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A CONCEPTUAL MODEL OF MANAGER BEHAVIOR IN A BALANCED SCORECARD ENVIRONMENT

Nelson U. Alino, Quinnipiac University
Scott Lane, Quinnipiac University
Gary P. Schneider, Quinnipiac University

ABSTRACT

In this paper, we propose a model of manager behavior in a balanced scorecard (BSC) environment. Research in management and organizational behavior has developed evidence that commitment, motivation, and job satisfaction are major determinants of managerial performance. Our model links these determinants to their precursors in a BSC environment by drawing on the accounting and control literature that has developed evidence regarding the elements of that environment and their effects on commitment, motivation, and job satisfaction. We conclude with suggestions for future research.

INTRODUCTION

Kaplan and Norton (1992, 1996) introduced the BSC as a way to add non-financial measures to the performance evaluation systems and goal setting structures of large organizations. Much research in accounting has been directed at evaluating the effectiveness of the BSC for strategic management and performance evaluation (see, for example, Davis and Albright 2004; DeNisi and Pritchard 2006; Luft, 2004).

USE OF NON-FINANCIAL MEASURES

Ittner and Larcker (1998) observe that the use of BSCs and their performance consequences appear to be affected by organizational strategies and the structural and environmental factors confronting the organization. They called for research that provides evidence on the factors affecting the adoption of various non-financial measures. Ittner and Larcker (2002) indicate that prior studies on non-financial measures ignore the interaction between different non-financial measures, and that this limitation could result in misleading inferences if the non-financial measures are highly correlated. Similarly, DeNisi and Pritchard (2006) report the result of a survey which indicates that only one in ten employees in the survey believe that their firm's BSC appraisal system influence their performance.

In a study of the effectiveness of BSC as a communication and strategic control tool, Malina and Selto (2001) used empirical interview and archival data to show that employees are motivated by effective communication, strategic alignments and effective management control and not by financial rewards only. They argue that a well-designed BSC and effective

communication appears to motivate and influence lower level managers to conform their actions to company strategy.

Contrary to the opinions referred to above, Davis and Albright (2004) argue that BSC and the use of strategic management systems provide employees with improved communication of strategic objectives, alignment of managerial actions with strategic priorities, increased motivation, fairness in strategic process, feedback and learning, and a link to rewards system that change behavior, and improve performance.

ORGANIZATIONAL STRUCTURE

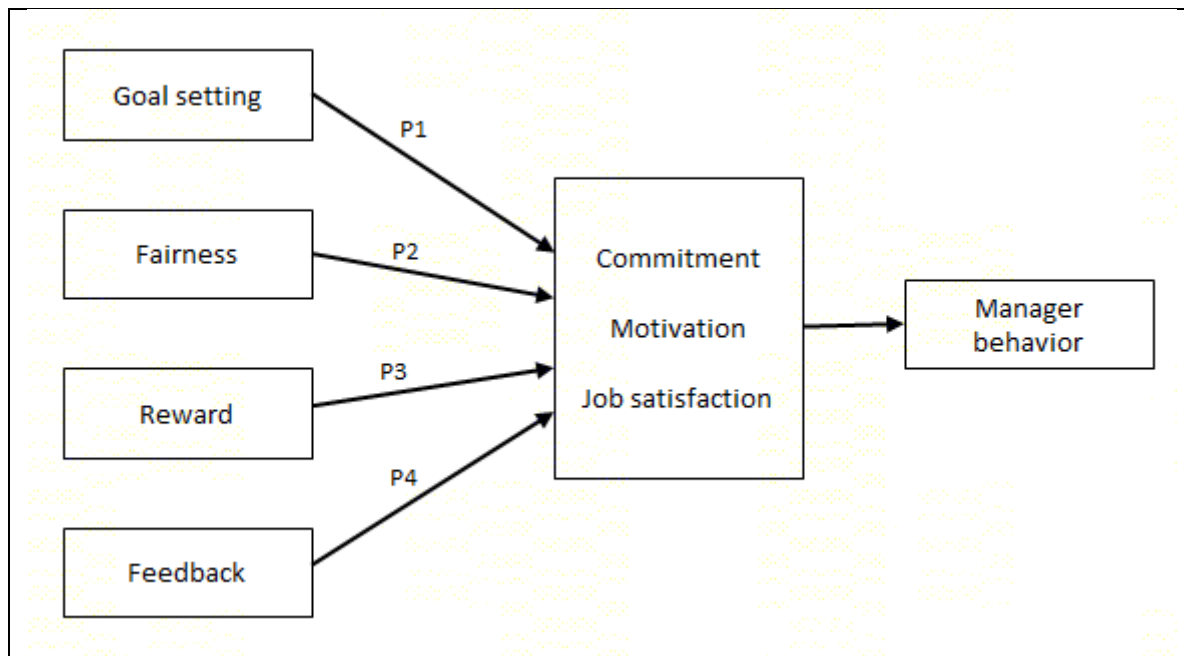
At a macro level, Caldwell, Chatman and O'Reilly (1990) found that differences in organizational structure do affect employee attitudes and responses. In terms of individual processes and systems, there is extensive literature on goal setting, on performance appraisal, feedback, perception of fairness, and on incentives (Bouillon et al., 2006; Locke and Latham 2002) that also link these attributes to changes in behavior. Specifically, we propose that the various attributes of BSC; including goal setting, perception of fairness, feedback, and linkage to reward systems; work together to achieve desired managerial behavior outcomes in a BSC environment. The thesis of this paper is based on the proposition that the effects of these attributes on managers' behavior taken together might explain the inconsistent results from prior research.

INDIVIDUAL BEHAVIOR

We contend that a greater understanding of the factors that influence individual behavior in a BSC environment can help to predict (and eventually influence) the quality and consistency of performance outcomes. With the ability to reasonably predict the outcome of the performance measurement process, using its attributes, interventions could be developed to increase the effectiveness of BSC in motivating individual job performance. This study will provide information for academic researchers interested in the effectiveness of BSC as a motivational tool for influencing managers and redirecting their attention among multiple objectives and functional areas (e.g. Ullrich and Tuttle, 2004).

CONCEPTUAL MODEL

Figure 1 provides a conceptual framework that depicts the propositions advanced by this paper. This framework is supported by various theoretical arguments presented in the review of relevant literature that follows. Figure 1 summarizes our research argument that the success of BSC is a function of how the various attributes of BSC, including goal setting (proposition 1), fairness (proposition 2), reward (proposition 3), and feedback (proposition 4) can affect the behavior (through the instantiation of commitment, motivation and job satisfaction) of managers who are charged with the implementation of their organizations' strategies.

Figure 1 - Conceptual Framework.**APPLYING THE CONCEPTUAL MODEL**

Overall, the use of multiple performance measures in a BSC as proposed by Kaplan and Norton (1992), seems to have provided organizations with an alternative performance measurement system that overcomes the deficiencies associated with the traditional financial measurement system. However, anecdotal evidence, and result of empirical, laboratory, and survey studies in the literature are inconsistent at the minimum on the effectiveness of BSC in changing individual behavior. This has increased the level of concern, and investigation of its effectiveness by both the academic researchers and practitioners are continuing. This suggests that more research is needed in other to really ascertain the effectiveness of the use of multiple performance measures and the balance scorecard as a strategic management tool in changing individual behavior and improving job performance.

The literature also suggests that the conflicting findings of research studies could be as a result of the differences in implementation procedures and resources distribution methods of organizational and employee perception of these differences. Various psychological and personality theories can be valuable in developing theoretical frameworks that could explain the differences and contribute to future research.

Furthermore, key intervening variables exist in the BSC-performance relationship. In exploring the cause and effect relationships between these intervening variables and BSC job performance relationship, another issue of importance includes the possibility that the various intervening variables might be measuring the same construct or are being confounded by other variables.

SUGGESTIONS FOR FUTURE RESEARCH

A valuable extension of the existing literature would involve a study of whether the level of commitment, motivation and job satisfaction co-vary in a multiple performance measurement environment when the level of perceived fairness, goal setting, and feedback quality is manipulated in an experimental setting and the rewards effect is controlled. Thorough examination of the effectiveness of the implementation of BSC across different types of organizations, industry sizes, management styles and cultures, over a long period of time may not only substantially increase our knowledge about the role and significance of BSC and the use of multiple performance measures in individual behavior changes, but could also explain the inherent differences in research results.

HOW TO RECONCILE MANAGEMENT ACCOUNTING AND PERFORMANCE IN THE MUNICIPAL PUBLIC SERVICES OF AFRICAN CITIES? AN EMPIRICAL STUDY

Donatien Avelé, University of Moncton

ABSTRACT

Despite an approximate and contingent nature, management accounting plays a key role in attaining objectives in organizations. This empirical study aims to examine the tools of analytical management accounting implemented in municipal services. The research also studies the contingent factors of structural and behavioural nature susceptible of influencing municipal performance. In order to test the hypotheses developed in this paper, a questionnaire survey was conducted with 50 municipalities and 60 municipal services in Cameroonian cities. The results of this survey show that the use of management accounting is very basic and quiet summary throughout the public services that we visited. Finally, the same results of the study expose a certain number of factors that influence the performance of municipal public services.

INTRODUCTION

An organization is a system that encourages the distribution of formal and informal information with the aim of assisting managers in attaining their objectives. Accordingly, for this reason, managers implement a management accounting system as a tool to aid decision making. During the 1980's, researchers in the field of management accounting studied the characteristics of their management control systems (Gosselin M., 2000). These studies were conducted on different aspects of management accounting systems such as price costing, budgets, and the degree of decentralization (Lukka K. and Granlund M., 1996; Mévellec P., 1995). Moreover, a municipality possesses a large number of services necessary for the proper functioning of the community but is required to provide even greater varied needs. (Van Ryzin Gregg G. and Immerwahr S. (2004). One of the purposes of management accounting is to better coordinate the diverse group of activities that are part of the same organization (Lebas M. and Mévellec P., 1999). Management accounting, as stated by Bouquin H. (2000), is far from being just a simple technology for a better financial or day-to-day management. It is also used as part of a set of tools for performance control and for cost reduction (Nanni A. J. and al, 1992). On the other hand, the determinants justifying the use of non-financial criteria to evaluate or guide performance are numerous with diverse theoretical explanations (Pointet E. and Wegmann G., 2005). The interest accorded to these criteria is justified in the current context (financial scandals, accrued market volatility), indicating the limits of accounting and financial information as a means of communicating performance (Depoers F., 2002). Researchers such as Kaplan and

Norton (1998), whose principal subject is non-financial indicators, explain that they complement the financial indicators that concentrate too much on guiding short-term actions. One current theme in literature, regarding management accounting and monitoring, concerns non-financial indicators (Lorino P. (2003). They are supposed to reflect company strategy and performance orientation. They are non-financial since they do not directly express the financial objectives of the organization as opposed to profit indicators based on results or total sales. Furthermore, the non-financial indicators that are included in a company's strategic prospect, based on human resource management or environmental concerns, in general can, respectively, be qualified as social and (Martory B., 1999) and societal (Oxibar B. and Déjean F., 2003).

However, very few studies, to our knowledge, have been undertaken to date to help better understand which factors are susceptible to influence the performance of municipal public services of African cities in general, and in particular Cameroonian cities. Thus, we include in the scope of this study an effort to understand why management accounting, despite its approximate and contingent character, has not yet been included in the management of these local entities. The object of this study is, specifically, to attempt to understand to what extent the structural and behavioural contingent factors can influence the performance of public municipal services. Finally, the research will also allow us to better determine how these local entities use their cost analysis systems.

PERFORMNCE CONTINGENCIES OF MUNICIPAL PUBLIC SERVICES AND RESEARCH HYPOTHESES

Dependent Variables

The dependent variables are chosen by taking into account the organizational distinctiveness of African municipalities. Because of the reticence of African municipal officials in general, and in particular, Cameroonian public servants to communicate financial statements, we measured the performance using a set of six criteria (These criteria are as follows: Q371_IMO (importance of objectives, 1= satisfaction of patients; Q372_IMO (importance of objectives 2 = ensure garbage collection), Q373_IMO (importance of objectives 3= ensure continuance of civil acts), Q374_IMO (importance of objectives 4= satisfaction of personnel), Q375_IMO (importance of objectives 5 = delivery of potable water), Q38_RO: realizing objectives. These criteria were personally assessed and evaluated by the department heads as a function of their importance on the 5-point Likert scale.

Independent Variables

The determinants of municipal performance are grouped into a set of five exogenous variables. After proposing the theory pertaining to each of these explicative variables, we will then present the hypotheses associated with them.

Explicative factors for behavioural contingents

Since the 1980's, management literature has strongly favoured an increased recourse to non-financial indicators to evaluate the performance of a company or its divisions and subsidiaries. Fisher J. (1994) studied the effects of implementing a system of non-financial measurements in five companies manufacturing high-technology products (semi-conductors). His study falls within the framework of management literature calling for an increase in using non-financial indicators since, according to the author, "financial measurements reflect the results of past decisions and do not help in defining the necessary actions required to initiate in order to survive in the actual competitive environment" (The author also states the insufficiencies of traditional systems based on financial measurements; however, he points out only a presentation on the limits of a single system of cost standards).

In light of this study, it appears that:

- The non-financial measurement systems were implemented in specific companies that underwent a major "crisis" (EX: loss of an important client);
- Their introduction requires a definition of indicators to estimate the results of the different factors retained;
-

Insofar as the author is concerned, the integration of non-financial indicators still does not allow for the resolution of all problems incurred by the evaluation of performance:

- One of the major difficulties encountered relates to the inability of increasing the value of the benefits of using non-financial indicators.
- Certain problems result when using joint financial and non-financial measurements. The coexistence of these measurements may be the source of less than optimal decision-making: when we purchase machinery to reduce delivery delays, the cost of this machinery is clearly identified; it is not the same as the profit gain by the reduction in delivery time.

The recourse to non-financial measures does not diminish the possibility of internal conflicts: if a production department is judged by the scale of production realized, if a quality control mechanism is judged on the rate of return by clients, all products rejected by the quality control mechanism decreases the rate of product returns, but also decreases the scale of production. Therefore, it appears that non-financial indicators cannot totally replace, by themselves, financial measurements. The inherent problems implementing non-financial measurements are due to the absence of a theoretical analytical framework. Such a framework must define the space accorded to different types of measurements, the relationship between results expressed in both financial and non-financial measurements, and the relationship between different non-financial indicators. In addition, as stated by Avelé D. (2011), the performance of an organization could not be possible without considering the employees who participate daily in its activities. By "employees", we mean all persons who are gainfully employed by the organization including directors, which in our study means elected officials, civil servants,

municipal employees, and municipal agents. The value of human resources represents the social dimension of the effectiveness. In the scope of this study, we have retained as explicative factors of behavioural contingency: respect of payment commitments, proof of job creation, number of jobs created, number of training hours, personnel mobility. Consequently, we present the following hypotheses:

H1: The explicative factors of the behavioural contingent are positively correlated to the performance of municipal public services.

As for the characteristic factors of the value of human resources, we retained: existence of complaints, sickness, frequency of dismissals, work related accidents, voluntary departures.

H2: The characteristics factors of the value of human resources are positively related to the voluntary departure of employees.

The contingency of controlling objectives

The use of the term “control” remains ambiguous. We kept with some nuances the concept of verification put forward originally by Fayol H. (1926) or Taylor F. (1965). We can substitute or add the idea of short-term planning. With organizations becoming more and more complex, it no longer suffices to verify the non-respect of rules and standards, but instead to initiate the capability to follow plans, to the point of even appropriating them. Anthony R. (1965), while observing this evolution, identified three levels of control:

- Strategic control, which consists of defining objectives and the necessary resources to achieve them;
- Management control, which allows managers to ensure that the resources are obtained and utilized in an effective and efficient fashion, in order to achieve the objectives of the organization;
- Operational control, that allows those responsible to ensure a smooth functioning of specific daily work assignments.

According to the contingent approach, control systems are influenced by a set of structural factors that differentiate them from one environment to another. Numerous studies have thus confirmed the existence of correlations between the characteristics of companies and the attributes of control systems (Fisher, 1998; Chenhall, 2003). One of the problems that arise when attempting to control local municipalities is that they are atypical and complex organizations. The dichotomous version of control was undertaken Mintzberg H. (1982. p.148-157). He makes a distinction between “performance control” and “operational planning”. The performance control system is by nature general and is intended for specific work assignments. He then defines the objectives of the performance control system: measure and motivate. As for the planning of work assignments, it emerges, according to Mintzberg, as the means by which

non-routine decisions and tasks in a structured and function-oriented organization can be conceived in an integrated manner. In order to specify the field of application for the concept of strategic control, must we beforehand be interested in the motives of non-profit organizations? If the case of non-profit organizations is relatively simple, we can conclude that profit can be seen as a non-priority or bonus of these entities. However, the case of local municipalities is more delicate to comprehend. Anthony (1988, p.174) indicates that for these other types of organizations, the objective is a two-pronged set of priorities. The first is to ensure the balance between resources and employment. The second is to maximize the services provided to the community while minimizing the costs. In this particular sense, the desire to place local municipalities under control is not without merit.

Consequently, we propose the following hypothesis:

H3: There exists a positive relation between the performance of municipal public services and the control of objectives by Minatd
(Ministry of Territorial Administration and Decentralization).

Behavioural contingency related to gender identity of elected management officials

It is part of our study to determine whether the sex of the elected management official influences the performance of municipal public services in Cameroon. In other words, is this an established practice that results in limiting professional activities for women in favour of “family duties”, as suggested by Allouche J. (1993), thus creating an existential difficulty that may significantly influence municipality performance? At the same time, Carland J.A.C and Carland J.W. (1991) note in their study that women directors and/or managers adopt different management strategies than their male counterparts. We must mention, nonetheless, the absence of empirical work or studies on the gender variable. This is the reason why Ducheneaut (1996) observes that, if the authors paid little attention to the question, it is because of the low rate of participation by women in managerial positions. Besides, the researcher Gerry F. (2003) indicates the following facts:

- Women entrepreneurship is a non-exploited source of economic growth;
- The rate of women participating in entrepreneurship is lower than men;
- Industries who select women in senior posts are seen as less important to the economic growth and development;
- Centralized policies and programs do not take into account the specific needs of women entrepreneurs. Despite the considerable absence of empirical data on the gender variable, we believe that the opportunity to integrate such a variable in our study in order to verify if in the framework of evaluating community performance, it may have an impact on the anticipated organizational objectives. Hence, we propose the following hypothesis:

H4: There exists a positive relation between the sex of the elected manager and the performance of municipal public services.

RESEARCH METHODOLOGY

The methodology is presented in the full paper

MAIN RESULTS

All results are presented in the full paper

CONCLUSION

The results of this study, based on a sample composed of 50 Cameroonian municipalities, show that management accounting is not yet rooted and accepted as a sound management tool by local entities. Research in management accounting and control is more closely associated with the domain of public management. To broach this field of analysis that is ill defined but certainly in demand, it is important for research projects to specify with greater precision the context in which they are writing as well as the organization studied. However, the implementation of a management accounting system requires initially adopting a form of language that is rare, especially in a context such as that of the Cameroonian local municipalities. The structural and behavioural contingent characteristics described in the framework of this research has allowed us to return the focus of the debate on the measure of performance with indicators based on future performance. It appears that a certain number of contingent factors exercise an influence on the performance of municipal public services. We have observed during the scope of our field study that a municipality is a heterogeneous organization composed of numerous activities, whose objectives and functioning are different, even opposite; consequently, the implementation of a management accounting system to improve such services must take into account this complexity.

REFERENCES

References are available upon request.

EXPLORING THE FINANCIAL STAKE IMPLICATION OF SELECTED “PROHIBITED SERVICES” UNDER SECTION 201 OF THE SARBANES-OXLEY ACT

Kevin L. Ennis, Mississippi State University-Meridian
Paul W. Allen, Mississippi State University-Meridian
Quinton Booker, Jackson State University

ABSTRACT

To aid in the protection of the public interest, Section 201 of the Sarbanes-Oxley Act (SOX) of 2002 specifically prohibits a registered public accounting firm from providing certain non-audit services to a public client contemporaneously with the audit. The new mandates of Section 201 clearly imply that the prohibited services were necessary to help resolve a potential self-interest conflict between a CPA's responsibility to the accounting profession (to protect the public interest) and his/her financial stake in the potential revenue offered from the prohibited non-audit services. This creates a contraindication for the accounting profession and suggests that relationships could exist between a CPA's financial stake in the practice of public accounting and his/her support of the prohibited services. The purpose of this exploratory study was to investigate those relationships.

Data was gathered via a survey instrument mailed to a random sample of 1000 active AICPA members from both the public and nonpublic accounting sectors. CPA support was solicited for three selected non-audit services prohibited by Section 201 of SOX. Evidence suggests that CPAs in both the public and nonpublic accounting professions appear to exhibit a public interest protection motive by making a decision to support the prohibition of the selected non-audit services. Taken as one overall group of accounting professionals, on average, CPAs exhibit significant support for the prohibition of the selected non-audit services. Relationship analysis suggests that financial stake is a significant factor in determining a CPA's level of support for selected prohibited non-audit services. Results were mixed in the nature of the relationships found. CPAs with a higher level of financial stake (Partners/Owners) in the practice of public accounting exhibit a stronger level of support for the prohibition of financial information system design and implementation services than CPAs with a lower financial stake. Comparatively, this level of support was significantly different between the groups of CPAs with the lowest (CPAs not in public accounting) and highest (Partners/Owners) financial stake. Conversely, with respect to the prohibition of internal audit services, a CPA's level of support decreases at higher levels of financial stake. While the results of this study do not conclusively show whether financial stake actually influences a CPA's level of support for SOX prohibitions of selected non-audit services, they do reveal that financial stake is an important component in a CPA's response toward the prohibitions. It could be conjectured that the results are consistent with the self-interest concerns inherent in SOX 201 provisions.

CAPITAL STRUCTURE CHOICES AND SURVIVAL IN A DEREGULATED ENVIRONMENT

Arthur J. Francia, University of Houston

Christian Kuate, University of Houston

Thomas R. Noland, University of Houston

Mattie C. Porter, University of Houston-Clear Lake

ABSTRACT

We examine the impact of capital structure choices for survival in a deregulated industry. Financial leverage in particular has been identified by numerous prior studies as a major determinant of the probability of survival in most industries. In the course of a deregulation, the debt overhang effect stemming from high leverage negatively affects the ability of existing firms to survive when a regulatory shock occurs (Zingales 1998). Following such a regulatory shock and consistent with the tradeoff theory of capital structure, firms are more likely to reduce their level of leverage (Ovtchonikov 2010), rendering the expected costs of financial distress even higher; thus we can expect a negative association between leverage and survival in a deregulated industry. However, in a highly competitive setting, firms may signal their level of quality by contracting for more debt instead of equity (Ross 1977). This signaling perspective can therefore induce the existence of a positive association between leverage and survival in a deregulated context. Using a sample of private trucking firms, we test this hypothesis and find a negative association between leverage and survival. In a refined analysis aimed at distinguishing high “quality” versus low “quality” firms, we adopt the “excess capacity” approach of De Vany and Saving (1977). Contrary to the signaling theory of Ross (1977), we find that the negative association between leverage and survival increases with the level of excess capacity.

THE GLASS CEILING IN PUBLIC ACCOUNTING

Rowena Ortiz-Walters, Quinnipiac University

Gary P. Schneider, Quinnipiac University

Aamer Sheikh, Quinnipiac University

Kathleen A. Simone, Quinnipiac University

ABSTRACT

In recent years, U.S. public accounting firms' entry-level staff have been about half male and half female. The exact numbers vary from year to year, but most industry experts believe that the profession has become gender balanced. However, this gender balance does not exist at the and partner level. Broad initiatives undertaken by professional accounting associations and by individual firms have included a number of initiatives designed to address this situation. Overall, these initiatives have not been successful. This paper outlines the current state of gender inequality at the partner level in U.S. public accounting firms.

INTRODUCTION

The number of women in the public accounting profession has been increasing steadily for decades. Today, women make up half the entry-level workforce in the profession. According to the American Institute of Certified Public Accountants (AICPA) 2011 Trends in the Supply of Accounting Graduates and the Demand for Public Accounting Recruits, the number of new accounting bachelor's and master's Graduates from the 2009-2010 academic year hired by public accounting firms was essentially equal with regard to gender. This represents a slight decrease from the 2008-2009 survey results for hiring where the ratio of female to male hires was reported as 55% and 45%, respectively. These statistics are not surprising given trends in the supply of accounting graduates, 52% male and 48% female in the 2009-2010 academic year (AICPA, 2011a). One might expect that a similar parity would obtain at the partner level, but the percentage of female partners is significantly lower, ranging from 23% to 16% depending upon the size of the firm (AICPA, 2011a).

GENDER BIAS OR RETENTION?

Although women are less likely to believe that they are being treated equally by employers, 36% as opposed to 46% male (PricewaterhouseCoopers, 2012a), research indicates that the underrepresentation of female partners might not be a result of gender bias or the lack of opportunities for women in public accounting firms. Rather, it is more indicative of the retention of female accountants in these firms (Public Accounting Report, 2008; AICPA, 2008; Deloitte, 2010). Women are not staying in public accounting long enough to achieve senior level or partnership status. The AICPA suggests that this is due to "off-ramping" a term coined to

describe a temporary career break. According to the AICPA, the number of employees electing to exit the accounting profession temporarily is increasing primarily to accommodate activities such as child rearing and caring for aging family members. The AICPA's recognition of the need for firms to appeal to and retain talent, particularly women and minorities, has resulted in development of several plans and initiatives. Public accounting firms acknowledge the importance of retaining female accountants. They point to the retention of female accountants as an imperative given the age and demographics of the profession (Public Accounting Report, 2010). They have implemented multiple initiatives and programs to support and ultimately retain their female employees.

This paper reviews and evaluates the AICPA and individual firm initiatives that support the retention and development of women in public accounting. It concludes with suggestions for further action that might prove useful in reducing the gender imbalance at the highest levels of public accounting firms in the United States.

ACCOUNTING PROFESSION RETENTION INITIATIVES

The AICPA (2010a) developed a Work/Life Retention Action Plan (WLRAP). The WLRAP details steps to be taken including offering tangible and intangible benefits, managing flexible work arrangements, encouraging mentoring and providing leadership and development opportunities. The WLRAP encourages intangible benefits such as flexible work arrangements and alternative career options including promoting based on an employee's contributions rather than the traditional steps that most public accounting firms have now. The AICPA (2008) Building Bridges Off-Ramping guide identifies six best practices for off-ramping programs that include supplying technology, providing training, communicating creatively, encouraging networking, creating support circles and facilitating on-ramping.

In addition to the AICPA, the Chartered Institute of Management Accountants (CIMA) issued a report, *Breaking the Glass-Strategies for Tomorrow's Leaders*. This report provides guidance from senior female management accountants for prospective women business leaders. The report includes strategies for employers and individuals as well as an action plan to assist with planning career advancement (CIMA, 2010).

The Big Four firms have also been actively involved in a variety of women's initiatives to support and advance their female employees. One has only to view the Big Four web sites to see how invested these firms are in developing programs to recruit and retain women.

UNDERLYING MOTIVATIONS FOR OFF-RAMPING

It is obvious that U.S. public accounting firms have been, are currently, and plan to continue to invest significant resources to support and advance their female employees. However, the slow growth of women at the partnership level suggests that either these initiatives and program are not effective or that women are not off-ramping to care for children or aging family members as firms' believed.

CONCLUSION

This paper discussed initiatives undertaken by the U.S. accounting profession to support the retention and advancement of women in public accounting. Although the AICPA and public accounting firms have committed a significant amount of resources to provide a variety of program and initiatives geared towards retaining female employees longer, women are still underrepresented at the partnership level in public accounting firms. Future research could provide insights into the sources of female staff expectations and aspirations. Qualitative studies could be designed to elicit whether the issues are related to work-life balance, family responsibilities (current or anticipated), personal preferences, the work environment created by the firm, or even societal expectations.

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A LOOK AT START-UP BUSINESS ACCOUNTING: THE COST OF NOT BEING PROACTIVE IN ACCOUNTING AND TAX PREPARATION

Letitia Meier Pleis, Metropolitan State College of Denver

ABSTRACT

One of the leading causes of non-success for a start-up business is related to accounting. It is either not managing the books correctly so that it is not known when expense are growing faster than revenue, not having a cash management system in place and running out of cash, or simply not paying attention to taxes and getting stuck with debt to the IRS, state or local tax authorities. The reason many individuals start a business is related to a passion or skill of the individual and not related to their keen accounting skills. Often the business is started with little funds and little knowledge of accounting and tax. The individual starts by pursuing their passion of producing a product or providing a service. One of the biggest expenses that the owners seek out first is related to marketing. Accounting is then pushed to the side. Even when money is spent to acquire an accounting software package, time is not carved out to actually use the software. To add to the complication, tax law is confusing and it is not always clear to the business owner what taxes must be paid or even how to pay them. In this paper, I present real life examples of start-up businesses struggling with accounting and tax issues, mistakes they initially made, what it is costing them to fix those mistakes and how those mistakes could have been avoided.

EXECUTIVE COMPENSATION IN SIN FIRMS

David A. Sauer, Quinnipiac University
Gary P. Schneider, Quinnipiac University
Aamer Sheikh, Quinnipiac University

ABSTRACT

This paper examines the characteristics of executive compensation in firms that exploit human vice (sin firms). We predict that chief executive officers (CEOs) of sin firms should earn higher pay than CEOs of non-sin firms. In addition, the bonus and cash pay-performance sensitivities of sin firm CEOs should be higher than the bonus and cash pay-performance sensitivities of non-sin firm CEOs when performance is measured using accounting returns.

INTRODUCTION

Akerlof (1980) defines social norms as acts whose utility to the agent performing them depends in some way on the beliefs and actions of others. Social norms are thought to be important determinants of economic behavior (Elster, 1989; Kubler, 2001). In the setting of capital markets, social norms manifest themselves in the form of what is known as “socially responsible investing,” in which investors avoid investing in the stock of corporations that operate in industries perceived to be exploiting human vice (Haigh and Hazelton, 2004; Statman, 2000; Statman, 2006). Such equities are often called sin stocks. Others have argued that investing in sin stocks provides superior returns when compared to other investment strategies (Ahrens, 2004; Fabozzi, Ma, and Oliphant, 2008; Krantz, 2011; Nelson, 2009; Statman and Glushkov, 2008; Waxler, 2004).

SOCIAL NORMS

Becker's (1957) theory of discrimination is perhaps the earliest work on the influence of social norms on markets. Becker (1957) explains that, in labor markets, agents (employers) may discriminate against hiring individuals possessing certain characteristics (e.g., gender or race), even if this discrimination results in harm (financial costs) to the agents. Akerlof (1980) formally defines social norms or customs as acts whose utility to the agent performing them depends in some way on the beliefs and actions of others.

SIN STOCKS

Sin stocks are often defined as shares of publicly-traded corporations that are engaged in morally reprehensible productive activities, such as engaging in the production of alcohol or tobacco products, or operating in the gaming industry. There is no common, agreed-upon

definition of sin stocks in the economics or finance literature. We use the definition employed by Kim and Venkatachalam (2011), who add firms in the adult entertainment industry to the sin firms identified by Hong and Kacperczyk (2009).

OPERATIONALIZING THE NEGLECT EFFECT

Hong and Kacperczyk (2009) found that social norms could have important effects in capital markets. Specifically, they provide empirical evidence showing that sin stocks are ignored by investors even though they provide superior returns. They call this characteristic a neglect effect because they argue that investors are following social norms and neglecting to invest in such stocks. Kim and Venkatachalam (2011) found that the neglect effect occurs even though sin firms possess higher financial reporting quality. We investigate how this neglect effect influences CEO pay arrangements at sin firms. Specifically, we examine the association between CEO compensation and firm performance for a sample of sin stocks as compared to the general population of Standard & Poor's (S&P) 1500 stocks for the years 1992-2010.

SOCIAL NORMS IN THE OPERATION OF CAPITAL MARKETS

Social norms manifest themselves in capital markets as the investing strategy known as "socially responsible investing." Socially responsible investing is "directing investment funds in ways that combine investors' financial objectives with their commitment to social concerns such as social justice, economic development, peace or a healthy environment" (Haigh and Hazelton, 2004, 59). Investors believe that by investing in firms that are socially responsible, they can influence the actions and practices of these firms, and presumably, discourage such firms from engaging in the exploitation of human vice.

Others have argued that investing in sin stocks provides superior returns when compared to other investment strategies. Sin stocks are defined as the stocks of publicly traded corporations that are engaged in morally reprehensible productive activities – typically those engaged in the production of alcohol and tobacco products as well those companies operating in the gaming industry. Recent research shows that a portfolio of sin stocks outperforms the market as well as a portfolio of non-sin stocks (Fabozzi, Ma, and Oliphant, 2008; Liston and Soydemir, 2010, Statman and Glushkov, 2008).

VARIABLES USED IN THE STUDY

We believe the following variables will be relevant to the study: Salary, which is the dollar value of the base salary earned by the CEO during the fiscal year, Bonus, which is the dollar value of the bonus earned by the CEO during the fiscal year, Cash Pay, which is the sum of salary and bonus, and Total Pay, which is the sum of salary, bonus, other annual cash pay, total value of restricted stock granted, total Black-Scholes value of stock options granted, long-term incentive payouts, and all other total pay items.

Other variables in the study include ROE, or Return on Equity, which is the net income before extraordinary items in fiscal year t divided by average book value of common equity; RET, which is the one year total return to shareholders including reinvestment of dividends; and SIZE, which is the natural logarithm of total assets. There are two measures of risk; RISKROE is the standard deviation of ROE based on a rolling five year window, and RISKRET is the standard deviation of RET based on a rolling five year window. AGE is the age of the CEO. TURNOVER is an indicator variable that takes the value of 1 in the year in which there is a change in the CEO of the firm. Investment Opportunity Set (IOS) is a measure of the firm's growth opportunities, and is measured as the market-to-book value of total assets.

HYPOTHESES

We believe that a levels model will allow us to evaluate the relation between CEO pay and firm performance (Murphy, 1999). To examine how pay-performance sensitivities differ between sin firms and non-sin firms, we will test the following eight hypotheses, stated in the null form:

- H1: There is no difference in the association between salary and ROE between sin firms and non-sin firms.*
- H2: There is no difference in the association between salary and RET between sin firms and non-sin firms.*
- H3: There is no difference in the association between bonus and ROE between sin firms and non-sin firms.*
- H4: There is no difference in the association between bonus and RET between sin firms and non-sin firms.*
- H5: There is no difference in the association between cash pay and ROE between sin firms and non-sin firms.*
- H6: There is no difference in the association between cash pay and RET between sin firms and non-sin firms.*
- H7: There is no difference in the association between total pay and ROE between sin firms and non-sin firms.*
- H8: There is no difference in the association between total pay and RET between sin firms and non-sin firms.*

PRELIMINARY RESULTS

This study extends Hong and Kacperczyk (2009) and Kim and Venkatachalam (2011) by examining whether social norms influence corporate governance policies, specifically CEO pay practices. Our preliminary results show that the CEOs of sin firms earn higher pay than CEOs of non-sin firms and that the bonus and cash pay-performance sensitivities of CEOs of sin firms are higher than the bonus and cash pay-performance sensitivities of CEOs of non-sin firms when performance is measured using accounting returns.

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THE MARKET EFFECT OF THE TROUBLED ASSET RELIEF PROGRAM (TARP)

Ronald A. Stunda, Valdosta State University

ABSTRACT

In October of 2008, the U.S. Treasury launched the Troubled Asset Relief Program (TARP). The purpose of the Program was to promote stability for financial institutions primarily in association with the subprime mortgage debacle. Upon its inception, some theorized that this program would be beneficial to stockholders of firms participating in the Program, while other believed that it would be detrimental to stockholders of recipients of such funds. Because of these conflicting opinions, this study was undertaken to assess the effect the Program has had in its brief life to stockholders. An analysis was conducted using a sample of 25 firms which participated in the Program. This analysis compared the security prices of these firms in the year preceding TARP (pre-TARP) to the security prices of the same firms in the year after TARP (post-TARP). Findings indicate that stockholders of these firms realized a drop in security prices between the two periods. In addition, a control sample of 25 similar firms that did not receive TARP funding was analyzed during the same periods. Findings indicate that these firms did not realize a drop in security prices between the two periods. Thus, we can conclude, for those firms participating in TARP, stockholders of those firms saw the value of their investment drop, whereas stockholders of non-participating firms did not see a similar drop.

IS BETA DEAD?

Justin Timpano, Longwood University

Frank Bacon, Longwood University

ABSTRACT

Some experts deny beta is an efficient form of measuring risk, but are those doubts valid? The capital asset pricing model has long been relied on by professionals in order to find the required return using the coefficient beta, but some are now shying away from this technique claiming beta is an inaccurate measure of risk. The purpose of this paper will be to test through regression if the coefficient beta has correlation with returns. Return information will be collected on 70 different stocks and the S&P 500 in order to run a regression and show if there is correlation.

INTRODUCTION

The CAPM model was first published by William Sharpe in 1964 and later extended by Treynor (1965), Lintner (1965), and Mossin (1966). The model is used to determine a proper rate of return of an asset, or more specifically a stock. Three things the capital asset pricing model takes into consideration are the expected return for the market, expected return of the risk free asset, and the coefficient beta, which represents the asset's sensitivity to non-diversifiable risk. This model uses the formula: $K_e = R_f + (R_m - R_f) \beta$; which demonstrates that the firm's cost of equity (K_e) is a linear function of its risk correlated with the market. The variable R_f represents the risk-free rate, while $(R_m - R_f)$ is the market risk premium. β signifies beta, which is defined as the market risk. CAPM makes three critical assumptions in order to simplify the measure. The first assumption is that there are no transactions costs or taxes. The second notion is that all investors have the exact same intentions with their investments. The last assumption is that all investors have the same opinions on things such as return and risk. The CAPM also divides a portfolio's risk into two separate categories, systematic and unsystematic risk. Unsystematic risk can be defined as risk that is not correlated with the market, and therefore can be diversified away. Systematic risk is correlated with the market and is measured by beta.

Some of the issues experts have listed with the CAPM model are the errors in benchmarking. If an error in the benchmark occurs, the risk premium and beta cannot be calculated accurately. The three assumptions listed earlier are often viewed as too unrealistic and provides inflated measures. The literature review will provide an in depth look at some of the most well-known oppositions against CAPM and the response studies that attempt to prove the validity of the model.

LITERATURE REVIEW

The CAPM formula has been debated for decades since its publication in 1964 by Sharp. Black, Jensen, and Scholes (1972) were the first to refute the equation. This study consisted of testing stock returns from 1931-1965 using CAPM and concluded that returns for low-beta stocks were underestimated and high-beta stocks were overestimated. Fama and Macbeth (1972) performed a similar study using data from 1931-1968 finding similar results. Roll (1977) made detrimental claims about the model's use of the S&P 500 as an index stating that different indexes would result in inconsistent expected returns. Other studies like Stambaugh (1982) and Lakonishok and Shapiro (1986) used data from the 1970's in order to question the accuracy of beta measuring portfolio return.

The most significant opposition of CAPM came from Fama and French in 1992. In their studies, they presented for the first time a three factor model. The two variables they added to their asset pricing model were SMB and HML. SMB stands for "small minus big" which refers to the capitalization rate and HML stands for "high minus low," or the book to market ratio. They believed that the book to market ratio and capitalization rate help provide a more accurate measure of risk because it takes more into consideration than the capital asset pricing model. Their resulting data concluded that value portfolios and small cap portfolios have a greater opportunity for return, associated with a larger risk. Although beta also represents this relationship, Fama and French found the CAPM beta being 20% less accurate than their three factor model. Since FF, several researchers (Malkiel and Xu, 1997; Leland, 1999; and Grauer 1999) have produced empirical evidence supporting FF's findings.

FF's work has resulted in other experts conducting similar studies on the risk-return relationship of portfolios. One of the first studies was done later in 1992 by Amihud, Christensen, and Mendelson. The purpose of their study was to demonstrate the CAPM model is still significant by using the specific technique of joint pooled cross-section and time-series estimation and generalized least squares. The data shows the two techniques showed a significant relationship between beta and return on a portfolio. This correlation helps prove their theory that the death of beta was over exaggerated and still has relevance. Fischer Black (1993) wrote an article criticizing Fama and French suggesting that they misinterpreted the results. Black believes that a one factor model is a sufficient way to measure risk on a portfolio. He accuses the two of data mining and manipulating the numbers in order to represent their original hypothesis. Fama and French also fail to explain connection between size and return, which is one of their biggest assumptions. Black suggests that CAPM is more alive than ever and to be cautious of the three factor method.

Chan and Lakinshok (1993) provided results showing a positive correlation between beta and return in a bear market by using stock data from the previous sixty years. Grundy and Malkiel (1996) also studied the effects of beta during a down market. Their research not only showed a relationship between beta and downside risk but also showed beta was consistent regardless of which index is used. A more recent study from Chan, Dimmock, and Lakonishok (2009) demonstrated that the three factor model does a poor job of finding correlations between risk and return. The study consisted of 25 weighted portfolios based on the company's size and

value. They decided to benchmark it against the Russell style indexes because it is the most popular benchmark among equity investors in the industry. Their conclusion states that not only was the three factor model a poor measure of returns, but it also provided an unrealistic number of over and underperformers. The writers of this journal recommend to continue using the CAPM formula and to be skeptical of other risk-return models.

METHODOLOGY

In order to analyze the correlation of beta to market return, we must first determine what time period is going to be used. Data will be collected using the stock screener tool provided by www.finance.yahoo.com. Monthly returns from the last 10 years will be collected starting in November 2001 and ending in November 2011. Monthly returns will also be gathered for the S&P 500 as it is our market index used to compare and run the regression. A total of 70 stocks were recorded and then allocated into seven different portfolios based on their beta. The stock with the lowest beta was -0.5238 while the highest was 2.881. The portfolios are grouped by betas less than 0, 0, 0.5, 1, 1.5, 2.0, and 2.5. In order to find the beta of the portfolio each stock's beta was multiplied by the percentage of the total portfolio that the stock represents in order to get a weighted average. Once the monthly return data is gathered for the stocks and S&P 500, a holding period return must be calculated for the 70 stocks and market index. To calculate the monthly holding period return take the price of the stock at the end of the month less the price at the beginning of the next month divided by the price at the beginning of the month. Once the individual monthly holding period returns are found, the next step is to find the holding period returns for the 7 portfolios. In order to do so, the stocks in each portfolio were accumulated and then an average was found. The same data was found for the S&P 500 in order to run a regression comparing the returns.

In order to test the effectiveness of beta measuring the risk-return relationship of stocks, we must list the following null and alternative hypothesis:

Ho: Beta is not an accurate tool for measuring the risk-return relationship of stocks recorded in November 2001 through November 2011 when using monthly returns.

Ha: Beta is an accurate tool for measuring the risk-return relationship of stock recorded in November 2001 through November 2011 when using monthly returns.

In order for the null hypothesis to be proven, data must show that the betas used to screen the stocks should be similar to betas found by calculating the actual portfolio returns. The published betas should show positive correlation with the actual betas. Results should demonstrate that stocks with high betas are correlated with higher negative returns.

QUANTITATIVE TESTS AND RESULTS

After splitting the 70 stocks into 7 portfolios according to their beta and calculating the monthly returns for the portfolios and S&P 500, excel was used to run a regression and find correlations.

Table 1
Regression Results

	Portfolio Beta	Actual Beta	R ²	P-Value	F	
Portfolios	< 0	-0.5238	-0.4658	0.5733	0.2676	0.9332
	0	0.0084	0.1040	0.1234	0.5400	0.5309
	0.5	0.4886	0.6312	0.6940	0.0125	29.8455
	1.0	1.0025	0.9903	0.7354	0.0033	35.0589
	1.5	1.4733	1.5222	0.7821	0.0000	69.5422
	2.0	2.0101	2.2510	0.8404	0.0000	87.1165
	2.5	2.4931	2.8211	0.8522	0.0000	86.0451

From the following table, we can distinguish that the regression has provided an actual beta with an increasing pattern very similar to the portfolio beta. The R² values demonstrate a rising trend, suggesting it has a linear relationship. Those values that are close to 1, like the portfolios with a beta of 2.0 and 2.5, suggest that the data closely fits with the regression line. The portfolio with a beta of 0 is the only portfolio that does not show a large amount of correlation with the market movements. The P-value represents the chances of obtaining data that are extreme as the one already recorded. The chart shows that almost every portfolio has a low chance of encountering any extreme test statistic except for the portfolio representing betas that are 0. The F statistic demonstrates a linear relationship and also shows that the portfolios with the higher betas have more risk associated with them.

CONCLUSION

Through this study it can be determined that through November 2001 to November 2011 beta has been a relevant factor in measure risk. Correlations shown by the test statistics R², P-value, and F prove that there is a positive relationship between beta and monthly returns when compared to the S&P500. These results suggest beta is still an accurate measure of risk and should not be abandoned yet.

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THE RELATIONSHIP BETWEEN EXECUTIVE PAY AND ALTERNATIVE EARNINGS MEASURE*

Akinloye Akindayomi**, University of Texas – Pan American

ABSTRACT

In this study, I present empirical evidence that using executive stock options to remunerate top 5 corporate executives increases future corporate performance even when alternative earnings measure (premanaged earnings) is considered. The findings further show that the contributions of executive stock options become progressively smaller into the future. It thus becomes an empirical question how far into the future the positive dollar impact of current option grants on future earning ends or becomes negative, as this could provide valuable decision tool to compensation committees on the efficient grant-frequency of executive stock options to top corporate executives. Overall the results of this study strongly support the incentive alignment theory of executive stock option grants.

Keywords: executive compensation; earnings performance, earnings quality, stock options

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** Dr. Akinloye Akindayomi, Department of Accounting and Business Law, College of Business Administration, University of Texas – Pan American. 1201 West University Drive, Edinburg, Texas 78539-2999 Email: akinloyea@utpa.edu ; Tel: (956) 665 – 7842.

INTRODUCTION

The objective of this study is to examine the findings of Hanlon et al (2003) and Akindayomi and Warsame (2012) within the context of alternative earnings measure – premanaged earnings¹. The findings from these studies show that granting stock options to top executives increase future reported earnings (Hanlon et al) and non-discretionary earnings (Akindayomi and Warsame).

The fact that executive pay has come under increased scrutiny in the recent past cannot be ignored. Unquestionably, this scrutiny substantially focuses on top (mostly the top 5) executives in corporate America. While some argue that top executives are over-remunerated, others contend that executive pay tied to performance is appropriate as these executives are motivated to improve corporate performance and thus increase shareholders' wealth. These contradicting positions have extensively attracted the interests of academics/scholars in

¹ Premanaged earnings is derived consistent with Baker et al (2003) which is computed by “removing an estimate of the effect of earnings management from income before extraordinary items.” In other words, it is earnings before earnings management.

accounting, economics and finance. However, scholarly research output in this area remains at best contradictory.

The genuine challenge posed by the separation of ownership and control is visibly highlighted in the agency research work of Jensen & Meckling (1976). The real agency cost associated with the agency problem in shareholder (principal)/manager (agent) relationship is magnified due to varying interests and the opposing incentive structures of the shareholder and the manager. This creates an incentive alignment gap that must be bridged for the manager to maximize the shareholder's wealth. Executive stock option is one of the widely employed bridging tools in this context. However, the extent to which this compensation tool achieves its anticipated objective remains a practical and an empirical question in compensation research domain. In sum, research findings in this area have been at best inconclusive and controversial.

REVIEW ON EXECUTIVE PAY AND EARNINGS MANAGEMENT MEASURES

The connection between executive compensation and stock options continues to grow in recent corporate history (see Gritsch & Snyder, 2005). Hall & Liebman (1998) note the increasing level of executive wealth exposure to stock prices. Bergstresser & Philippon (2006) corroborate this view claiming that such exposure becomes stronger in the mid 1990s leading to the new millennium. Two competing theories are advanced in this area of the compensation literature vis-à-vis the increasing use of stock options to remunerate executives. On one hand, some argue that given the agency problem and its attendant costs (see Jensen & Meckling, 1976), tying executive pay to future performance reduces incentives gap between top management and the shareholders. This is called the incentive alignment theory (for more see, Rajgopal & Shevlin, 2002; Hanlon et al, 2003; Mawani, 2003). On the other hand, other scholars believe that if anything, such a corporate decision actually rewards executives in good times without any punishment during years of dismay performance, thus becoming a conduit for channeling shareholders' wealth to executives. This is referred to as rent extraction theory (for more see, Johnson 2003; Aboody & Kasznik, 2000; Baker et al, 2003).

During the sample period examined in this study, research evidence suggests that managers actively consider *ex ante* financial reporting costs in stock options grant decisions as well as the magnitude of the options to grant to executives (see Matsunaga, 1995; Klassen and Mawani, 2000 for example). This thus implies a substitution effect between stock options and cash compensation. However, findings in Bryan et al (2000) do not produce 'strong evidence' to support such a relationship. Notwithstanding, Murphy (1999) emphasizes the dominance of the financial reporting incentives albeit in the grant choice between at-the-money options and in-the-money options, suggesting the prevalence of the former. Hall & Murphy (2002) provide explanation for the lack of popularity of out-of-the money options grant. They argue that in addition to the de-motivational effect, such grants will trigger demand for higher premiums by executive recipients. This I contend could increase the firm's cost of capital.

Both Hanlon et al (2003) and Akindayomi & Warsame (2012) find results consistent with the incentive alignment hypothesis, even though the latter shows that the positive impact executive stock options have future earnings is not as high (relative to the former) if one controls

for the potentials of managers to actively interfere in the financial reporting process. In this study, I intend to subject both findings to alternative earnings measure – premanaged earnings, in terms of the direction and magnitude of the stock options contributions.

Ceteris paribus, using stock option compensation to reward top 5 executives will increase the premanaged operating earnings of the firm.

Consistent with Kang and Sivaramakrishnan (1995) Reitenga et al (2002), Baker et al (2003). I calculate premanaged earnings as:

$$[\text{OPINC}_t - \text{REV}_t \times \Delta(\text{AR} \div \text{REV})_t + \text{OpExp}_t \times \Delta(\text{CL}-\text{CM}) \div \text{OpExp}_t - \text{OpExp}_t \times \Delta(\text{Inventory} \div \text{OpExp})_t] \quad (1)$$

Where:

- OPINC = Operating Income before depreciation scaled by Sales of firm i at time t;
- REV = revenues;
- OpExp = Cost of goods sold and selling and administration expense before depreciation;
- AR = Accounts Receivable
- CL = Current Liabilities
- CM = current maturities of long term debt.
- Δ is the change and computed as the difference between time t and t – 1.

The following empirical models are used to test the above hypothesis:

$$(\text{PMGD}/\text{S})_{it} = \alpha_0 + \alpha_1(\text{TA}/\text{S})_{i,t-1} + \sum_{k=0}^5 \alpha_{2,k}(\text{BSO}/\text{S})_{i,t-k} + \sum_{k=0}^5 \alpha_{3,k}(\text{BSO}/\text{S})_{i,t-k}^2 + \sum_{k=0}^5 \alpha_{4,k}(\text{R\&D}/\text{S})_{i,t-k} + \alpha_5\sigma(\text{PMGD}/\text{S})_{i,t-1} + \alpha_6 \text{Idummies} + \alpha_7 \text{Ydummies} + \varepsilon_{it} \quad (2)$$

$$(\text{PMGD}/\text{S})_{it} = \alpha_0 + \alpha_1(\text{TA}/\text{S})_{i,t-1} + \alpha_2(\text{BSO}/\text{S})_{i,t-1} + \alpha_3(\text{BSO}/\text{S})_{i,t-1}^2 + \alpha_4(\text{R\&D}/\text{S})_{i,t-1} + \alpha_5 \text{Idummies} + \alpha_6 \text{Ydummies} + \varepsilon_{it} \quad (3)$$

Where:

- PMGD = Premanaged earnings scaled by Sales of firm i at time t.
- TA = Total Assets of firm i at time t
- BSO = Black-Scholes value of executive stock options granted to top 5 executives.
BSO is also squared to adjust for an observed non-linearity in the relationship between BSO and PMGD.
- R&D = Research and development expenses of firm i during the year $t - k$ ($k = 0 - 5$)
- $\sigma(\text{P PMGD})_{i,t-1}$ = Standard deviation of earnings measures estimated over the prior 5 year, for firm i.
- S = is the annual sales in time t.
- Idummies = Industry dummies
- Ydummies = Year dummies

The difference between equation (2) and (3) is that the former is the modified version of the Hanlon et al baseline model which is referred to by Larcker (2003) as “backward-looking” empirical design and the latter as “forward-looking”. One improvement of the “forward-looking

model is that it allows the model specification to efficiently maximize the sample size. In addition, Larcker considers the absence of the control for prior performance in the baseline model as an important exclusion. Therefore, consistent with Larcker's position, I control for prior performance in the following equation:

$$(\text{PMGD}/S)_{it} = \alpha_0 + \alpha_1(\text{TA}/S)_{i,t-1} + \sum_{k=0}^5 \alpha_{2,k}(\text{BSO}/S)_{i,t-k} + \sum_{k=0}^5 \alpha_{3,k}(\text{BSO}/S)_{i,t-k}^2 + \sum_{k=0}^5 \alpha_{4,k}(\text{R\&D}/S)_{i,t-k} + \alpha_5\sigma(\text{PMGD}/S)_{i,t-1} + \alpha_6(\text{PMGD}/S)_{i,t-1} + \text{Idummies} + \alpha_8 \text{Ydummies} + \varepsilon_{it} \quad (4)$$

$$(\text{PMGD}/S)_{it} = \alpha_0 + \alpha_1(\text{TA}/S)_{i,t-1} + \alpha_2(\text{BSO}/S)_{i,t-1} + \alpha_3(\text{BSO}/S)_{i,t-1}^2 + \alpha_4(\text{R\&D}/S)_{i,t-1} + \alpha_5(\text{PMGD}/S)_{i,t-1} + \alpha_6 \text{Idummies} + \alpha_7 \text{Ydummies} + \varepsilon_{it} \quad (5)$$

(See variable definitions above).

SAMPLE

In this study, I use all US firms that meet the data availability criteria in the Execucomp database (which begins in 1992) and Compustat tapes. The choice of the sample locale is mainly to avoid potential complications from different reporting rules in different jurisdictions/countries (see Matsunaga, 1995). In addition, due to different earnings management incentives, I exclude firms in regulated industries, i.e., utilities (SIC codes 4900-4999) and financials (SIC codes 6000-6099).

The sample period spans 1992 through 2004. This period is relatively longer than Hanlon et al, thus providing a more efficient sample size good for improved generalizability of results. Further, due to the financial reporting changes vis-à-vis expensing stock options (FAS 123 with year 2005 effective date) and the potential confounding effects it will have on my study, year 2004 is the cut-off period. The initial analysis for all the relevant models begins with 2507 firms with 17,970 firm-years. Recall that the empirical models are both 'backward-looking' and 'forward-looking'. After necessary data screening, there are 858 firms with 2,579 firm years in the former design. The latter model has three designs as follows:

- n + 1 (1,666 firms with 8,384 firm years);
- Sum n + 1 + 2 (1,476 firms with 6,666 firm years);
- Sum n + 1 + 2 + 3 (1,283 firms with 5,357 firm years);
- (n in the above designs is the grant year)

Note that the discrepancies in the number of firms and firm-years above is primarily due to more stringent data screening requirements necessitated by their unique individual underlying characteristics. In all models, I use firm-years and not firm-quarters because Execucomp database, from where I obtain the Black-Scholes value of an option for my sample period, only provides the stock options data on annual basis.

RESULTS

Descriptive Statistics

In tables 1 through 4, panel A shows descriptive statistics while panel B contains the correlation matrix of the variables tested in the models. All variables in panel B are significant at conventional thresholds.

In panel A of table 1, the sample characteristics of BLD indicates average value of (BSO) stock options granted to the top 5 executives is \$7.758 million (median \$2.7 million). This represents approximately 0.4% of operating revenues. The average assets are \$5 billion (median \$1.6 billion) with asset turnover rate of approximately 0.90. With approximately 16% premanaged earnings margin, the firms generated revenue worth 5.395 billion (median 1.7 billion) on the average during the sample period. Overall, the statistics indicate that the sampled firms are clearly large and profitable with intensive use of executive stock options compensation to remunerate top executives. Similar inferences are drawn from the figures in tables 2 through 4 on the FLD.

Regression Results

These results are analyzed in two subsections i.e., Backward-Looking design (BLD) and Forward-Looking design (FLD). In sum, even after using alternative earnings measure (premanaged earnings), it is shown that executive stock options increase future earnings performances as reflected in the results from both the regression and implied sensitivity analyses.

CONCLUSION

Larcker (2003) emphasizes the "...performance consequences of managerial choices...", the choice of which include using stock options as a remuneration package for top corporate executives by compensation committees. Notwithstanding the earlier limitations mentioned earlier, overall, this study reveals that in sum, using stock options continue to provide incentives for executives to improve future corporate performance and thus improve shareholders wealth. Executive compensation continues to be significant part of overall global corporate narratives especially in the US. The conversation intensified in the wake of corporate bailouts and overall top corporate executive compensation package comes under increased scrutiny both by the public and the regulators. No doubt, stock options remain substantial portion of such compensation package. Academic and scholarly findings in the compensation literature have not helped the debate in that such findings are at best inconclusive and controversial. While some believe in the incentive alignment hypothesis, others document rent extraction. In this study, my findings could not reject the incentive alignment hypothesis. In fact, its empirical evidence strongly supports the hypothesis. Using alternative earnings measure (premanaged earnings); my sample during the sample period (1992-2004) finds strong results for improved future corporate

performance when top 5 corporate executives are remunerated by stock options. Results Tables and References are available on Demand.

CLOUD COMPUTING AND INTERNAL CONTROLS

Arundhati Rao, Towson University
Partha Mohapatra, Indian School of Business

ABSTRACT

Software as a Service (SaaS) is a business model in which client firms pay for the right to access a standardized set of business software functions through the internet. In the IT world this term is not new; it is called Cloud Computing. It has existed for a few decades but it has grown exponentially only in the past few years. It is a convergence of IT efficiencies and business agility (Marston, et. Al., 2011.) Some of the main reasons for its popularity are low costs, 24/7 accessibility, scalability, simple implementation and support. A couple decades ago firms selling goods and services online were a novelty. Now in order to survive even the largest brick and mortar firms have an online presence. The same is now true in the software industry. Even the largest ERP software vendor such as Oracle, a leader in Customer Relations Management (CRM) has a SaaS companion, Siebel. The SaaS vendors are located all over the world, have several thousand employees and the number of customers range from a few hundred to several thousands. This new business model is not without its share of problems, the biggest problems are downtime and security breaches. This paper explores the risk and challenges that SaaS users and providers and their auditors face. We focus on the risks to internal controls of the SaaS users and providers.

MICROFINANCING: MEASURING SUCCESS

Thomas P. VanKley, Indiana Wesleyan University

Austin Doerr, Indiana Wesleyan University

Jacob Wheeler, Indiana Wesleyan University

Joshua Millage, Indiana Wesleyan University

ABSTRACT

Microfinancing loans is the concept of giving small loans to people who cannot provide collateral and cannot get a loan elsewhere (Mamun, 2011; Haque, 2009). The idea of microfinancing came from a U.S. economics professor, Dr. Muhammad Yunus (Haque, 2009). There is also a method giving loans in a group setting, commonly called micro credit (Goldberg, 2005). The group concept is similar to the concept of group insurance, using a compilation of people to reduce risk. If one person defaults on a loan, the others have to help make payment or risk not obtaining loans in the future (Mamun, 2011). This makes the investor feel more secure about the risk involved; however, as Zhang remarks, the risk is just about the same as it would be for just an individual micro financed loan (2008). Zhang has published several articles on the social impact of group financing and has concluded that, at least for the most part, group financing is a better option than individual financing.

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THE RISE IN EQUITY EXCHANGE TRADED FUNDS (ETFs): THE CASE OF MOMENTUM?

**Young Dimkpah, Virginia State University
Christopher Ngassam, Grambling State University**

ABSTRACT

Using data obtained from CRSP and Morningstar (2001-2009), this study examines the returns and liquidity behavior of 2,366 Equity Exchange Traded Funds (ETFs). ETF portfolio formation and holding periods (6, 3 and 1 months) for the entire sample and by specialties with deciles categorized by returns and liquidity were analyzed. Momentum does not exist when analyzing the overall portfolio of ETFs. The mean formation estimate for the entire ETFs winners is 31.5%, compared with the value of 0.2% for the 6 months formation and holding periods respectively. On the other hand the mean formation periods returns for the losers are -24.25% compared to 3.3% for the holding period. In the formation and holding periods of 1 and 3 months there were evidence that momentum exist amongst the losers portfolios. There is plausible reason for this result. The 1 and 3 months period are not enough time to factor in transaction cost.

ARE ARLINE FREQUENT FLYER MILES TAXABLE?

Jeffrey A. Mankin, Lipscomb University
Timothy L. Swinney, Lipscomb University
Jeffrey J. Jewell, Lipscomb University

ABSTRACT

Citibank surprised some of its customers in January 2012 with a Form 1099 for miscellaneous income. These customers had received frequent flyer miles for opening accounts with the bank in 2011. Previously, no bank had ever issued a Form 1099 for issuing airline miles. Since 2002, the IRS has held that the airline miles are not taxable. This paper examines airline mile issues relating to their taxability in the first section. The second section shows valuation problems for airline miles. Also, a discussion of Citibank's incentives is made in the third section.

INTRODUCTION

In January 2012, some customers of Citibank were surprised by what they received in their mail. These customers received miscellaneous income tax forms (1099-MISC) for frequent flyer miles they had been awarded by opening new accounts in 2011. Many banks have special promotions that give frequent flyer miles for opening an account. However, Citibank is the first to claim that the free airline miles are income to the account holder (Maranjian, 2012, January 31). This new development has been the subject of feature articles in mainstream media, financial media, and travel websites and blogs.

Forbes under the headline "Citibank Issues Forms 1099 for Frequent Flyer Miles, Surprising Customers and IRS" observed that banks are "going to new heights to tick off customers... quite literally (Erb, 2012)." *The Wall Street Journal* reported that some customers are furious at Citibank (Saunders, 2012). A class-action lawsuit was filed against the bank from customers because the 'free' frequent flyer miles could actually cost them hundreds of dollars in extra taxes (Mirando, 2012). One travel site was especially negative in the article, "Citibank Scam Will Cost You Money – Even If You Don't Use Citibank (Perkins, 2012, February 9)."

The reason for the surprised reactions is that frequent flyer miles have not previously been taxable for federal income tax. The IRS last issued guidance on airline miles in 2002. It noted that frequent flyer miles had not been taxed previously and there was no change in the current policy (Internal Revenue Service, 2002). The IRS further noted there were technical and administrative issues relating to the timing and valuation of the miles that have never been officially decided.

Since the issue had not come up in recent years, the Citibank decision caused a controversy. The purpose of this paper is to examine the issues about the taxability of frequent flyer miles. These issues are in two broad areas relating to taxability and valuation. The first

section discusses the taxability issues and the second section examines the valuation issues. The third section discusses the possible reasons for Citibank to issue the income tax forms.

TAXABILITY ISSUES

The tax issues relating to airline miles can be compared to similar tax situations. Frequent flyer mile taxability relates to three tax issues: miles as unrealized gains, deductibility of expired miles, and charitable deductions of donated miles.

Miles as Unrealized Gains

Unrealized gains occur when an investment grows in value but the investment is not sold. For example buying ABC stock for \$25 and owning it when the market price is \$35 results in a \$10 unrealized gain that is not taxable. The \$10 gain would be taxable if the investor sold the stock for the \$35 market price. Receiving airline miles is analogous to these unrealized gains, so if they are to be taxable, then the tax should be paid after the miles are used to purchase an airline ticket. The value of the taxable income would be the market value of the ticket purchased at that date.

Deducting Expired Miles

In the U.S. income tax system, items that are taxable when received generally are deductible when used up. A taxpayer can deduct losses on investments that would be taxed on gains. One of the challenges that customers have is that many frequent flyer miles expire every year. Therefore, if airline miles are taxable, then the expiration of airline miles should be deductible for taxpayers. Since the receipt of airline miles is income to the taxpayer, then losing those miles should be a loss that would be deductible. It seems unlikely that the IRS would want the expired miles to be deductible.

Deducting Donated Miles

Most airlines have programs allowing customers to donate frequent flyer miles to charities. One of the benefits that these programs offer is that the miles do not expire for the charity, so customers can donate miles that would otherwise expire. However, the IRS does not allow a deduction for a charitable contribution for donated frequent flyer miles. If cash or investments are donated to charity, there is a deduction for charitable contributions. If the receipt of airline miles were taxable, the charitable giving of the same miles should be tax deductible.

VALUATION ISSUES

In addition to the taxability issues of airline miles, there is the difficult problem of valuing a mile. Citibank issued its tax forms on the basis that each mile was worth 2.5 cents. Many customers received 25,000 miles for opening an account, so the Form 1099 showed \$625 of taxable income ($25,000 \times 0.025$). The IRS rules require a Form 1099 when "prizes and awards" are greater than \$600. If Citibank valued the miles at 2 cents, then the resulting \$500

would not require a Form 1099 to be issued (Lazarus, 2012, January 25). The classification of the miles as a reward or as a rebate is an important distinction. If the miles are classified as a rebate, then they are not taxable by definition (Maranjian, 2012, February 8).

The price per mile is an important number in the valuation of the airline miles, but there is not an accepted standard price per mile. One travel expert estimated that miles are worth 1.2 cents per mile, or half of the Citibank estimate. The expert also noted that customers could sell their miles for cash on PayPal for 0.42 cents per mile, or about a third of his 1.2 cents estimate (Winship, 2011). Another expert estimated the value of the miles to be between 0.7 and 1.5 cents (Perkins, 2007). The Bureau of Transportation Statistics keeps statistics on the average price of a domestic round-trip ticket in the United States. Table 1 below shows the average ticket price for the past five years and the price per mile determined by dividing the average price by the standard 25,000 frequent flyer mile cost for one free round-trip ticket. In each of the past five years, the cost per mile is between 1.24 and 1.45 cents (Bureau of Transportation Statistics, 2012).

Table 1: AVERAGE PRICE OF A DOMESTIC ROUND-TRIP FLIGHT		
Cents Per Mile = Average Price / 25,000 Miles		
YEAR	AVERAGE PRICE	CENTS PER MILE
2006	\$329	1.3160
2008	\$346	1.3840
2009	\$310	1.2400
2010	\$336	1.3440
2011 (through 3Q)	\$362	1.4480

If the airline miles were taxable, it appears that the Citibank estimate is higher than both expert estimates and the actual costs over the past five years. The actual cost of all the flights is closer to 1.5 cents rather than 2.5 cents. It is unclear how Citibank estimated the miles at 2.5 cents per mile.

The health of the airline industry is also important to the valuation of airline miles. A *Forbes* columnist suggested that after American Airlines filed for Chapter 11 bankruptcy in November 2011, the frequent flyer miles in its AAdvantage program may be worth less than before the bankruptcy (Jacobs, 2011).

WHAT IS IN IT FOR CITIBANK?

Why did Citibank surprise its customers with a Form 1099? It could relate to two possible answers. First, if a bank gives a customer \$500 to open an account, then that cash reward is clearly taxable. So, the bank may think of the airline miles as a reward that would then be taxable. However, if the miles were viewed as a rebate to customers, the miles would not be taxable. A reward is taxable but a rebate is not. A rebate is deemed a reduction in the cost of a good or service. Buying a television for \$500 and receiving a rebate of \$50 would not cause the \$50 to be taxed but instead it would lower the cost of the television to \$450 (Lazarus, 2012, January 30)

Second, one travel expert speculated another incentive for Citibank. He estimates Citibank pays 1 cent per mile to the airlines for the bank customers. Citibank could previously expense the 1 cent per mile against its credit card profits. However, by arbitrarily estimating the miles to be 2.5 cents it would then be possible to write off the “retail value” of 2.5 per mile, thus saving more tax dollars. Citibank has not confirmed this or responded to this speculation (Perkins, 2012, February 9 & 10).

CONCLUSION

The issue of taxing airline miles is a new and challenging area of debate. The fundamental taxability of frequent flyer miles can be questioned because of its similarity to unrealized gains and the current non-deductibility of expiring miles or donated miles. Another important issue is how to accurately value airline miles. Agreeing on the value of airline miles could be an insurmountable problem.

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THE MORTGAGE INDUSTRY'S ROLE IN THE CURRENT GLOBAL FINANCIAL MELTDOWN: HISTORICAL PERSPECTIVE AND RECOMMENDATIONS

Lydia McKinley-Floyd, Clark Atlanta University
Christopher Ngassam, Grambling State University
Christopher Chin, Florida A & M University
Rasheed K. Alli, Florida A & M University

ABSTRACT

This paper examines the two specific areas where the mortgage industry's transmission of "mispriced" assets into the financial system led to the deterioration of investor's confidence in the entire financial system. These two areas, the regulatory environment that created an asset bubble in mortgage based collateral and the rapid growth of structured instruments (including credit-based derivatives) in our view, significantly impacted the magnitude and scope of the problem. We show that each had a direct impact on the existing credit framework in different ways and adversely affected the risk assessment of mortgage related collateral. The exposure that financial institutions have to this "mispricing" of credit, in a variety of ways, led to the volatility observed in financial markets since the fall of 2008.

We conclude the paper by emphasizing that future credit risk frameworks will require greater emphasis on consistent global standards regarding securities trading and risk management practices. Techniques and methods used for assessing the creditworthiness of financial obligations, collateral, securitizations, and counterparties are required not only to be robust but adhered to by the management of financial institutions and investors in general. We argue that until major reforms in regulation & financial product risk analysis are implemented, investor confidence will not return. Actions that will help the proposed "bailout" achieve its goal of restoring investor confidence and trust in the financial system are hereby suggested.

USING A TAX MODEL TO INTERPRET THE FINANCIAL PERFORMANCE OF SOCIAL SECURITY

Steven R. Ferraro, Pepperdine University
Richard W. Powell, Pepperdine University

ABSTRACT

The purpose of this paper is to construct a Roth IRA model that can be used to interpret the financial performance of Social Security. Using sample data from a relatively high earner, the model first treats the earner's social security taxes as similar to deposits into an artificial Social Security account with potential for growth. The account is artificial since the deposits are actually treated by the government as taxes and not segregated savings. Next, the model constructs a second, competing Roth IRA account with deposits that match the earner's social security taxes. The two accounts are compared at the age of retirement after applying reasonable rates of growth to the Roth account and after examining the Social Security annuity available under the Social Security account. The results show that the Roth account outperforms the Social Security account. For sample data from a more moderate earner, the results still favor the Roth but with a smaller margin.

Keywords: Taxation, Social Security

HOW LOOMING THREATS TO THE ROTH IRA CAN ALTER THE BEHAVIOR OF INVESTORS

Steven R. Ferraro, Pepperdine University
Richard W. Powell, Pepperdine University

ABSTRACT

For some investors, the Roth IRA has been an attractive vehicle for retirement savings. But recent developments threaten its role in retirement planning. Threats include a looming increase in tax rates along with governmental advocacy of means-testing for government benefits. This paper models how these threats can alter the behavior of investors and reduce the utilization of the Roth IRA. The increase in tax rates can shift some investors away from the Roth IRA and toward the traditional IRA. Means-testing based on an investor's Roth IRA seems to conflict with the tax policies underlying the creation of the Roth IRA.

THE EFFECT OF THE SOUTHERN TORNADO BREAKOUT ON INSURANCE COMPANIES STOCK PRICES

Caitlin M. Newton, Longwood University
Frank W. Bacon, Longwood University

ABSTRACT

This study tests the efficient market theory by examining the effect of the Southern Tornado Breakout on insurance companies and their stock prices. With the massive home destruction, loss of life, and associated insurance claims, it follows that stock price return of insurance companies should be negatively affected. This event study analyzed the risk adjusted stock price returns of 15 different insurance firms affected by the southern tornado breakout on April 25, 2011. The study results question the semi-strong form market efficiency theory reflecting that the market reacts so fast to public information no investor can earn an above normal return by acting on this type of information. Appropriate statistical tests for significance conducted in this study show that the breakout negatively impacted the risk adjusted rate of return on selected insurance company stock prices over the event study period.

INTRODUCTION

How fast does the stock market react to publicly announced information? According to Fama (1970), market efficiency can take on three forms: weak-form efficiency, semi-strong-form efficiency, and strong-form efficiency. According to the efficient market hypothesis, the stock market should immediately respond to public announcements of stock splits making it impossible for an investor to “beat the market,” or to make an above normal return on their investment by acting on such information. This study tests the efficient market hypothesis by determining whether an investor can achieve an above normal return by capitalizing on public information accompanying a natural disaster.

The purpose of this event study is to test market efficiency theory by analyzing the impact of the April 25, 2011 Southern Tornado Breakout (STB) on a sample of 15 insurance firms’ stock prices. Specifically, how fast does the market price of the firms’ stock react to the natural disaster? Using standard risk adjusted event study methodology this research tests whether the stock price reaction incorporates the strong-form, semi-strong-form, or weak-form of the efficient market hypothesis. Likewise, this event study examines the stock market’s ability to predict as well as monitor the impact of the STB on stock prices. In particular, how efficient is the market with respect to information concerning a natural disaster?

Specifically, this research examines the effects of the April 25th STB on the stock price risk adjusted rate of return for a sample of 15 insurance companies. The event represents the

largest tornado outbreak in U.S. history that caused widespread damage across the southern region. There were direct and indirect impacts on the states that were affected. This outbreak affected mostly the state of Alabama; however, it also affected places in Georgia, Mississippi and Tennessee. The magnitude of the tornadoes in the region met the threshold necessary to be declared federal disaster areas. Many lives were lost in these areas as well as homes, communities and businesses. It has affected many things in these areas such as; employment, earnings, state finances and GDP.

LITERATURE REVIEW

Fama (1970, 1976) defined market efficiency in three forms: weak-form, semi-strong-form and strong-form. Weak-form efficiency hypothesizes that no investor can earn an above normal return by developing trading rules based on past price or return information. If the market is weak form efficient, then stock price reacts so fast to all past information that no investor can earn an above normal return (i.e. higher than the risk adjusted market return as measured by the S&P 500 index) by acting on this type of information. Numerous studies (Fama, 1965; Alexander, 1961; Fama and Blume, 1966; Granger and Morgenstern, 1970) support the random walk theory in support of weak form efficiency.

Semi-strong-form market efficiency states that no investor can earn an above normal return based on publicly available information. Tests of semi-strong form efficiency (Fama, Fisher, Jensen, and Roll, 1969; Ball and Brown, 1968; Aharony and Swary, 1980; Joy, Litzenberger, and McEnally, 1977; Watts, 1978; Patell and Wolfson 1979; Scholes, 1972; Kraus and Stoll, 1972; Mikkelson and Partch, 1985; Dann, Mayers, and Raab, 1977) document the claim that no investor can earn an above normal return on publicly available information such as accounting statements, stock split announcements, dividend announcements, sale of stock announcements, repurchase of stock announcements, block trades, and earnings announcements. If the market is semi-strong form efficient, then that means that the stock price reacts so fast to all public information.

Strong-form efficiency theory suggests that no investor can earn an above normal, economic return using any information, public or private. Studies on the validity of strong form efficiency offer mixed results (Jaffe, 1974; Finnerty, 1976; Givoly and Palmon, 1985; Friend, Blume, and Crockett, 1970; Jensen, 1968). If the market is strong form efficient, then the stock prices react so fast to all information (public and private) that no investor can earn an above normal return acting on this type of information. In this case, the market reacts to an event within the confines of the firm when it occurs even before it is publicly announced. For this to occur, investors must act on insider information, which is illegal. "Because information is reflected in prices immediately, investors should only expect to obtain a normal rate of return" (Ross, 342). However, does market efficiency hold for public information surrounding natural disasters?

Natural disasters have enormous effects on insurance companies as well as those who are insured within those companies. The demand for life insurance increases in mainly the states

that were affected by the catastrophe. This disaster is shown to affect these companies in the year of the event as well as the year after the event. Insurance companies adapt to these events by raising rates to lower loss ratios. The recovery activities for this outbreak will cost up to 2.6 billion dollars in the southern hemisphere's economy in 2011, and around 1-2 billion in the year of 2012.

METHODOLOGY

This study sample includes 15 insurance companies with significant property and casualty business in the STB region. To test semi-strong market efficiency with respect to public information surrounding the natural disaster and to examine the effect of the STB on stock return around the announcement date, this study proposes the following null and alternate hypotheses:

- H1₀:** *The risk adjusted return of the stock price of the sample of insurance firms is not significantly affected by this type of information on the event date.*
- H1₁:** *The risk adjusted return of the stock price of the sample of insurance firms is significantly negatively/positively affected by this type of information on the event date.*
- H2₀:** *The risk adjusted return of the stock price of the sample of insurance firms is not significantly affected by this type of information around the event date as defined by the event period.*
- H2₁:** *The risk adjusted return of the stock price of the sample of insurance firms is significantly negatively/positively affected around the event date as defined by the event period.*

This study uses the standard risk adjusted event study methodology from the finance literature. The event date (day 0), is the date of the STB on April 25, 2011. The required historical financial data, i.e. the firm's stock price and S & P 500 index during the event study period was obtained at (<http://finance.yahoo.com/>). The historical stock prices of the sample companies, and S & P 500 index, for the event study duration of -180 to +30 days (with day -30 to day +30 defined as the event period and day 0 the natural disaster date) were obtained. Then, holding period returns of the companies (R) and the corresponding S & P 500 index (R_m) for each day in this study period were calculated using the following formula: Current daily return = (current day close price – previous day close price)/previous day close price.

A regression analysis was performed using the actual daily return of each company (dependent variable) and the corresponding S & P 500 daily return (independent variable) over the pre-event period (day -180 to -31 or period prior to the event period of day -30 to day +30) to obtain the intercept alpha and the standardized beta coefficient. Alphas and betas for the study sample are shown in Table 1. For this study, in order to get the normal expected returns, the risk-adjusted method or market model was used. The expected return for each stock, for each day of the event period from day -30 to day +30, was calculated as: $E(R) = \alpha + \beta (R_m)$, where R_m is the return on the market as measured by the S & P 500 index. Then, the Excess return (ER) was calculated as: $ER = \text{the Actual Return (R)} - \text{Expected Return } E(R)$. Average Excess Returns (AER) were calculated (for each day from -30 to +30) by averaging the excess

returns for all the firms for given day or $AER = \text{Sum of Excess Return for given day} / n$, where n = number of firms in sample i.e. 15 in this case. Cumulative AER (CAER) was calculated by adding the AERs for each day from -30 to +30. The graph of CAER was plotted for the event period (day -30 to day +30). Chart 1 depicts Cumulative Average Excess Return (CAER) plotted against time.

Using standard risk adjusted event study methodology with the market model the study analyzed 3,376 recent observations on the 15 publicly traded insurance firms and the S & P 500 market index. Appropriate statistical tests for significance were conducted.

Table 1. Study Sample Alphas and Betas

Firm	Alpha	Beta
ALL	0.013840945	0.001016926
ALV:GR	-0.030930416	0.001024609
AFG	0.029016368	0.000770844
PGR	0.002773895	0.001014761
AV:LN	-0.017487979	0.000992609
AIG	-0.092044937	0.012121449
L	0.032540847	0.001431884
ACE	0.046730596	0.002901054
CNA	0.024380767	0.001285054
PRA	0.036226714	0.004357117
FAC	-0.011285751	0.001325278
KMPR	0.045228578	0.001488263
AWH	0.027594651	0.001698443
TRV	0.045884009	0.002836406
MKL	-0.029747328	0.001430923

QUANTITATIVE TESTS AND RESULTS

Quantitative tests and results are presented in the full paper.

CONCLUSION

This study tested the effect of April 25, 2011 STB on the stock price's risk adjusted rate of return for a selected sample of 15 insurance. These stocks were traded on the NYSE, AMEX or NASDAQ. Using standard risk adjusted event study methodology with the market model the study analyzed 3,376 recent observations on the fifteen traded firms and the S & P 500 market index. Appropriate statistical tests for significance were conducted. From the regression results it is evident that the breakout did have somewhat of a significant effect on the insurance

companies. This was significant because it generated new information to the market in the form of costs to the insurance companies. Based on this evidence the risk adjusted rate of return from the selected insurance companies showed a negative impact on the day of the event and few days following. For this particular event the market reacted with semi-strong efficiency to the breakout, which means that it reacted on the event day as the information was received by the market.

REFERENCES

References are available upon request.

STOCK MARKET EFFICIENCY AND EARTHQUAKE TOHUKU IN JAPAN ON MARCH 11TH, 2011

Kacie R. Oliver, Longwood University
Frank W. Bacon, Longwood University

ABSTRACT

This study tests efficient market theory by examining the effect of Earthquake Tohoku in Japan on electric companies' stock prices. It follows that electric companies with significant market capitalization should incur negative stock price returns due to this catastrophic event during a certain time period after the earthquake hit. This event study analyzed 15 firms with market capitalization of over 800 million and examines the effect of Earthquake Tohoku on stock price's risk adjusted rate of return before and after March 11th, 2011. Results show that the stocks of the electric companies dropped on the day of the event, March 11th, 2011 and continued to drop for about a week before they bounced back. These results support semi-strong market efficiency, reflecting that the market rapidly reacted to the devastating Earthquake Tohoku. Appropriate statistical tests for significance conducted in this study show that the earthquake in Japan negatively impacted the risk adjusted rate of return on selected electric company stock prices over the event study period.

INTRODUCTION:

To test the efficiency of a market, an event study can be performed. An event should be chosen that has a measurable impact that can be theoretically justified. The earthquake that hit Japan on March 11th, 2011 can be theoretically justified because of the large hit that the electric companies took afterwards. This earthquake had a magnitude of 8.9, only to be followed by a huge tsunami; this was devastating to the Japanese as a whole. The physical damage caused by the earthquake is estimated to be about \$250 billion to \$350 billion. Electric companies have had to pay out large sums of money due to the amount of damage the earthquake caused to their plants, sensitive electronic equipment, and the 2035 roads and 56 bridges that were damaged. There were about 27,000 people who were killed or are missing, 2777 injured and 146,000 homes or other buildings were either totally or partially damaged by the earthquake. The empirical tests included in this study will prove if the event did generate new and significant information to the market.

Stock prices alone can't be used to judge the value of an event for three reasons. First, price can be influenced by other firm-specific events that will result in a change in the stock price. Second, dollars do not provide a consistent standard. Third, price is also influenced by market-wide factors, so a single event may not be responsible for the entire impact. The event I

observed is the earthquake in Japan that took place on March 11th, 2011, which was one of the costliest payout for electric companies in history.

PURPOSE OF STUDY:

An event study is used to test the efficiency of the stock market by measuring the importance of new information and how fast the market reacts to it. An event is observed, an expectation about the performance is established, actual performance is measured and any differences are tested for significance. The differences are the average excess returns, also called abnormal returns. The signs of the AER's and CAER's coefficient are unexpected so a two-tailed test is going to be used.

LITERATURE REVIEW:

Fama (1970, 1976) defined market efficiency in three forms: weak-form, semi-strong-form and strong-form. Weak-form efficiency hypothesizes that no investor can earn an above normal return by developing trading rules based on past price or return information. Numerous studies (Fama, 1965; Alexander, 1961; Fama and Blume, 1966; Granger and Morgenstern, 1970) support the random walk theory in support of weak form efficiency. If the market is weak form efficient, then stock price reacts so fast to all past information that no investor can earn an above normal return (i.e. higher than the risk adjusted market return as measured by the S&P 500 index) by acting on this type of information.

Semi-strong-form market efficiency states that no investor can earn an above normal return based on publicly available information. Tests of semi-strong form efficiency (Fama, Fisher, Jensen, and Roll, 1969; Ball and Brown, 1968; Aharony and Swary, 1980; Joy, Litzenberger, and McEnally, 1977; Watts, 1978; Patell and Wolfson 1979; Scholes, 1972; Kraus and Stoll, 1972; Mikkelson and Partch, 1985; Dann, Mayers, and Raab, 1977) document the claim that no investor can earn an above normal return on publicly available information such as accounting statements, stock split announcements, dividend announcements, sale of stock announcements, repurchase of stock announcements, block trades, and earnings announcements. If the market is semi-strong form efficient, then stock price reacts so fast to all public information that no investor can earn an above normal return by acting on this type of information. Strong-form efficiency theory suggests that no investor can earn an above normal, economic return using any information, public or private. Studies on the validity of strong form efficiency offer mixed results (Jaffe, 1974; Finnerty, 1976; Givoly and Palmon, 1985; Friend, Blume, and Crockett, 1970; Jensen, 1968).

If the market is strong form efficient, then stock prices react so fast to all information (public and private) that no investor can earn an above normal return acting on this type of information. In this case, the market reacts to an event within the confines of the firm when it occurs even before it is publicly announced. For this to occur, investors must act on insider information, which is illegal. If an investor buys the stock on the event based on inside information, and still does not make an above normal return, the market is strong form efficient.

“Because information is reflected in prices immediately, investors should only expect to obtain a normal rate of return” (Ross, 342). However, does market efficiency hold for public announcements of regular stock splits? This study asserts that stock split announcements are reflected in the price of a company’s stock according to the semi-strong form of market efficiency.

Research suggests that after a catastrophic earthquake, the affect will not only be regional but national and in some cases even the global economy can take a hit. Specifically regarding the earthquake in Japan, it has affected other markets, especially the automotive and technology companies because all exports have been frozen. As the world's economies still struggle to emerge from the recession, this earthquake has caused sectors that have been major drivers of global growth and have now faced massive stalls.

Susanna Kim writes an article for ABC World Wide News, describing the economic hit that Japan as a country will take, which in turn will affect the global economy. The earthquake hit the northeastern part of Japan extremely hard and it is going to take a lot of rebuilding to get Japan back to where it was. This means that to generate the funds to do so, they may have to sell U.S. government securities to pay for rebuilding the economy and their infrastructure. She stated that in the initial hour of the earthquake the Dow Jones Industrial dropped 36%, which is an extremely large drop. She also stated that due to the earthquake and tsunami that soon followed there will be a drop in oil prices in the future.

The earthquake which was followed by a nuclear crisis in Japan has left a huge crisis for Japan’s economy and was also predicted to slightly negatively affect the United States economy. The Congressional Research Service writes that since Japan plays a major role in the global supply chain, imports and exports are going to be affected. The United States depends greatly on Japan for critical electrical products causing a negative effect on electrical companies (Nanto, Cooper, Donnelly, Johnson 2011).

METHODOLOGY:

The first step in an event study is to pick an event which can be either expected or unexpected. For this study, an earthquake was chosen in order to monitor the effects of a totally unexpected event on the stock market.

Second, after the event has been chosen, label the announcement date as Day 0 or March 11th, 2011. The event period will be 181 trading days before and 30 days after the announcement.

Third, a companies’ stock or multiple stocks must be chosen to research. The sample used for this study came from *yahoo.finance.com* and searching for companies by industry. The stocks did have to meet certain requirements. One, they had to be an electric company within the United States. Two, they had to have a market capacity greater than 800 million. After the companies had been chosen, the historical adjusted closing price for the pre-event period and after event period were download off the Yahoo Finance Website.

Fourth, an estimation period was identified which was 180 days before and 30 days after Day 0. The trading day 181 days before March 11th, 2011 is September 5th, 2010. The trading day 60 days after March 11th, 2011 is September 13, 2010. The estimation period that is used to calculate the alphas and betas of various stocks duration is -180 days to -30 days prior to the event.

The fifth step is to test the semi-strong market efficiency with respect to the earthquake in Japan. This is how fast the market reacts to the information about the earthquake and with semi-strong efficiency; the market reacts so fast that the earthquake event information will not allow any investor to earn an above normal return. In this study we will test for the risk adjusted return of stock prices for the sample of electric companies and how they are affected by the earthquake event. There are four hypotheses that will be tested. One, the risk adjusted return of the stock electric firms is significantly affected by the earthquake information on March 11th, 2011, the event date. The second hypothesis is the risk adjusted return of the stock electric firms is significantly negatively affected by the earthquake information on March 11th, 2011, the event date. The third hypothesis is the risk adjusted return of the stock electric firms is significantly affected by the earthquake information around March 11th, 2011, the event date. The fourth hypothesis is the risk adjusted return of the stock electric firms is significantly negatively affected by the earthquake information around March 11th, 2011, the event date.

The risk adjusted event study methodology was used to test these four hypotheses. This methodology allows us to properly analyze the information regarding the 15 electric companies; the holding period returns of the companies, and the index or the S&P 500 for each day were calculated. After this a regression was run for each company (the dependent variable) comparing it to the S&P 500 index (the independent variable) to find the alphas and betas for each stock. This regression was conducted over the pre-event period day -180 to -30 and the intercept is equal to the alpha value and the standardized coefficient is equal to the beta value.

The sixth step to an event study is to calculate the expected return for each company. This is calculated as: $ER = \text{Alpha} + \text{Beta} (R_m)$. You will take the sum of the alphas and betas from each company and multiply that by the return on the market or the return on the S&P 500 Index between the even period (-30 through 30). Using this information, we calculate the average excess returns or (AER's). The AER is equal to the sum of the excess return for each given day divided by the number of firms in the sample which in this study will be 15.

The seventh step is to use the AER's to calculate the CAER or the daily cumulative average. This was calculated by adding the AER for each day from -30 to 30.

QUANTITATIVE TESTS AND RESULTS:

Quantitative tests and results are presented in the full paper.

CONCLUSION:

From the regression results, it is evident that the earthquake in Japan did have a somewhat significant effect on the electric companies because of the p-value of the CAER's was less

than .05. It was significant because it generated new information to the market in the form of costs; that is, costs to the electric companies. Electric companies took a hit in the United States because of the damage done by the earthquake. Based upon the statistical evidence provided above, the risk adjusted rate of return from the selected companies showed a negative impact on the day of the event and the following week after. This initial downfall did not last long however, it only lasted about a week; this may be due to the fact that it did not occur in United States nonetheless, the market did react to event. This shows that the market dropped as a result of the bad information and eventually rebounded afterwards. These results support a semi-strong market efficiency, resulting in the market anticipating the devastation of the earthquake in Japan that took place on March 11th, 2011. One point to note is that the day before the event, there was a significant drop in the CAER. This could be due to another event or the possibility that some investors predicted this event happening.

Other than the day before the event, the market reacted with semi-strong efficiency to the earthquake. This means that it reacted on the event day as the information was received by the market, not allowing any investor to receive an above average return.

REFERENCES:

References available upon request.

INTERNATIONAL EVIDENCE ON FOREIGN EXCHANGE EXPOSURE

Baeyong Lee, Fayetteville State University

ABSTRACT

This study attempts to provide a logical overview of the literature which examines issues of foreign exchange rate exposure. The primary goals are to summarize and critically review empirical estimates of foreign exchange rate exposure and to attempt to arrive at a consensus view. Secondary goals are to address the implications of the foreign exchange rate exposure empirical results in the areas of multinational firms' risk management program, research, and the firm value. Areas for future research are also outlined.