

A one-way ANOVA analysis resulted in F=3.621, Significance level =. 029, indicating that the mean difference in responses between constituency groups for this open-ended question is significant.

CONCLUSION

This study provides information from survey respondents who use accounting concepts to make decisions on what contributes to quality of earnings emerging from the firms they evaluate. Although the sample is small, the results provide a framework for the content analysis of the open ended questions. For the FASB Concepts section of the survey, the results indicate a somewhat neutral vantage point in how they have affected earnings quality. The balance sheet focus delineated in *SFAC No. 6* is addressed in this study but the results do not indicate a clear preference for a balance sheet approach. However, the sample size is small, and further studies with larger response rates may indicate differing results. The study indicates that a balance sheet approach is important in assessing earnings quality, but the effect tends to be neutral.

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