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Audit Committee Effectiveness & Earnings Quality: Review of Literature & Future Research Direction

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Abstract

This research study identifies and documents effect of Sarbanes-Oxley Act (SOX) on audit committee effectiveness in an organizational context, and how the theories can be applied to real businesses all in a Post SOX environment. Within 15 years after the SOX passed, there has been changes in the dynamics of organizational behavior as a consequence of the act. As documented in previous researches, the corporate governance effects and broader organizational changes can have very interesting unintentional effect. The accounting financial expertise requirement supported by SOX is alleged to induce risky companies make audit committee weaker rather than stronger. Researchers contradict each other. I discuss here the effects of an increase in audit committee financial expertise, the interactions among audit committee status, audit expertise, and firm characteristics. Recommendations are given in two streams. One stream of recommendation is for firms to choose a right structure of audit committee. Another set of recommendation contributes specific variables taken from other recent stream of financial accounting research that the future corporate governance researches may consider to bring audit literature to date. This research calls for the need to see the audit committee structure in newly listed firms (new/successive cohorts) versus listed firms in earlier decades (old cohorts)

Key words: Audit Committee, SOX, Financial Expertise, Status.

1. Introduction

Audit committee effectiveness and audit committee independence both are prime objective for SOX to achieve. This is because, these two act as fraud prevention mechanism in the firm. To measure audit committee effectiveness, previous researches have used the extent of earnings management practiced by the firm. It is to be noted that earnings management is closely related to earnings quality. The only difference is as per K. Lo (2008) is that earnings quality can also be low while there is no earnings management, due to the presence of fastidious adherence to poor standards by the accountants of the firm. On an average, high quality earnings are evidence of conservatism and low quality earnings means more earnings management by the firm. Earnings Quality has been influenced by audit committee expertise and alleged to be influenced by audit committee status. Researchers debate on the usefulness of SOX in deterring earnings management. This paper builds upon prior researches and research gaps in audit committee effectiveness. It calls for inclusion of some new concepts and some specific variables in audit committee empirical research.

1.1. Objectives of the Study

The broad objective of this study is to analyze effects of SOX on audit committee effectiveness in an organizational context, how the recent researches contribute to our understanding of the audit committee effectiveness, ideas of application of theories to real businesses all in a Post SOX environment, and future research directions. To fulfill this purpose the following specific objectives are outlined:

- Determining the factors of recent literature on Audit Committee Effectiveness
- Applying recent concepts of Financial Accounting Literature to know more about Audit Committee Effectiveness and its relationship with investment of the firms
- Applying recent concepts of Financial Accounting Literature to know more about Audit Committee Effectiveness and its relationship risks of the firms.
- Determining specific variables to look for as measure of earnings management.

1.2. Research Question

The main research question of this study is as follows-

- What incremental value does the recent financial accounting literature add to the research on audit committee effectiveness?
- How the recent financial accounting literature changes the prior literature on audit committee effectiveness?

1.3. Research Methodology

This paper is based on literature review and includes a statistical analysis to show what future research may look like.

1.4. Type of Data

All the financial statement data were taken from Google and Yahoo Finance records. All the research papers were taken from subscriptions of University of Texas at Dallas.

1.5. The Sample

This represents the study period December 31, 1990 to December 31, 2010of firms listed in US stock exchange based. The relevant quantitative data were cleaned and stored in STATA and analyzed with my own set of codes and macros.

2. Literature Review

Audit committee effectiveness and audit committee independence both are prime objective for SOX to achieve. This is because, these two act as fraud prevention mechanism in the firm. To measure audit committee effectiveness, previous researches have used the extent of earnings management practiced by the firm. It is to be noted that earnings management is closely related to Earnings Quality. The only difference is as per K. Lo (2008) is that earnings quality can also be low while there is no earnings management, due to the presence of fastidious adherence to poor standards by the accountants of the firm. On an average, high quality earnings are evidence of conservatism and low quality earnings means more earnings management by the firm. Besides, some specific measures of earnings management, authors also used earnings management as proxy of low earnings quality.

Earnings Quality has been influenced by audit committee expertise and audit committee status. Before going into the details of these proxies for effectiveness and factors of effectiveness, SOX act and the topics it emphasizes are discussed below.

2.1. The Sarbanes Oxley Act 2002

The Sarbanes-Oxley Act (SOX) became regulation on July 30, 2002. It was sanctioned as emergency regulation amid prominent corporate scandals and is so important that the then Securities and Exchange Commission (SEC) chairman William Donaldson termed it the most important securities legislation since the original federal securities regulations of the 1930s.

Although the job and behavior of audit committees historically has primarily been the purview of the dominion of organization of an entity, SOX demands for audit committees to exercise direct and independent oversight of financial reporting process, internal controls and external auditors. At the SEC's appeal, and in the wake of SOX necessities and SEC regulations prescribing minimum listing standards, the New York Stock Exchange and Nasdaq have reviewed their corporate governance standards and have proposed regulation changes providing more tough standards for audit committees.

During the time when SOX was considered and approved, other significant events were going on, such as the huge drop in stock prices, the start of an economic downturn, and a sequence of corporate scandals. These events influenced the corporate governance landscape, and led to SOX and changes by the major U.S. exchanges. However, Researchers believe that SOX indicates a turning point; its enactment characterizes a significant inroad by government into governance. SOX emphasizes on the following

- Financial Management oversight
- Choosing external auditors based on competence
- Communication standards with internal audit function
- Independence of Audit committee members
- Financial Expertise of Audit committee members

2.2. Audit Committee Financial Expertise

Prior studies have disintegrated different types of audit committee financial expertise (Dhaliwal et al., 2010; Bédard and Gendron, 2010; DeFond et al., 2005) such as accounting, supervisory, and finance expertise. Current broad definition of financial expertise by SOX encompasses all of them.

Researchers have argued over the years that effective audit committee members are those who have non-accounting background and years of management skill rather than those who have an accounting or financial background (Olson, 1999; Badolato et al., 2013). After a long research, SEC defined financial expert broadly to include non-accounting financial experts, such as directors with experience as a chief executive officer (CEO) or president (SEC 2003) and accounting financial experts — that is, directors with experience as a certified public accountant (CPA), auditor, chief financial officer (CFO), controller, or chief accounting officer. After SOX was passed, DeFond et al. (2005) conducted an event study of SOX's impact. They found out that when the company appoints an accounting expert the stock market reacts positively to it. This means that investors would perceive that the firm will become less unsystematic risky in future (risk from internal control weaknesses). Kanodia (2016) mentioned in his seminal paper that collectively investors have more information than the manager of the firm. Hence, one investor may not be smart enough to know the future earnings of the firm but collectively they possess a lot of information about future earnings of the firm. However, Kanodia (2016) set an analytical model to prove that the market may not know how far the earnings of the firm can be improved. Hence, managers only respond to the expectation of the investors and sometimes underinvesting in projects.

Badolato et al. (hereafter BDE) in 2013 showed that a movement towards greater financial expertise especially accounting expertise may not have the best impact as intended. Their research results show that firms with audit committee with financial expertise and high relative status than management have much more power to deter misleading financial reporting (non-GAAP based earnings management) than the ones with audit committee with only financial expertise, particularly accounting expertise. This research results imply that the imposition of financial expertise by SOX and subsequent perception that "accounting experts mean high value of firm" may result in a diminished ability to constrain fraud. This would be a serious unintended effect of recent regulatory action. This was contradictory to many prior researches.

2.3. Status/prestige

One of the emerging characteristics of audit committee is status. Currently there is no rule regarding how status should be incorporated while deciding a new independent director appointment. The concept of status has a history. In 1992, Pettigrew argued that the study of strategic position holders' power is important to know if they are doing their job correctly. Two dimensions of power that play a big role in effectiveness of audit committee are "prestige power" and "expert power". Prestige power is a kind of power that can influence people inside an organization and a very well-known type of power defined by management study.

The prestige power has a significant connection with the status of the individual and used almost as synonymous to it. The three underlying measures of status as defined by BDE (2013) "Status is measured by the number of contemporaneous public board directorships, the number of contemporaneous private board directorships, and the number of degrees from elite institutions." They create a measure of relative status of the audit committee compared to the CEO/CFO like Belliveau et al. (1996). Their measure for status is a composite of three variables: number of private board membership, no of public board membership, and elite school education. The relative status is high if the average of the status measure for audit committee less the average status for the executive committee is higher than median relative status for the sample.

2.4. Earnings Quality

A major aspect of research on the financial reporting effects of ACs is how it affects the earnings quality of a firm. Earnings quality is expected to be negatively related to accrual estimation errors and positively related to earnings persistence. When working capital accruals and the operating cash flows do not match with each other, the earnings quality or accrual quality is bad. Accrual estimation error, working capital accruals, and sales growth related accruals are diagnosed as three components of earnings quality by Kothari. Earnings Quality is expected to be systematically related to the firm characteristics and industry characteristics (Dechaw and Dichev, 2008). Very recently, Srinivasan has found out that the earnings quality is fundamentally related to the business model of a firm. He characterized the firms since 1970 into different cohorts. These cohorts are based on the idea that every decade there are some fundamental changes to the business models of firms. Hence, Google will be fundamentally different from IBM

in terms of their business processes/operations though IBM has evolved its business operations over time. It is claimed by his research that new cohorts have worse earnings quality when compared to the old cohorts during the same time period i.e. in a cross sectional dataset.

2.5. Earnings Management

Earnings management has a negative linear relationship with earnings quality. Healy and Wahlen (1999) opinionates "earnings management is when managers use judgment in financial reporting and in structuring transactions to alter financial reports to either mislead some stakeholders about the underlying economic performance of the company or to influence contractual outcomes that depend on reported accounting numbers."

Abnormal accruals, restatements, irregularities are some of the measure of earnings management. The higher the conservatism in Financial reporting, the lower the irregularities (Lin et al., 2014). Abnormal accruals and restatements decreases due to the application of conservatism.

While abnormal accruals are a common measure of earnings management, the models are also noisy (Bernard and Skinner, 1996; Kothari et al., 2005). This makes results less reliable and more difficult to interpret as compared to the more objective measure of accounting irregularities (Erickson et al., 2004). Irregularities are calculated as a class-action lawsuit and the violation associated with SEC and Department of Justice Enforcement Actions.

Another very recent measure of earnings management is the abnormal cash flow, abnormal product costs and abnormal discretionary expenses as a result of real activity manipulation. Some of the techniques firms seek to apply to manage earnings are: sales discount to bump up sales, overproduction to reduce reported cost of inventory, and reduction of discretionary expenses to report higher earnings. From these measures alone, we can assume that R&D intensive firms are susceptible to earnings management practices. Firms with very low income and in tension to meet analysts forecast will also try to manage earnings. Now Roychowdury (2006) has developed a measure to detect the firms that are suspects for earnings management. These firms are those who are trying to meet a threshold ROA among all the firms. He also found out that the presence of institutional investors will deter earnings management. None of the recent research except that of BDE (2013) talks about the role of audit committee characteristics in deterring earnings management. Reichelt et al. (2009)

talked about the effect of various auditor expertise on detecting earnings management. BDE (2013) found out that Financial Expertise of Audit Committee is not enough to deter fraud. Audit committee also needs to have higher status as compared to Management to execute its power in Financial Reporting.

3. Prior Researches on Audit Committee

The trail of research on the unintended regulatory impact on audit committee and management body started since 2003. Cohen et al. reported in 2004 that the SOX provisions will reduce CEO risk taking in such a way that it will cause the firm to underinvest in research and development. This was cited as an indirect cost of the regulation.

Recent research on audit committee takes into account the interplay of power between the board and the executives, all the audit committee characteristics that could have far reaching impact other than just to influence financial reporting quality. All this research became even more relevant as financial reporting or broadly accounting information is day by day being proved to have much more powerful impact on the firm's underlying economics.

One of the many recent quest of empirical researchers of corporate governance is to find out the impact of recent broad definition of audit committee expertise by SOX. Researchers differ in opinion on whether the broad definition of audit committee expertise by SOX was at all required. Albring et al. (2014) found out that an independent audit committee with accounting financial expertise is much more likely to switch to non-auditor service provider. In other words, Albring concluded that accounting financial expertise is relevant for audit committee's independence and this independence is the prime objective of SOX. They concluded that the earlier narrow definition of financial expertise by SOX is more relevant to audit committee's independence.

More recently, researchers like BDE (2013) advocate that status of the audit committee members significantly interact with financial expertise. This leads us to believe that status is also important in determining an audit committee member's independence. Since 1992, researchers have tried to emphasize and prove in different dimensions how power and status of strategic leaders of a company impact the corporate governance mechanism. Zaman et al. (2007) documented an interaction process between governance members and management members and resultant decisions depend on

power relations between these two groups. The case study of a financial services company in UK reveals that the corporate governance outcomes appear to be significantly affected by informal communication and interactions. The author quotes:

"One of the mysteries of Enron Corp.'s fall from grace is how an audit committee chock full of talent could have been blind to the company's financial sleight of hand the audit committee followed all the rules – but it let the shareholders down (Business Week, 2002, p. 28)."

In terms of promoting good corporate governance it is actually in the non-routine situations where there is the extreme requirement for audit committee action. To fully comprehend the role of audit committee, let us go through the reporting line of internal auditors. Internal auditing departments are led by a Chief Audit Executive ("CAE") who generally reports to the Audit Committee of the Board of Directors, with administrative reporting to the Chief Executive Officer (In the United States this reporting relationship is required by law for publicly traded companies).

Now, if the company has a written ethics and moral code and whistle blowing policy, it becomes easier for the internal auditors to approach the audit committee chair and cut the line in between. Zaman et al. also quotes an executive director's word about the power relations between AC members and the executive directors:

"How much clout the Audit Committee has within the organization, how effective it is, depends on the experience of the non-executive directors ... The present Audit Committee team, they are all individually sort of strong characters, with a clear view of what's going on. No one would dream of pulling a fast one on any of them."

Prior research identified the parameters of audit committee's effectiveness to deter fraud in financial reporting. It is of course directly related to the independence, expertise, and status of the audit committee. Several measures of financial reporting quality have been- accrual based earnings management, irregularities, even variables such as switch decision of the audit committee to non-auditor tax service providers.

In short, prior research emphasized on factors associated with existence of audit committee, characteristics and measures of activity but still we know very little on the decision-making factors of audit committee and the manner in which they influence corporate culture and organizational behavior. There is no mechanical relationship between the adoption of

certain audit committee structures or characteristics and achieving certain governance effects. Greater independence and accounting financial expertise of audit committee members need not always be perceived as the means of ‘‘correcting’’ past weaknesses in internal control, financial reporting etc. The most fundamental question concerning what structure of audit committees deters fraud in practice continues to be an important area for research development. Besides, the firm characteristics also have the possibility to have interaction effect with the strategic leaders' expertise.

4. The Problems with the Prior Researches

The reason behind hiring accounting experts is that they exert more conservatism. Givoly and Hayn (2000) state that conservative accounting leads to persistently negative accruals, in contrast with the expected pattern of accrual reversals. Though the persistence of accruals makes the earnings quality good to count upon by the investment community, it is still unclear how conservatism is mapped into valuation of the firm.

Besides, application of conservatism has an unintended effect. This effect has been found out by Kanodia and Septa very recently. In their analytical framework, Kanodia and Septa (2016) found out that being too conservatism can be costly for the firm in the long run. Besides, they found out that earnings quality of a firm does not depend on the management solely. It is partly determined by aggregate investors. When a firm has less persistent accruals, the investors give more importance on cash flows and this is turn encourages the management to invest in short term projects (being myopic). In this situation, being too conservatism in financial reporting may not improve financial reporting quality or real economy of the firm. It may generate persistent negative accruals but may compel the manager to be more myopic in his investment decision making. The managers will underinvest in projects and hence, the firm’s future earnings will decrease. The firm even if efficiently priced in the capital market will have value lost due to continuous management underinvestment.

The lost future earnings may be a cause of audit committee members being too restrictive in expensing all R and D expenses etc. In R&D intensive firms, the underinvestment is much higher due to the pressure from the external auditors. Ole-Kristenen et al. (2016) found out that it is due to the increased risk of litigation of the auditors in post SOX period for which they choose to be more conservative in auditing an R & D intensive firm. Recently researchers such as Srivastava et al. (forthcoming)

found out that new generation (cohorts in his language, Srivastava et al. 2016) firms are more prone to auditors giving an adverse opinion regarding going concern. This subtly points out that newly listed/new generation/new cohorts are fundamentally different in their business model that their old peers. Moreover, they are riskier (Srivastava et al., 2016). They documented that big four audit firms are holding less and less of the shares of audit industry. A plausible explanation for less firms audited by big four than it used to be in the 1990s is that now a day all firms are more research intensive than before. Since big four firms have more compliance costs and more reputational or litigation risk, they choose to reduce their share from these firms.

A tough future research question is how much the decreased share of big four firms will reduce the overall quality of accounting information. Has this impact been already occurring? If yes, then what is the role of audit committee to counteract that? If the effect is still not there, how the audit committee is counteracting the degradation of quality of accounting information in near future. How the audit committee and in a broader sense, the corporate governance board can better tradeoff between reliability and relevance measure of investment in R and D. Rigorous audit committee is perceived as a sign of less internal control weaknesses and hence less breach of internal control. A rigorous audit committee will have power to stand strong for the decisions made regarding financial reporting and hence increase the confidence of external auditors on the company's reporting system. Since as per Krisnan et al. (2008) audit committee members with accounting financial expertise are expected to enhance accounting conservatism, the more the experts, the lower the innovation should be expected. Such a committee may send signal of low risk of litigation to the external auditors and hence, they will not unnecessarily be afraid of mismatch of R and D expenditure. Consequently, they will not deter innovation within the firm. Research has not yet shown the effect of conservatism of audit committee on management decision to invest in innovation in the first place.

Today, we can reach a conclusion that the presence low accrual quality may not be a sign of earnings management, but purely the current situation of new cohorts' state of operations (Srivastava, 2014). It is evident from prior research that operating cycle has a negative relationship on the firm's accruals. Besides, volatility in operating cycle will have impact on the firm's accrual quality. On an average, in a panel data of 1987-2005, the average operating cycle is 124 days, which indicates that accruals are

expected to reverse within one year. However, according to Srivastava's research, this cycle has more volatility in new cohorts. Hence, in cross sectional panel data, when we take both new and old cohorts firms together and calculate central tendency of accruals that is not a proper benchmark for all firms. Old cohorts should have a separate benchmark from the new ones.

In addition, predicting an effect of audit committee financial expertise on abnormal accruals (as BDE did) is less clear because within-GAAP earnings management is relatively routine and many executives admit to this behavior (see Graham et al., 2005). One way to look at it is through fixed effect models. Over a period of time in which GAAP based rules did not change but audit committee expertise changed, this model is feasible. Through changing period of GAAP standards, BDE looked at the relationship between audit committee expertise (both overall financial expertise and specifically accounting expertise) and status with abnormal accruals and found out that audit committee accounting expertise does not in itself deter fraud. He did not cite a reason for it. But empirically and in his descriptive statistics, he showed that it is actually because these accounting experts do not have status higher relative to the CEOs in those firms.

One of the emerging characteristics of recent audit committee research is the effects of audit committee on accounting numbers. Traditionally, usefulness of accounting numbers have been measured by persistence of earnings in this literature. If the persistence of the earning components is more, it translates into superior earnings quality for the firm. Dichev and Tang (2008) documented that the earnings quality has gone down in the recent years. Donelson et al. (2011) found out that it is not due to the changes in accounting standards but due to economic events. These recent economic events create a lot of special items and hence deter the earnings quality. However, it is Srinivasta (2014) who found out that it is firm characteristics such as newly listed firms versus old firms that create the massive decline in earnings quality. Donelson et al. (2008) points out that competition has increased in the market that leads to increased recognition of special items. However, Srinivasta (2014) argues that it is not the competition or changes in regulations that is driving earnings quality down. It is the successive cohorts that possess lower earnings quality for which the overall earnings quality is going down. Successive cohorts are more in number. That means more firms got listed in 2000s than firms listed in 1990s. New firms have very different business model that the old firms. As a result, their accounting measurements are different. Their accruals have high volatility and low match. The table reproduced from Srinivastava's

research (Figure 1) give us such glimpses of differences in successive cohorts.

Measure of status or prestige is somewhat ambiguous in the literature. Hayes et al. (2014) mentioned “Finkelstein (1992) tried the development and validation of objective measures of managerial power.” His definition of power aligns with that in the hardcore management study, which is known as “prestige power.” The nature of prestige power is believed to be influenced by personal prestige or status, and it derives from a person’s reputation in the institutional environment. The four underlying measures of prestige power are the number of corporate board membership, the number of nonprofit board membership, the average stock rating for all corporations where the person has board membership, and elite school education. Hayes et al. (2014) quoted that D'Aveni (1990) measured prestige using five status characteristics. He quotes “prestige is measured by membership in the political elite, membership in the military elite, prestigious educational status, multiple board connections, and previous high-level business experience.” Belliveau et al. (1996) found out the impact of social capital on CEO compensation. They construct management– board pairs similar to BDE (2013) and considered relative measures of status for each pair. In the Belliveau et al. (1996) paper, a similar pair is the firm's CEO and the chair of the compensation committee. They hypothesize that CEOs with higher social status than the chair of compensation committee will obtain a relatively higher reimbursement. Their social status measure comprises four variables: the number of corporate board seats, the number of trusteeships, the number of social club memberships, and the prestige of the undergraduate institution attended. They standardized each parameter because the differences in mean board seats and social club memberships will not be the same for any of the two groups and sum the standardized parameters to get an index for each person. The relative status variable is an indicator for whether the CEO's status index is greater than compensation chair's status index. In a more recent paper, Pollock et al. (2010) studied the effects of prestige on IPO valuations. They measure the prestige of individuals with three qualifications, including a tie (defined as current or former employment at a high level, or board membership) to a large prominent firm in the same industry, a tie to a blue-chip corporation, and a degree from an elite institutional education. An executive or director is considered to be prestigious if he or she possesses one or more of those credentials. Finally, Erkens and Bonner (2013) form an index that comprises the number of public board memberships held by the director, the number of

trusteeships, the number of social club memberships, and the prestige of the undergraduate institution.

The three underlying measures of status in BDE (2013) are the number of contemporaneous public board seats, the number of contemporaneous private board management post, and the number of degrees from elite schools. They create an index of relative status of the audit committee compared to the CEO/CFO like Belliveau et al. (1996). Their measure for status is a composite of three variables: number of private board membership, no of public board membership, and elite school education. The relative status is high if the average of the status measure for audit committee less the average status for the executive committee is higher than median relative status for the sample.

BDE (2013) found that firms with high status directors and executives will have high status executives and directors. Their overall result indicates the proposition that firms with higher prior accounting irregularities will be avoided by directors with higher reputation or prestige or status. Hence, they continue to be riskier in spite of having accounting experts in the board. Hence, this evidence suggests that accounting expertise is alone not enough to deter irregularities. There is a small twist in this conjecture. The demand and supply market of accounting experts play a big role to reach the equilibrium condition that accounting experts will end up with risky firms. Krishnan et al. (2009) found out that firms exposed to high probable litigation risk will have a greater demand for accounting experts but accounting experts may be less willing to join the audit committees of such firms. Prior papers such as, Beasley et al.'s (2009) suggest “while accounting experts serve on a greater number of audit committees, they are very careful about which boards they join; the most common reason they cite for declining a position is concern about the integrity of the firm's management.” Their finding is that: a positive relationship between litigation risk and the appointment of an accounting experts is true only for the firms with already prevailing good corporate governance. To summarize, prior research shows that accounting experts have considerable freedom in choosing where to join.

Their choice is:

- Firms with inherent riskiness
- Firms with already good governance board
- Firms with high accrual quality (Dhaliwal et al. ,2010)

But, recent research found out the following,

- From a close inspection of the sample, it is revealed that large firms with high status board of directors will end up hiring high status directors. These new high status directors are less likely to be accounting experts. (Erkens and Bonner, 2013). This power of board on the recruitment process leads us to think that accounting experts with low status do not have considerable freedom in moving in the job market.
- Another observation is the status of executives and other independent directors not serving on the audit committee being positively associated with audit committee status. This goes back to the first point (Erkens and Bonner, 2013), high status audit committee members will end up in a firm with high status directors.
- On the other hand, high status experts may be unlikely to accept an audit committee role in a firm where management has a questionable reputation or may leave a firm when an accounting irregularity is revealed due to professional risks in terms of reputation and legal liability (Beasley et al., 2009).
- Accounting experts with low status like residuals in the market for directors will end up with low accrual qualities. They will also not be effective in fraud deterrence (BDE, 2013).
- A plausible explanation is that the wage offered by large firms with high probability of facing litigation or irregularities firms is too high for such experts to ignore.
- The most striking conclusion is: in firms with bad accounting practices, accounting experts with low status will fail to reduce irregularities. On the other hand, accounting experts with high status will succeed in deterring management from accounting irregularities. Hence, the conclusion we can draw from recent research is, the relative status of the audit

committee is as important as the audit committee financial expertise.

- In fact, BDE (2013) had this conclusion strange to the eyes of many. In their large sample of more than 21000 firms, they observed that accounting experts do not usually possess the high relative status. It is the non-accounting experts who possess high relative status. They specifically suggest that "supervisory and finance experts increase audit committee status."

5. Ideas for Future Research

If the irregularities, restatements or abnormal accruals are considered to be inappropriate measurements for earnings management, shareholders actually have no way to know what type of committee is performing a better job. Information asymmetry between owners in general and board is very high in such a situation. It is crucial to form a measure precise enough to detect earnings management before relating it with the audit committee expertise. RoyChowdhury's measure of real earning manipulation can be used in future research as a complement to current measures. Kanodia's measure of relative weight on cash flow (with respect to accrual) can researchers confirm which companies have good quality financial reporting and which company have bad quality financial reporting.

It is very difficult to characterize status. The status of a person changes overtime and hence, it is also important to look at the future potential status of the director before appointing him. If status seems to be increasing over time, that is going to be a good signal for the shareholders. If we believe that status changes for different individuals differently over time or changes very slowly, we should reconsider the conclusion of BDE's fixed effect model of audit committee effectiveness. Audit committee turnover can be complemented with audit committee status turnover to observe whether it is slowly changing for a firm or rapidly.

An unintuitive aspect of the status parameters in BDE's research, as criticized by Hayes et al. (2014), "The use of the average, rather than the highest, status for each group". Is it necessary for the average audit committee member to have status, or is it enough for just one member to have status?" He added "An individual audit committee member who is viewed as competent, can -ask the right questions, and has the -willingness

to act on information, including confronting managers when necessary would seem to be an effective deterrent to misreporting. Further, consider a high relative status audit committee that adds another financial expert, increasing the committee size and lowering the mean audit committee status on one of the underlying variables to the point where the committee no longer has higher average status than the CEO/CFO." He also mentioned "It is worth noting the similarity of the status measures to measures of social ties or centrality, which are not always viewed favorably for firm governance. For example, Hwang and Kim (2009) found "Social ties between conventionally independent directors and the CEO affect how the directors monitor and discipline the CEO." They note that many boards classified as independent are substantively not independent. Other work (Larcker et al., 2013) finds that connections are value-increasing. When are board connections and social ties beneficial or harmful to the firm? Where does ability fit?"

Recent literature explored how auditor's litigation risk can make them conservative and hence, deter R and D expenditure in R and D intensive firms (Ole-kristian Hope et al., 2016). Similar studies should be led to know more about how financial expertise of audit committee and their status or relative status may harm innovation i.e. R and D expenditure. In fact, Kanodia's paper on real effects of accounting information shows that accounting information will have real effects on the underlying fundamentals of the firm. When the audit committee members are applying too much conservatism in financial reporting oversight, it may result in underinvestment in innovation.

In 2008, Cohen et al. showed that though the abnormal accruals (accrual based earnings management), decreased in the period after SOX, real earnings management (abnormal cash flow, abnormal discretionary expenses, abnormal production costs) increased for certain firms. Hence, how the audit committee impacts real earnings management should is a crucial question.

An interesting pattern in my opinion will be found in the audit committee of new cohorts versus old cohorts. Significant differences are already visible in terms of volatility, ROA, ROE, earnings quality etc. among successive cohorts (Srinivasan, 2014). The earnings management benchmarks for different cohorts within an industry are supposed to be different from each other. The most recent measure of detecting abnormal accruals (Kothari et al., 2005) that is the performance matched accruals used

to test robustness of results in BDE (2013) wash out the impact of different cohorts. Hence, the result is we see the relationship between earnings management and interaction between audit committee expertise and status i.e. the changing variables, over time. It will be interesting to see how different cohorts differ in their choice of audit committee structure. New as mentioned, successive cohorts have low earning quality. Hence, it would be interesting to test if they have different intensity of earnings management. Since, audit committee is expected to deter earnings management, the successive cohorts should have different audit committee structure. Till date, no other researcher in the corporate governance take this cohorts concept into account.

Listed cohorts	Expense volatility	Revenue volatility	Earnings volatility	Volatility of cash flow
Seasoned Firms	0.13	0.14	0.03	0.06
1970s cohorts	0.20	0.20	.07	0.30
1980s cohorts	0.22	0.22	0.15	0.38
1990s cohorts	0.27	0.22	0.16	0.37
2000s cohorts	0.47	0.25	0.37	0.38

Figure 3: Differences in Firm Characteristics in Different Cohorts

Note: Table taken from Srivastava 2014 "Why have measures of earnings quality changed overtime?" showing Differences in the earnings qualities of the successive listing cohorts after controlling for overall time trends.

Figure 2 and 3 are an attempt to create a distribution of income before extraordinary items scaled by assets for old cohorts versus new cohorts. There is an abrupt jump in numbers of firms reporting positive profit near the edge i.e. near the zero-profit point. According to Roychowdhury (2006) this shows that firms on the verge of zero income or slightly negative income manage earnings to report positive profit. For the graphs for the cohorts 1990s and 2000s, I observe that both 1990s and 2000s cohorts show earnings management in Post SOX era.

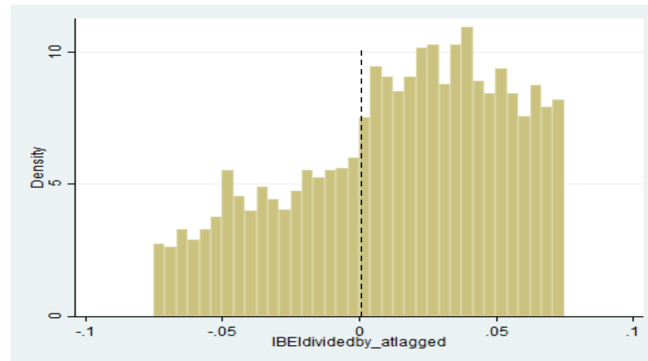

Figure 4 IBEI by A for 1990s Cohorts

Note: As expected, there is a sudden jump in the number of firms having IBEI scaled by A slightly higher than zero, showing that these firms are suspect firms, suspected of managing earnings to report a profit.

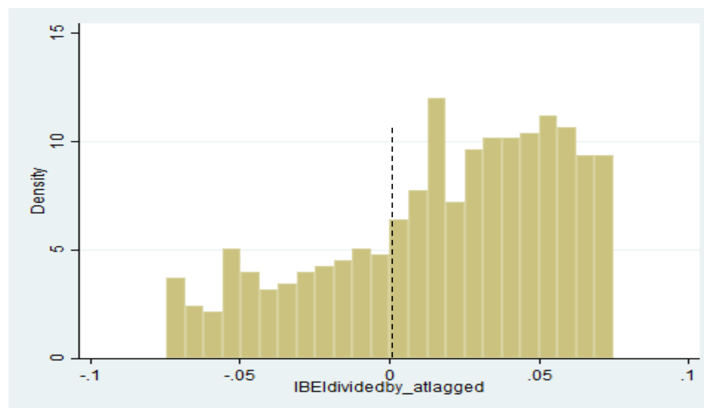

Figure 5: IBEI by A for 2000s Cohorts

This literature review leads to the provoking thought that:

- Corporate governance mechanism of these successive cohorts has to be different as well. This is a substantial area to look at in future researches.
- Corporate governance literature at this time revolves around significance of audit committee status. Currently there is no rule

regarding how status should be incorporated in SEC rules while deciding a new independent director appointment.

6. Summary of Findings

Objective 1: Determining the factors of recent literature on Audit Committee Effectiveness

Hypothesis: At least one additional factor: audit committee status is significant.

Finding: Analytical and archival research actually show that status (power) is important. Researches need to done to find the exact effect of status as to whether existence of one influential audit committee member along with low status members is enough to deter fraud or most of them need to have high status relative to management.

Objective 2: Applying recent concepts of Financial Accounting Literature to know more about Audit Committee Effectiveness and its relationship with investment of the firms

Hypothesis: Firms with high R and D expenditure have deterred investment in innovation due to presence of conservatism.

Finding: Both auditor litigation risk and audit committee conservatism cause the firm to underinvest. This is true for all firms. However, more true for firms with low accrual quality such as new cohorts firms (firms listed in 1990s, 2000s)

Objective 3: Applying recent concepts of Financial Accounting Literature to know more about Audit Committee Effectiveness and its relationship risks of the firms.

Hypothesis: Firms with different business models will have different level of riskiness and hence will different audit committee structure.

Finding: Firms with low quality accruals has more sensitivity toward application of more conservatism and hence will require accounting experts to be balanced by non-accounting financial experts in the audit committee. Low quality accruals do not necessarily mean more earnings management. Researches need to be done to see whether audit committee of new cohorts firms need a different structure than that of old cohorts.

Objective 4: Determining specific variables to look for as measure of earnings management.

Hypothesis: As prior research shows that in the post SOX period accruals based earnings management decreased but real earnings manipulation increased.

Finding: No research has taken real earnings manipulation as a measure of audit committee effectiveness overtime.

7. Conclusion

The recommendations of this paper revolve around the current research gaps in the light of new developments in analytical and archival research in financial accounting. Some of the very new concepts about accounting information usefulness, measures of firm characteristics, and measures of accrual and earnings quality can change the existing literature on audit committee effectiveness. Choosing the right audit committee composition is crucial for long term success of the firm. Successful choosing of audit committee may also have positive externalities. Such as choosing optimal audit committee help the shareholders keep debt holders away from rent extraction. (Debt holders may have less incentive to renegotiate the debt covenants) and innovation of the firm may be positively affected. However, further research is required to fill in the gap between audit committee effectiveness research and recent developments in other accounting research.

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Appendix A

This appendix is dedicated to the abbreviations and meaning of some variables taken to perform pilot analyses on nature of real earning manipulation of 1990s and 2000s cohorts.

Name	Description
Cohorts	All of the firms listed in a common decade are referred as a separate cohort. So, firms listed in 1990s are termed as 1990s cohorts. The concept is discovered by Srivastava (2014) that each new cohorts of listed firms exhibits lower earnings quality than its predecessors
IBEI	Income before extraordinary items
CFO	Cash flow from operations
Accruals	IBEI–CFO
Production costs	COGS + Change in inventory
Discretionary expenses (DISEXP)	R&D + Advertising + Selling, General and Administrative expenses
MTB	The ratio of the market value of equity to the book value of equity, expressed as deviation from the corresponding industry-year mean

SIZE	Logarithm of the market value of equity, expressed as deviation from the corresponding industry-year mean
abnormal CFO[3]	Measured as deviations from the predicted values from the corresponding industry-year regression
abnormal production costs[3]	Abnormal discretionary expenses, measured as deviations from the predicted values from the corresponding industry year regression.
abnormal discretionary expenses[3]	Measured as deviations from the predicted values from the corresponding industry-year regression.
Abnormal accruals	Measured as deviations from the predicted values from the corresponding industry-year regression

Appendix B

This appendix is dedicated to show the difference between the successive cohorts in terms of their abnormal CFO, abnormal production costs, and abnormal discretionary expenses. SUSPECT_NI is the suspect firms (which is an indicator variable that takes one when it has ROA very close to zero and suspected to end up manipulating earnings and zero otherwise). MTB, or the market-to-book ratio, is the ratio of market value of equity to book value of equity. SIZE is the logarithm of the market value of equity at the beginning of the year. Dechow et al. (1995, 1996) argue that abnormal accruals calculated using conventional, non-discretionary-accruals models have measurement error positively correlated with firm performance. To address the possibility that abnormal values from my estimation models have measurement error correlated with performance, Roychowdhury (2006) included net income as a control variable in the regressions. The net income figure is scaled by lagged total assets, so it is similar to return-on-assets (ROA). Since the dependent variables are essentially deviations from 'normal' levels within an industry-year, all the control variables in the regressions are also expressed as deviations from the respective industry-year means.

Note: Each column presents the results of the above regression for a different dependent variable, whose name appears at the top of the respective column. t-statistics are calculated using standard errors

[3]Roychowdhury (2006) focused on the following three manipulation methods and their effects on the abnormal levels of the three variables: 1. Sales manipulation that is, accelerating the timing of sales and/or generating additional unsustainable sales through increased price discounts or more lenient credit terms; 2. Reduction of discretionary expenditures; and 3. Overproduction, or increasing production to report lower COGS.

corrected for autocorrelation using the Newey–West procedure. They are reported in parentheses.

Table 2 Comparison of drivers of abnormal CFO, abnormal production costs, and abnormal discretionary expenses for two separate cohorts 1990s and 2000s

Comparison of drivers of abnormal CFO, abnormal production costs, and abnormal discretionary expenses for two separate cohort 1990s and 2000s						
	1990s cohort			2000s cohort		
	Abno- Rmal CFO	Abno- Rmal DISEXP	Abno Rmal PROD	Abno- rmal CFO	Abno- rmal DISEXP	Abno- Rmal PROD
SIZE_1	0.0000 102***	-0.0000 0678***	-0.0000 0412**	0.0000 209*	-0.0000 0575	- 0.0000 143
	(8.77)	(-5.53)	(-4.40)	(3.00)	(-0.67)	(-2.06)
MTB_1	-0.0007 24**	0.0040 1**	-0.0012 1**	-0.0020 4*	0.0011 6	- 0.0015 2*
	(-3.70)	(4.33)	(-3.74)	(-2.99)	(0.59)	(-2.53)
NET INCOME	0.0025 3***	-0.0024 5	-0.0018 0*	0.0041 0**	-0.0059 8	- 0.0000 438
	(5.29)	(-1.94)	(-2.49)	(3.82)	(-1.61)	(-0.04)
SUSPE- CT_NI	0.0196 *	-0.0575 **	0.0169	0.0192	-0.0630	0.0562
	(2.40)	(-3.86)	(1.46)	(1.08)	(-2.03)	(2.05)
_cons	-0.0105 **	0.0351 ***	-0.0069 5**	-0.0097 1	0.0647*	0.0223
	(-3.96)	(8.21)	(-3.46)	(-0.56)	(3.07)	(1.81)
N	8999	8999	8999	1501	1501	1501
Adjusted R2	0.0302	0.0256	0.0890	0.0661	0.0447	0.0238
F	31.08	17.00	10.42	8.415	1.884	3.706
t statistics in parentheses						
="* p<0.05	** p<0.01	*** p<0.001"				